



CITY OF TROUTDALE

"Gateway to the Columbia River Gorge"

AGENDA

CITY COUNCIL – REGULAR MEETING

Troutdale Police Community Center – Kellogg Room
234 SW Kendall Court
Troutdale, OR 97060-2078

Mayor
Casey Ryan

City Council

David Ripma
Randy Lauer
Larry Morgan
Glenn White
Rich Allen
Zach Hudson

City Manager
Ray Young

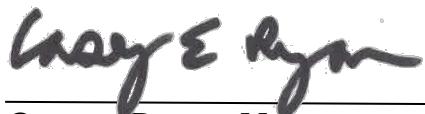
City Recorder
Sarah Skroch

- 1. PLEDGE OF ALLEGIANCE, ROLL CALL, AGENDA UPDATE.**
- 2. PUBLIC COMMENT:** Public comment on non-agenda and consent agenda items is welcome at this time. *Public comment on agenda items will be taken at the time the item is considered. Public comments should be directed to the Presiding Officer, and limited to matters of community interest or related to matters which may, or could, come before Council. Each speaker shall be limited to 5 minutes for each agenda item unless a different amount of time is allowed by the Presiding Officer, with consent of the Council.*
- 3. CONSENT AGENDA:**
3.1 MINUTES: November 13, 2018 City Council Regular Meeting.
- 4. RESOLUTION:** A resolution extending the Frontier cable services Franchise Agreement with the City of Troutdale. *Ed Trompke, City Attorney*
- 5. REPORT:** A report on the Metro 2030 Regional Waste Plan.
Ryan Larqura, Environmental Specialist
- 6. PUBLIC HEARING / ORDINANCE (Introduced on 11/27/18):** An ordinance to adopt Text Amendments to Chapters 1, 2, 4 and to establish Chapter 14 of the Troutdale Development Code.
Chris Damgen, Community Development Director
- 7. PRESENTATION:** A presentation on Housing Needs Analysis and associated studies. *Chris Damgen, Community Development Director*

8. STAFF COMMUNICATIONS

9. COUNCIL COMMUNICATIONS

10. ADJOURNMENT



Casey Ryan, Mayor
Dated: December 6, 2018

City Council Regular Meetings will be replayed on Comcast Cable Channel 30 (HD Channel 330) and Frontier Communications Channel 38 on the weekend following the meeting - Friday at 4:00pm and Sunday at 9:00pm.

Further information and copies of agenda packets are available at: Troutdale City Hall, 219 E. Historic Columbia River Hwy. Monday through Friday, 8:00 a.m. - 5:00 p.m.; on our Web Page www.troutdaleoregon.gov or call Sarah Skroch, City Recorder at 503-674-7258.

The meeting location is wheelchair accessible. A request for an interpreter for the hearing impaired or for other accommodations for persons with disabilities should be made at least 48 hours before the meeting to: Sarah Skroch, City Recorder 503-674-7258.

DRAFT**MINUTES**

**Troutdale City Council – Regular Meeting
Troutdale Police Community Center – Kellogg Room
234 SW Kendall Court
Troutdale, OR 97060**

Tuesday, November 13, 2018 – 7:00PM

1. PLEDGE OF ALLEGIANCE, ROLL CALL, AGENDA UPDATE

Mayor Ryan called the meeting to order at 7:00pm.

PRESENT: Mayor Ryan, Councilor Ripma, Councilor Lauer, Councilor White (7:02pm), Councilor Allen and Councilor Hudson.

ABSENT: Councilor Morgan (excused).

STAFF: Ray Young, City Manager; Sarah Skroch, City Recorder; Ed Trompke, City Attorney and Steve Gaschler, Public Works Director.

GUESTS: See Attached.

Mayor Ryan asked, any agenda updates?

Ray Young, City Manager, replied no.

2. PUBLIC COMMENT: Public comment on non-agenda and consent agenda items is welcome at this time.

Paul Wilcox, Troutdale resident, stated first up, it's nice to have the meeting packets available before the meetings and this week they didn't show up online until this morning. The agendas usually come up the Wednesday before and the packets are usually Thursday or Friday at the latest. That's a problem for people who want to see more details of what's happening at the meeting in advance without actually coming down here to read the printed material. Second, on the consent agenda the letter about plastic bags, I'll start by saying I agreed with Councilor Hudson 100% about what he had to say at the recent meeting on the subject. However, it did remind me of 3 years ago when the Council was talking about doing a local gas tax and there were some Councilors that wanted to wait to see if the state legislature was going to raise the state gas tax which the City gets a portion of. Here we are 3 years later. Nothing has happened with the state legislature. I just wanted to point out you can't count on them doing anything, necessarily. Onto meeting minutes, I have one correction I would like to make. On page 8 of the September 25th meeting minutes, the paragraph that starts with my name in the very last sentence of that paragraph. I went back and listened to the video/audio and it was hard to discern

what I was saying so it wasn't clear. From the context of this sentence that's in the minutes I think my correction will make more sense. What it should say is, I'm fine with not requiring the additional parking space because I think it's available the way Troutdale is set up. The point I was making was that most houses in Troutdale have garages and with a garage pretty much every house has a driveway so you've got 2 spaces right there. And then with a 2 car garage you've got 4 spaces. I was essentially saying I didn't think it was necessary to require additional parking spaces for ADU's. We have a couple discussions tonight and I want to mention that those are open to public comment if anyone is interested. Another item, the parking lot where the old police station was behind Mayor's Square, I'd appreciate an update on paving that. I suspect it's not going to happen this fall. I just wanted to see what's happening with that. On a positive note, Imagination Station II, the grand opening is 2 to 4 o'clock this Saturday.

3. CONSENT AGENDA:

- 3.1 MINUTES:** September 25, 2018 City Council Regular Meeting and October 9, 2018 City Council Regular Meeting.
- 3.2 MOTION:** A motion to approve a letter to state and regional elected officials regarding the regulation of single use plastic bags.

Councilor Hudson stated I would like to pull #3.2 for discussion.

MOTION: **Councilor Hudson moved to approve #3.1 on the consent agenda.**
Seconded by Councilor Ripma.
Motion Passed 6-0.

Mayor Ryan asked, does anyone have an issue with discussing this now?

Council replied no.

Councilor Hudson asked, is this the proposed letter to be sent to members of Metro and State and Senate based on the meeting we had previously?

Mayor Ryan replied that's my understanding.

Ray Young stated I tried to encapsulate what the Council agreed to do last time in a letter. And we put it on the consent agenda just in case it was okay or if anybody wanted to change it or tweak it.

Councilor Hudson asked, would we want the dates to reflect...

Ray Young stated I know I got the date wrong.

Councilor Hudson stated what I was wondering then is, we adopted the intention as a Council to send this on behalf of the Council. Should the letter reflect that?

Ray Young replied it says on behalf of the Troutdale City Council and the citizens.

Councilor Hudson stated I was imagining that this would come from the City Council. But if that is clear I suppose that Mayor Ryan is writing for all of us. I wanted to make it clear that this was a City Council adopted position and not Mayor Ryan's individual position. It seemed that our intent was to send something with the voice of the Council.

Councilor Lauer stated I'm in favor of the letter and with what the letter says.

Mayor Ryan stated it could say, I'm writing this on behalf of the City Council. A lot of energy was put forward on this and I'm not too sure the City of Fairview is moving forward with their deal. This is going to have more weight. If this doesn't go anywhere then we will end up doing something.

Councilor Hudson stated I would be ready to move forward with a motion.

MOTION: Councilor Hudson moved adoption of a motion to approve a letter to state and regional elected officials regarding the regulation of single use plastic bags. Seconded by Councilor Ripma.
Motion Passed 6-0.

4. PROCLAMATION: Native American Heritage Month.

Mayor Ryan read the proclamation.

Ray Young stated the Grand Ronde Tribe was very helpful in helping us craft that proclamation and they've been very helpful in helping us add some additions to Imagination Station to also honor that part of the Troutdale heritage and culture. We'll be working with them further to make some modifications to Imagination Station for that reason.

5. DISCUSSION: Multnomah County alternative intersection feasibility evaluation Historic Columbia River Highway and Buxton Road.

Steve Gaschler, Public Works Director, stated tonight we're bringing forward some work that we've been doing with the County for about 2 years now. We're trying to improve the operation of one of the key intersections in downtown Troutdale. I'm sure you are all aware that at certain peak times of day, in the morning and the peak hours in the afternoon, we get a long line of cars trying to maneuver through that intersection. By bringing this to you tonight it will give the property owners in that area a chance to talk to you before we do anything. About a year ago the County agreed to go out and hire Kittelson & Associates who is one of the better transportation and planning engineers in the region here to take a look at this and come back with some alternatives and what they thought. What comes out of that mostly is that that intersection, the way they analyzed it, does meet warrant for a signal. I think that's the good news. I think in the long run that's probably the best solution. The downside of that is to get a signal in there is going to take a considerable amount of money and probably some time working with the County. So

what we looked at then was, what can we do in the interim until the signal is put in? They looked at some concepts and if you looked at the memo there was some stop signs looked at there, which didn't really help much and caused a big concern on how that might affect the intersection at 257th. If we start having cars pile up at the stop sign and back up and plug that intersection with the high volume it is, it would compound the problem. So we kind of put the stop sign solutions off the table. Another thing that was looked at is a mini roundabout which would actually function fairly well and could fit in there but we would lose some parking. And we know parking is a hot button issue downtown and we thought that probably wouldn't be a good road to go downtown with taking away additional parking. So they came up with a fourth alternative that basically puts a right turn lane in there that can turn freely and that way people going northbound on Troutdale Road can then make the turn when the cars are in the right lane knowing they're going to turn right. Currently there's one lane and you don't know if they're going to turn or not turn. Some people use their signal and some don't. Some people that are signaling aren't actually turning there, they're actually turning into the parking lot into here (Bandits Bar & Grill). That's what backs that traffic up the hill so bad. This is the interim solution that will improve the functionality of the intersection from an F which is failing to an E which is a little better than failing. But we'll fail eventually as traffic picks up which we all know traffic will continue to pick up. The ultimate solution is to put a signal in there. (Steve Gaschler showed the Council a slide of the map included in the meeting packet).

Ray Young asked, Steve, would you like to introduce our guests so they know they can ask questions of the County?

Steve Gaschler replied with the County I have 2 of the lead people in the transportation department, Riad and Carrie.

Mayor Ryan asked, the proposal right now is just that? That's all that's on the table at this point?

Steve Gaschler replied basically it's just a right turn lane which the negative impacts of that is currently there's one parking spot right there at the corner that we'll lose by doing that. This just came to light so it's not on the County's CIP currently and it's not on the City's CIP. It's in our transportation system plan but it's been out there so far it hasn't met the warrant. The next update of our plan we'll put it on our plan if the Council gives us a go ahead, they'll put it on their plan and we'll start working towards getting a signal in or something.

Mayor Ryan stated let's just say everyone loved this idea. Best case scenario, when would it happen?

Riad Alharithi, Multnomah County Transportation Department, replied we would wait for the weather to be better.

Mayor Ryan asked, it could be within a year?

Riad Alharithi replied yes.

Mayor Ryan stated you're talking about the turn lane solution.

Councilor White stated I'm not sure what that baseball bat looking thing is there on Buxton (as shown on the map included in the meeting packet). Is that a divider?

Steve Gaschler replied what they're trying to do is keep the cars in the northbound lane from crowding that center line because when there's a bus or a truck coming westbound trying to make that turn they crowd out there and get over too far and they can't make a turn. And the same thing with a bus or truck going westbound making a right turn. We've seen where people crowd that and then they can't get around that corner.

Councilor Allen asked, didn't we as a Council decide years ago that we would approve the funding for a light?

Councilor Ripma replied no. I think this solution is better than a light. But let's see how it works.

Councilor Allen asked, do you all like concept #1?

Mayor Ryan stated lets have the public who came speak about it.

Councilor Ripma asked, is what is being proposed concept #1 or concept #4?

Steve Gaschler replied concept #4.

Councilor Ripma stated if we do that center divider striping we would lose a few spots of parking.

Steve Gaschler stated my understanding is the only parking spot we're losing is the one that's on E. Columbia River Highway where the right turn lane basically takes it out.

Mayor Ryan stated let's have the public come up.

Richard Weill, Troutdale property owner, stated I own the property where Steve talked about the one parking space which is the law office. I'm an attorney and I bought that building and have operated it continuously since 1995. When I bought that property I really kind of think of myself as really the first person to make an investment in the "new downtown Troutdale" because in '95 there was nothing on the north side. The first that happened there was a street improvement that happened a couple years after I was there where they put those new sidewalks in. (Richard Weill handed out a photo, a copy can be found in the meeting packet). There weren't curb cuts until you reached the bays at the plumbing folks there (Alliance Plumbing). There were maybe 3 parking spaces

immediately right in front of the building to the west. The way I operate my business, first of all, I never park on the street. I don't know why any merchant in downtown Troutdale would park on the street or allow their employees to. In that picture that I showed you you'll see a little space by my building there and in the daytime when you drive by you usually see my black Volkswagen there. That's where I park. That one space was hard fought. I'll tell you a funny story. Last year sometime I got to work on a Monday morning and there were yellow hash marks like the County had come through and just completely like condemned the street in front. Like don't even walk in this area and I probably blew Ray's phone up and I called the County and I just could not believe that that had been done without any input from me. It completely eliminated any parking, the one spot that I always wanted to have for handicap people because I do a lot of elder law and I have people coming in to sign wills. They can't walk down Buxton. They need to be in front there. It turns out it was a gentleman across the street that decided to take matters into his own hands. Recently something happened where they were going to paint a yellow stripe along the whole curb so that there would be no parking. State law, and Riad who is here can correct me, I believe it's 20 feet from an intersection that you're not supposed to park. And formerly there was a marking there but it wore off and then when they repainted it they took out the whole thing. I met with Ray and Mr. Gaschler and we got together with the County with Riad and a temporary solution was reached where they backed off on that yellow mark so that I would at least have that one space. It's not really a great space because it's not a full space. The back end of your car is actually into the curb cut. It just provides a little bit of a consideration for the kind of folks that I service in my business. The problem that I've had in this whole street and I have brought it to the attention of the County many times way before Riad was with the County and I've talked to people in Troutdale and that is this bike lane. I do not understand why this bike lane on that block has to be there. If you go on the other side of the road when you get towards 257th you'll notice there is no bike lane. It's because it's just incompatible with the amount of traffic turning right. And I think that the one thing that's missing from this report is they are still trying to maintain that bike lane. For me, it is just insane. I have been there since 1995 looking out that window seeing the increase in traffic and seeing the recreational bicyclists. The problem with that bike lane is that you've got all these cars that turn right there so they're always turning against the bike lane. The reason why the people coming down Buxton turning left are so confused is that the people turning right are not pulled over at the curb where they're supposed to be. State traffic code says when you make a right turn you are to pull over to the right as far as practical. That's in the rules of the road. Also in the bike lane statute it says, thou shall not enter a bike lane except to make a right turn. So there's nothing wrong with going into a bike lane to make a right turn to go up Buxton. But people don't do that because it's got those nice white lines and they're just afraid so they're out at the double yellow line. I think one solution would be just to recognize this is just too busy of an intersection to have the bike lane and just take it out so you open up the street. The cars that want to turn right will just go to the right. The cars that want to go straight will go straight. You can go to any street and see that action. They also painted the yellow line far more than 20 feet up Buxton. So they took out a lot of parking there. I don't think that they need to do it that much. Councilor Ripma said the trucks aren't supposed to be going up there. I think there could be a few more cars put

on Buxton. With this change I will lose the only parking space that I have which I feel that I need to service my clients. I would just like to see them explore a little better way by considering taking out the bike lane.

Ryan McNaughton, Troutdale resident, stated I own the property just to the east of Mr. Weill's property. My concern is we've looked at developing the lot there next door to my building and that triggered all sorts of things from the County. One of them was where they wanted 15 feet or so of that property for easement. They wanted us to put in stormwater facilities and you don't see that anywhere else where we've developed. It's not happening on the Discovery Block. It's only happening on my property because it can because it's 2 County roads. They said it would happen anywhere else. It feels a little bit like unrealistic to me. That's my biggest concern. I would like to develop that property. So how does this impact that development? The other thing I don't see with this is that the main problem I see is cars turning left up to Buxton and that's where you get the backup. I'm not sure that this really alleviates that problem at all. You're still going to have cars waiting to turn left and the backup is going to go clear up the road. I'm concerned with what I can do with my property. The County is telling me that I have to give them a substantial piece of my property if I do any type of development. I don't think that's fair. Nobody else has to do that downtown. It's unrealistic and just doesn't make sense. I can even see a little cut out there going through my property where the hedge is.

Councilor Lauer stated I think that's just the 75 foot length for that yellow divider in the center of Buxton. That just tells you it's 75 feet from the beginning to the end. You own Bandits?

Ryan McNaughton replied the building and the lot. We've explored developing that and quite frankly we're held up because of the County restrictions they put on us which, in my opinion, are pretty ridiculous.

Councilor Ripma stated this change in the traffic pattern putting in the right turn lane and so on, is that going to trigger the County taking 15 feet of your property?

Ryan McNaughton replied that's why I'm here.

Councilor Ripma stated I mean, that would really be unreasonable.

Ryan McNaughton stated in all my conversations with the County they want that 15 feet of property.

Councilor Ripma stated if you wanted to develop it they would take 15 feet. That's a little more arguable. I'm not saying it's fair or reasonable but if just putting in this stop sign arrangement triggers them taking 15 feet of your property which I'm not fully understanding why it would but if it did I would be opposed to us even doing it.

Ryan McNaughton stated and I'm not sure that it does. I just want to be clear that there has been some discussion of that with the development of that. We do want to see that property developed. If it's not me, I want to see it developed and I don't want anything that happens here to hinder that development. If a light is going in, do we need to give up some property? I'm fine if it helps the whole intersection but I'm not fine with just because I want to develop it I need to give up the property.

Councilor Allen asked, Mayor, can we get some clarification on what the 15 feet for stormwater?

Riad Alharithi replied, I'm not privy to the development to the property but to answer the question, none of the solution to the traffic would trigger any taking from any property.

Ryan McNaughton stated I just hope that this also brings forward the conversations that I've had with the Planning Department and with the County about that property and kind of why. I hope that we're kept in the loop about what's going on down there.

Paul Wilcox stated I had time this afternoon to review this presentation and the 4 options. I was looking for a 3-way stop ideally. I wanted to back up to the attorney's comments. The idea that cars can occupy the bike lane prior to turning right, that's absolutely incorrect in Oregon. That's the rule in California and Washington states. In Oregon, just look at the news. Look at what's referred to as right hook accidents in Portland. The reason for that is cars are required to make a right turn from the through traffic lane whereas you have the through bike lane on their right. If the car were occupying the bike lane it wouldn't happen. As far as that right turn lane, I really like that idea, the right turn lane eastbound on Historic Columbia River Highway (HCRH). I had problems with it being a free right lane. The reason for that is that people westbound on HCRC wanting to turn left onto Buxton are going to be facing a continuous flow of cars turning right from HCRH onto Buxton. I think to address that possibly rather than having a full stop for the right turners, possibly a yield sign so they would know that the people turning left onto Buxton would have the right-of-way. Another comment I had on the right turn lane, one problem I did foresee was when you create that right turn lane the people merging into that right turn lane, they're crossing the bike lane. So you have potential for bicyclists being side swiped if they're not paying attention. The one I liked best was option 4 but it didn't have the 3-way stop signs. I did like the addition of the striping between the north and south lanes to allow for larger vehicles to make that right turn. I would go with a 3-way stop and a right turn yield lane eastbound on HCRH.

Mayor Ryan asked, Ray, what's the goal of tonight?

Ray Young replied information and input. The County wants to be a good partner and let everybody know what's happening and get feedback.

Councilor Ripma stated I think the County should provide assurance to the City and the property owner that no land needs to be taken by the County for this modification. We need to provide some assurance.

Mayor Ryan stated this is just painting. Is it realistic to get rid of the bike lane?

Councilor Ripma stated I think Mr. Weill's point is very good that at 257th the bike lane disappears. What's so sacrosanct about Buxton that you have to leave it striped there?

Steve Gaschler replied at 257th you have 3 lanes. You have a left turn, a straight through and right lane. That's why the bike lane goes away. Here we've just got 2. We're not wanting to take anybody's property and I'll give you those assurances tonight. This isn't a property taking. Council has to approve a property taking. We're not asking that. If you take the bike lane away you don't get your parking back because the bike lane is 6 feet and the parking lane is 8 feet. It doesn't gain us anything. You have a lot of bike people coming through here and Ray sees them all the time downtown and it's increasing all the time. We want to make Troutdale bike friendly and try and get them through here as safely as we can. This is what the experts say is the safest way to get them through that intersection. I think if we start playing around with it we're asking for problems.

Mayor Ryan stated this is something that we have to address.

Councilor Ripma asked are any parking places being lost on Buxton by this concept 4?

Ray Young stated we'll give them a chance to look at it. We have the bus stop on the one side and we've got no parking all the way up past Mr. Weill's building on the other side. We should probably get the measurements out and look at the "baseball bat" to see how far back it actually impacts parking. I'll let you know next council meeting, Councilor Ripma.

Councilor Allen stated I definitely feel for the business because you want your customers to be able to park close. I wonder about the "baseball bat". I can understand wanting to push the traffic that is headed north on Buxton over to the right a little bit to make it easier for the bus to make the turn. However, I don't understand necessarily that same bat encroaching onto the southbound lane which seems like it would just crowd out parking near the curb. It seems like if the baseball bat weren't so far to the west that we could have less impact on the parking.

Councilor White asked, is there eventually going to need to be a light there even with these improvements?

Steve Gaschler replied yes. That's correct.

Mayor Ryan stated we have an issue here and we have to do something. I am sensitive to Richard and I get that. I wish there was something we could do there. I'm also sensitive

to Ryan's issue but that's not what we're talking about tonight, that's a different issue. We have to make a decision and we have to do something here in my opinion. I would suggest we move forward.

Councilor Allen stated I like an amalgamation of concepts 2 and 4 with the idea that the bat's not as thick and that lane flow freely whereas the stop signs are actually on HCRH with a right turn permitted.

Councilor Lauer stated there's bulb outs on concept 2.

Councilor Allen stated I don't like the bulb out. It's taking up space unnecessarily in this intersection. I would leave as many legal parking spaces as you could.

Mayor Ryan asked, will you come back to us when you finalize?

Riad Alharithi replied if you want us to come back, of course we will.

6. DISCUSSION: Local homeless problem.

Rip Caswell, Troutdale resident, stated I'm a business owner and a resident of Troutdale. I've been here in Troutdale operating business for about 26 years now. I moved in 1992 and it's always been such a quaint, wonderful community and I always felt safe. About 2 years ago, I don't know what the reasons are, it felt like things started to change. Our home up on 7th was broken into. Somebody climbed into the bedroom window and ransacked our house, stole jewelry and they were even so brazen that they made themselves lunch out of our refrigerator. The neighbors saw them climbing out of the bedroom window and called the police and our Sheriff's department reacted very quickly. Unfortunately they had had enough time to get to their drug dealer and sold all of my wife's jewelry and they were just as high as could be. And really, nothing happened to them. They just got a slap on the wrist. It's just frustrating to see that kind of thing. A few weeks later my wife and I were awakened by somebody pounding on our front door demanding to come in. This guy was high and on drugs and he was screaming and wanted in and rattling the door. I told him to leave and he was just not wanting to go and was there for quite a while. I finally pulled a shotgun and ejected a shell and told him he better leave our front door. He finally did. And then maybe a few months later the front of our gallery was broken into. Somebody smashed the front window, came in, stole artwork and the alarm went off finally and that scared them off. All these people were on foot but I can't say for sure they were homeless but I'm just saying that the town doesn't feel quite as safe as it used to. I think part of the problem is the new bridge that's come in. We have a lot of homeless people out on Thousand Acres and there's camps all over. That bridge has given them access into our downtown. They're able to easily cross back and forth going onto Frontage Road and panhandle. You see them sleeping, urinating and all kinds of things all over around the outlet malls, Frontage Road and they also go underneath the bridge out to our new building on Harlow Road. We just built a new foundry right along the Sandy River and everyday there's garbage thrown all over the place out there. There's derelict vehicles, people camping and throwing their garbage all over the place. Maybe

I'm just overly sensitive to it as an artist but I can't stand seeing all the litter and trash floating down the Sandy River, blowing all around and just really wrecking the beauty that has drawn me into Troutdale. So I wanted to bring this to your attention. I know that everyone is aware of it but I thought maybe if we get it onto the Council's agenda and we could talk about it and look for some solutions that might sort of come up with something so that we don't end up looking like we're annexed into Portland. Believe me, I have great empathy for our veterans that are out there and our mentally ill. I wish that our state and our national government would get back into helping these mentally ill people and providing housing or whatever they can do. We've got a local problem here right now and I'm hoping that we can come to some solutions. I talked to a few people and I talked to one of the sheriffs and he said we're bound right now by kind of the over-reaching rules of Multnomah County. But he said that each town can have home rule and if your Council will give us direction we'll follow that rule. And I know there's a lot of laws and it's going to take some bright minds to come up with some solutions but I think if we look at some of the other cities in Oregon and what they've done. I read an article that Ashland, Albany and Medford adopted a law called the expulsion zone. They were having a lot of problems with homeless causing problems within the town and they created this and it's given them the resources to be able to get them moved on. In Hermiston they have a law that's called the unlawful transfer law so nobody can panhandle. If you're transferring product or cash, that's an illegal activity and they can get them to move on. You don't see a lot of camps in downtown. They're mostly out at Thousand Acres. But they're sleeping under tarps and around and they're very nomadic. They come in here to panhandle along Frontage Road and they're walking quite a bit up and down the Sandy River. But there's also a lot of people living out of their cars and I'm seeing a lot of it. We've got one right in downtown on the parking below the stores along the railroad tracks there. There's kind of an RV sort of vehicle there. Along our road at Harlow there's been a lot of them coming and going. They'll stay there for 2 or 3 days, maybe a week. The police now are aware of it so they've been pushing them out of there. A lot of drug deals. I found a bag filled with needles. They've done several busts down there. There's used gloves and needles all along that trail there along the Sandy coming right out from underneath I-84 where our new urban renewal development's going to be. There's just a lot of traffic coming through there. We have all these wonderful trails but I can tell you my wife refuses to jog on any of those trails or ride a bike alone. She's afraid that she could be abducted. That's a shame to have such a beautiful livability of a city with so many amenities and parks and our residents are afraid to use them. So, what can we do? I'd like us to really talk to our Sheriff and the people that are on the ground and see if they have some ideas. They're living it and working it. The guys that are on the street are working it. Do they have any ideas as to what we can do? And I think if the towing of these vehicles is a problem because what I heard is that it costs \$3000.00 if they find a derelict vehicle that's been abandoned and they go through the whole process to tow, the tow companies refuse to take it because it costs them \$3000.00 to get rid of all the junk and only \$1000.00 in return. I'd like to ask our City to consider a fund that would help subsidize that. If we can start getting rid of these things because they seem to gravitate and it grows. Those are some of the ideas. I'd like us to look at some of the other cities and see what they've done in Oregon. We don't have to put up with this. We can be creative and be different and I really think that

Troutdale is an independent town and we should remain that way. We've all worked really hard to make this a wonderful place to live, work and play. It would be a shame if we lose what we've all worked so hard for.

Luke Bates, Way Out Inn Owner, stated I would like to second and support what Rip had to say. I had a business in N.E. Portland for the last 12 years before we moved out here and we had a serious problem with the homeless in that location for years and it just got worse. Once they got a foothold it got worse so quickly I just decided I'm done. I sold that business and my house in that neighborhood. We live out in Bridal Veil and we work here in Troutdale and we love it. I just wanted to say I'm concerned about the homeless activity that I've seen. We have young people that work for us that are leaving the place alone at 10 o'clock at night sometimes. There's been some campers down below the back side of our restaurant. I'm concerned about their safety and my wife's safety. And like Rip said, it's such a great little town and I'm hoping that we can get everybody behind this before it gets any worse.

Dodi Simons, Troutdale business owner, stated I own a couple of buildings downtown. I came in on a Sunday and all the power was off in 5 buildings that were going down the street. So then I went downstairs looking and there were beer cans all down by my power box and they had cut the switches to the power. In 21 years I've never had to put a lock on that. So then I had to go and put locks on all of the power boxes that are up and down and they're just doing it because they think it's funny. I have all girls working for me mostly and they cut the light to my automatic sensor light to go down below at night. It makes it dangerous for a lot of gals to go out to their car in the back. We can figure this out.

Mayor Ryan stated I actually have a whole bunch of experience with this because at my paying job I oversee bank branches and one of our branches is on 94th and S.E. Stark right on the trail there. There's a wall there and we've seen the increase in the last 3 years where we have overnight security there 3 times a night moving campers. The drug problem there is so bad. Every morning we go and pick up needles, we clean up human feces and blood. What I will say is that if you don't get a handle on it, it will only get worse. I sent 28 emails to the Portland City Council. I got 2 replies in the middle of the 28. They completely just ignored everything. We are going to be responsive to this. But another thing is, the City of Troutdale needs to understand that we can't go just take a baseball bat and start kicking people out. Whatever we need to do for home rule we need to be able to do because this problem will only get worse. The City of Portland is having a really tough time distinguishing between home affordability and just people who are totally addicted and they're zombies. The police can only keep them for about 4 hours. The petty theft that they do, they do little tiny things because the withdrawals are so bad that they can't go in for very long. I'm challenging Multnomah County Sheriff's Office to please help us with this. It's not going to be okay. We have a very dark and quiet downtown. I'll tell you guys, this is not inhumane. The people I deal with are going to the bathroom on our wall. This is a bank branch. He was so high and one of his needles fell out and he's struggling around. It is serious issues. If they find their way out here the drug dealers will find their way out here.

Jay Marquess, Troutdale resident, stated you all have a right to be concerned and it's valid and really sad. On my way here tonight I heard a noise outside of my house and I went out and looked and there's a gentleman with a 5 year old kid getting out of the front of his van and getting inside the back of the van to sleep tonight. And it's not all just drug addicts. It's a very sad epidemic and it's going to take a humanitarian collective effort with cities, counties and states. All of our facilities have been shut down. Unity, which is one of the main ones that we use, try to take your clients or your people down there and there's no place to put them. So what do we do? We're kind of all to blame in a sense because nobody wants to pay any more taxes and nobody wants to facilitate these places in their areas. But being a homeless person for 4 years, I'm telling you, mental health is real. What you seem to think sometimes are drug addicts are untreated mental health. All's I'm asking here is we need to do it together with humanitarian core coming to the table. When you go and break up these camps and you move them, what seems to happen? They go somewhere else. And sometimes maybe it's not easier for them to facilitate themselves so desperate people do desperate things and become a little more extreme the more exposed they get. There is an epidemic called heroin. I hope this discussion has a ripple effect and it brings us together for more discussions. I would like to be involved in those discussions if I may.

Mayor Ryan stated don't get me wrong, I think what we're talking about tonight is criminal activity and vandalizing of property, showing up at your house and breaking into things. That's 2 different issues. We do have issues. I'm almost 4 years sober. I have had times in my life also. This is not coming from a place that doesn't understand addiction because I do. What I'm saying is, there's a difference between people cutting out lights and vandalizing things and throwing trash everywhere and they're disrespectful and then the homeless families that need our help. That's a different deal and I think the HOPE officers are doing very well with that. We've got to be patrolling these areas and making sure that they're not dealing drugs down below.

Saul Pompeyo, Ristorante di Pompello, stated the homeless grows. The homeless go but the garbage stays in the place. You guys need to approve a budget for the Public Works to clean the mess. You guys can use the people that need to do community service. A budget for cleaning and work with the police for community service to clean the mess.

Ray Young stated we have a meeting with the prosecuting attorney and myself and Chris Damgen to talk about changes in parking, RV parking and the codes that we currently have to tighten those up a little bit more so we don't have a problem with people camping and causing a problem. The City of Troutdale has not had one minute of increase in police coverage in this city in over 15 years. And maybe it's time that we need to look to increase our police coverage in this City. We've grown a lot in 15 years and we haven't grown at all in our police and sheriff coverage. We're looking at what that cost might be for next budget year. I've talked to the Citizens Advisory Committee and they're considering whether they'd be willing to examine the extent of the problem if you asked them. What

is the problem? Where is the problem? And then make suggestions for code changes. I think it would be really helpful to have the Citizens Advisory Committee examine this.

Monte Reiser, Multnomah County Sheriff's Office Commander and Chief of Police, stated I really appreciate Mr. Caswell sharing his observations and the others as well. We also had an opportunity a couple weeks ago at the Community Forum to discuss this issue. I also attended the Citizens Advisory Committee meeting last week. I can tell you we are seeing and hearing of more issues related to the homeless in Troutdale. I can tell you that I don't receive as many calls as you might think. I think lately 2 or 3 more than I normally do per month. We have the HOPE team (Homeless Outreach and Programs Engagement) as an exclusive resource to try to have some public safety impact on this issue in the County. Those HOPE team members were funded a couple years ago on one-time only money that has been renewed. The 2 deputies do a wonderful job but I can tell you that they are also frustrated with the homeless condition regionally and locally. Their mission is really two-fold. It's one of outreach and it's one of enforcement. We don't see and we haven't seen a tremendous impact in terms of the lower level crimes that's typically associated with the homeless population in Troutdale. In fact, we've seen some lower type 1 crimes in Troutdale, property crimes specifically, has stayed pretty steady or has gone down in the last few years in Troutdale. But that's not to excuse anecdotally what we're actually seeing. We talked about in the past the issue of Frontage Road, that being about 15% of all the incidences that occur in Troutdale. I think we do see a lot more of the transient homeless subjects that are going typically into the unincorporated locations across the river and the Sandy River Delta and the Thousand Acres area as well as some of the camps along the railroad tracks. We talk about solutions and what can we do. The County is involved with the Joint Office of Homelessness with the City of Portland. I don't think the City of Troutdale is associated with that but there might be some experts that are working on the problem within the city. I appreciate the attempts of contacting the City in that regard. I'm familiar with Marc Jolin who is the director of the Joint Office and he would be a great resource that we can work with moving forward. There's some things that we had talked about with Council and Ray and I shared some discussion about being proactive in terms of cleanup or having a citizen's patrol and keeping an extra eye on parks and communicating and led by a sheriff's office member. Business watch might be something that we can pursue downtown with the business owners and having a discussion with them maybe through the Citizens Advisory Committee and those sorts of things. I think that looking at any immediate changes in ordinances or anything at the sheriff's office is asked to pursue in terms of enforcement really needs to be scrutinized thoroughly in terms of the legalities involved in that and the protection of 1st and 4th amendments. There's some recent 9th Court rulings that have come out with impact to what we can do and what we can't do and other rulings out there.

Mayor Ryan stated I think it's important to realize that I think that 9th ruling was that we can't ask people to move.

Monte Reiser stated if there's no available resources for them to go to. That's my understanding. I haven't read the ruling. The one thing that is a resounding statement

from me is just it's such a complex issue. It's a human services issue and it touches upon law enforcement at times. We don't see the violent crime that people may be concerned about association with homeless. Occasionally we have had those but we really don't see that as much. The addiction, the veterans and those that are down on their luck. I too share some of the experiences with seeing and meeting families that are homeless and there's definitely a compassion element that we all feel towards this issue. But we also experience the low level crime like the offensive littering and some thefts. But what we really can't say, I think, is that homeless are causing the crime in our communities. That they are the primary factor in that in the homeless population. We're dedicated to doing what we can in response to that. I'm really hoping that the HOPE team can get refunded in the next fiscal year and continue to pursue their mission of outreach and at times responding to some of the criminal complaints.

Mayor Ryan asked, is there any thought that the HOPE team wouldn't be? We went down and testified last time when it first came out.

Monte Reiser replied just an uncertain budget outlook for next fiscal year. So with that there's always the exercise that we do in terms of trying to meet that constraint. It's one of those specialty units that could be subject to a potential reduction.

Mayor Ryan asked, would you be able to give us a heads up if it looked like it was so we could help?

Monte Reiser replied absolutely.

Councilor Lauer stated the HOPE team is designed to help connect people down on their luck to resources that are available to them that they might not have known. They have to want to use those resources though. If they don't want the help, what's the course of action? If you continuously see the same people over and over again and they don't want help and for whatever reason the HOPE team isn't the answer, what's the course of action then?

Monte Reiser replied we do have that population for whatever reason. They choose the lifestyle. I think at times we can attribute some of that to mental health or addiction but for whatever reason I think there is a percentage of that population that chooses the lifestyle. With that, we enact the enforcement option. When it's on public property we have the unlawful camping ordinance which essentially gives them the 24 hours to vacate after we post that. If they're not there we'll post it and we'll give that 24 hours and if they don't move we'll go in and they're subject to arrest or citation for trespass. If they're not there, by order under the resolution, we confiscate their property and we hold it for 30 days. I like to think that people don't want to die out there and spend the rest of their lives homeless. Our first option is one of compassion and trying to connect them with those services. It's a lifestyle that there's consequences in terms of livability. There are tremendous amounts of garbage and debris and human waste and everything else that

goes with living outdoors without adequate services. The option is enforcing that unlawful camping ordinance.

Councilor Lauer stated I think Rip and the other business owners downtown bring up a bigger topic than homelessness in our area. I think mental services, addiction or just trying to make it and living out of a car in a place where people don't want them to live. We're obviously not going to find an answer tonight but I think getting the ball rolling and starting to talk and starting to at least hear the grievances that are occurring is super important. I've worked for 15 years for public works and I'm on the streets every day in 3 different Cities and I've seen different levels of the problem. It's so hard to deal with trying to help people that don't want the help. How do we get past the epidemic that we're facing and how do we offer them services that might not exist or don't exist to the amount that we need it to so we can help people? This is something that I think the 3 Cities should have come together on instead of plastic bags. I'm not saying plastic bags aren't that big of a deal but this is something that effects people right now. I think this is something worthy of 3 Councils, 3 Administrators and 3 legal teams coming together and trying to think of something positive to help our community.

Councilor Allen asked, do we know if this is a growing problem in this area as far as transferring from other states?

Monte Reiser replied I remember a couple of years ago, I think it was an Oregonian article, that talked about the 3000 homeless citizens in Multnomah County. I looked the other day and I saw the number 4100 so I think it's growing. I don't know where they're coming from but it definitely appears to be on the rise.

Councilor Lauer stated I would absolutely be for sending this to the Citizens Advisory Committee to get them involved and start discussing maybe some topics and solutions. Then even going a little bit further than that and maybe starting a sub-committee and maybe something geared more towards this specifically.

Mayor Ryan stated Ray, I guess we could ask you if everybody's in favor of the Citizens Advisory Committee doing it.

Ray Young stated I think last week Mr. Wilcox was running the meeting and my understanding that they were going to talk about it at their next meeting to see if it's a project they're willing to take on. Let's see what the Citizens Advisory Committee says and then if not we'll come back with a proposal maybe to bring together an ad hoc committee of interested citizens, the sheriff's office and staff to work on solutions if they want. I would first suggest give them the option if they want to do it. If not, we'll come up with another committee to do it. We need to come up with a solution and also the idea of talking to the other 2 Cities is a great idea.

Councilor White stated I wouldn't mind providing some input to the Citizens Advisory Committee. I've been to every League of Oregon Cities (conference) since I've been on

Council and there's usually always a homeless tour or discussion. I've gained a lot of information by seeing those. It's a highly complex set of problems. I appreciate Jay's comments that we can't just live in a bubble and think as long as we're okay and not worry about our neighbors. There's some good people out there but there's also a huge drug problem and I think in Troutdale it's a particular problem because of the area that's not in our City which is Thousand Acres. I know in the past there was a team effort with several agencies because it's a bigger problem than I think even Multnomah County can handle. I think we need to look at ways, instead of pointing fingers and blaming anybody, of coming up with a solution. I'd like to see the mental health being funded like it used to be. I know that's became a big burden on the police officers to have to deal with when that was shut down. Another thing I learned, I think there isn't a big amount of public support for a lot of the programs because they don't make sense to the public. For example, the housing authority you would think they would pick women and children first or a disabled vet instead of the person that gets the first pick for housing is someone that's coming out of jail because the idea is if they reoffend they're going to cost us all more money. So they get top priority over women and children. It's stuff like that that I think needs to be looked at and fixed. Eugene is really ahead of the curve. There's people that have college degrees that are dedicating their life to the homeless. They're non-materialistic and they want to help humanity. My hat's off to those people. There's an underlining theme that they have to not be committing crimes and not be on drugs or alcohol. There's rules. The Union Gospel Mission won't even accept anybody under their program until they're around the age of 28. I asked them why that was and they said because by then they've usually been on the bottom so long that they're looking for any kind of help and they're willing to do anything to get off the drugs and get help. I appreciate all your work. I want to look at this from an approach of, how can we help?

Mayor Ryan stated we're going to ask the Citizens Advisory Committee.

Ray Young stated we'll wait until the Citizens Advisory Committee makes a decision on what they want to do and depending on what they say we'll come back with the next steps.

7. STAFF COMMUNICATIONS

Ray Young stated Saturday at 2 o'clock your wonderful Mayor, Casey Ryan, will be helping with part of the festivities at Imagination Station. Our former Mayor Daoust will also be there saying a few words. We have coffee and punch and cake. We're planning for at least 100 to 200 people. We have our next Council meeting on the 27th which will primarily focus on an ordinance change needed for FEMA compliance for flood areas. There's nothing next week. We will be closed on Thursday and Friday next week. After the 27th, on December 4th, we will have the half-yearly budget meeting. That Thursday right after that on December 6th we will have committee selection interviews. On December 11th we will have a regular Council meeting and we will be saying goodbye to our dear friends, Rich Allen and Larry Morgan and honoring them. After the first of the year we will be swearing in our new Council members, Jamie Kranz and Nick Moon. We

will have an event for that at 6 o'clock on January 8th. Finally, we are happy to introduce Fred Ostler, our new Public Works Director who started today.

8. COUNCIL COMMUNICATIONS

Councilor Ripma stated I hope everyone enjoys a wonderful Thanksgiving.

Mayor Ryan stated I had the opportunity to go speak to the Reynolds football team before their second round playoff game Friday. They won their first round. I got to talk to them in the gym before they loaded onto the bus. I really love the culture there and I love the fact that the coach has the sense to greatness. It's kind of like Chip Kelley's "Win the Day". It's spreading throughout the school. They're bringing pride back to Reynolds. Hats off to the football team.

Councilor White stated I just want to let the public know that Rip Caswell is not the only one we've heard from. We heard from a recent resident that came in and spoke about the homeless situation. I like that Rip brought up home rule. In Troutdale we have our own way of doing things and we're trying to maintain a way of life and I think we're doing a great job.

Councilor Allen stated I do believe that we do need to enforce our laws. I think we also have to take a look at the sanitation condition. Whatever we can do to help we should be doing.

9. ADJOURNMENT

MOTION: Councilor Ripma moved to adjourn. Seconded by Councilor Lauer.
Motion passed unanimously.

Meeting adjourned at 9:04pm.

Casey Ryan, Mayor

Dated: _____

DRAFT

ATTEST:

Kenda Schlaht, Deputy City Recorder

CITY OF TROUTDALE

City Council – Regular Meeting

7:00PM

Tuesday, November 13, 2018

PLEASE SIGN IN



CITY OF TROUTDALE



STAFF REPORT

SUBJECT / ISSUE: A resolution extending the Frontier cable services Franchise Agreement with the City of Troutdale

MEETING TYPE:
City Council Regular Mtg.

MEETING DATE:
December 11, 2018

ACTION REQUIRED:
Resolution

PUBLIC HEARING:
No

STAFF MEMBER:
Ed Trompke, City Attorney

DEPARTMENT:
Legal

ADVISORY COMMITTEE/COMMISSION RECOMMENDATION:

Approval

Comments:

STAFF RECOMMENDATION: Approve the franchise term extension and acceptance as recommended by the Mt. Hood Cable Regulatory Commission (MHCRC).

EXHIBITS:

- A. Memo to Troutdale City Manager – Frontier Franchise Extension (11-20-18)
- B. Troutdale Resolution #1979 – Approving Verizon Cable Franchise (12-16-08)

SUBJECT / ISSUE RELATES TO:

- Council Goals Legislative Other (describe)

ISSUE / COUNCIL DECISION & DISCUSSION POINTS:

- ◆ The Mt. Hood Cable Regulatory Commission (MHCRC) recommends approving a term extension resolution extending the term of the Frontier franchise by four years to December 31, 2022.
- ◆ MHCRC and Frontier have agreed on extending the term of the franchises for Gresham, Troutdale, Fairview and Wood Village to December 31, 2022 with certain conditions. See Exhibit A above.

Reviewed and Approved by City Manager:

A handwritten signature in blue ink, appearing to read "R. Trompke".

BACKGROUND:

The MHCRC-administered cable franchise with Frontier expires December 31, 2018. Prior to agreeing to an extension, MHCRC staff negotiated eight issues with Frontier regarding the terms of the current Franchise. Several of the issues were resolved and the remaining issues have been dealt with in Settlement Agreement between MHCRC and Frontier (see MHCRC Memo to City Manager, Exhibit A). The MHCRC recommends that the City extend the term of the existing Frontier franchise for four years (until December 31, 2022) in order to complete a community technology needs assessment and to restart the renewal window for MHCRC in order to better manage franchise negotiations. Frontier has agreed to the extension. Under the terms of the extension, all terms and provisions of the applicable Frontier franchise, together with all related documents and agreements, will continue in effect without modification, except as specifically identified, and there will be no disruption in services provided.

Cable television franchises are non-exclusive and the City of Troutdale has active cable services franchise agreements with two companies – Comcast and Frontier. Frontier and its predecessors – began offering competing cable services in Troutdale in February 2009 and currently has a percentage of overall market share.

Under the Intergovernmental Agreement creating the MHCRC, only the City Council can renew or extend the term of an existing cable franchise; the MHCRC is a recommending body in this instance.

PROS & CONS:

Pros:

- Term extension approval accords with the MHCRC recommendation;
- Term extension avoids possible disruption of services if Frontier franchise is allowed to expire;
- Term extension preserves current level of commitments; and
- Term extension agreed to by Frontier.

Cons:

- None have been identified by MHCRC.

Current Year Budget Impacts: Yes (describe) N/A

Future Fiscal Impacts: Yes (describe) N/A

City Attorney Approved: Yes N/A

Community Involvement Process: Yes (describe) N/A

MHCRC negotiated the extension on behalf of the cities and considered the proposed extension at its November 19th meeting to receive input and comments from interested parties.



Exhibit A

12/11/18 Council Mtg. Item #4

Serving Multnomah County and the Cities of
Fairview, Gresham, Portland, Troutdale and Wood Village

November 20, 2018

TO: Ray Young, City Manager – City of Troutdale
FROM: Norm Thomas, Jurisdiction Representative
Mt. Hood Cable Regulatory Commission (MHCRC)

Julie S. Omelchuck
MHCRC Program Manager

CC: Debbie Stickney, City Recorder

RE: Frontier Franchise Extension Recommendation

Mt. Hood Cable Regulatory Commission Recommendation

The Frontier Cable Franchises with Gresham, Troutdale, Fairview, and Wood Village expire December 31, 2018. The MHCRC adopted Resolution #2018-01 recommending the MHCRC Cities extend the Frontier cable franchises to December 31, 2022, under certain conditions (see attached Resolution No. 2018-01).

A *Draft Model Franchise Term Extension Ordinance/Resolution*, along with a *Draft Model Acceptance Form (Resolution No 2018-01, Exhibit A)* have been provided as templates to expedite the adoption and acceptance process. The MHCRC also entered into an agreement with Frontier to address a couple outstanding issues. The *Settlement Agreement* has been provided for your information.

Council Action is needed before the current Franchise expires on December 31, 2018. For your convenience, we have contacted Debbie Stickney, who has tentatively scheduled the item for Tuesday, December 11th.

Once your city council has voted to adopt an ordinance/resolution, an *Acceptance Form* should be sent for signature to Frontier's legal counsel (George Baker Thomson Jr.) and returned to you with a copy to the MHCRC:

George Baker Thomson Jr.
Frontier Communications Associate General Counsel
1800 41st Street
Everett, WA 98201

Thank you in advance for your timely attention to the MHCRC's recommendation to extend the Frontier Cable Services Franchise Agreement.

Background

Under the IGA, the Jurisdictions retain authority to act on cable franchise renewals or extensions and the MHCRC acts in an advisory role to the Jurisdictions in these instances.

The MHCRC and Frontier have agreed on extending the term of the Franchises to December 31, 2022, with certain conditions set forth in MHCRC Resolution No. 2018-01 (attached).

The MHCRC is recommending the four-year extension primarily to: 1) Complete a community technology needs ascertainment, which will inform identification of potential public benefits for a renewed franchise; and 2) Restart the renewal window for Frontier as to stagger cable franchise renewal processes with current cable companies to accommodate limited MHCRC staff capacity and legal resources to manage franchise negotiations.

Conditions for Franchise Extension

Following Frontier's request for a franchise extension, MHCRC staff reviewed Frontier complaints, past compliance issues, and current franchise areas in need of updating. MHCRC staff initially identified eight issues to possibly address in a franchise extension, however, through discussions with Frontier, several issues were resolved. The remaining issues are addressed either in the recommended franchise extension model ordinance/resolution or in the MHCRC Settlement Agreement with Frontier:

PEG Access Channels in High Definition Format (Settlement Agreement)

Pursuant to the Franchise, the MHCRC requested the reserve eight access channels be activated by October 1, 2018, in HD format. This was followed by a noncompliance notice on October 3, 2018. Frontier disputed the allegations of non-compliance, but nevertheless Frontier has agreed to settle the dispute in the manner contained in the Settlement Agreement included as Exhibit B to the Resolution.

Relief of "Franchise Grant" Obligation (Settlement Agreement)

The MHCRC and Frontier have determined that Frontier wishes to be relieved of its obligation in Section 7.3.1 of the Franchise/s to pay a "Franchise Grant", and resolve this issue in the manner contained in the Settlement Agreement included as Exhibit B to the Resolution.

Clarification of Reporting Requirements (Ordinance/Resolution)

The proposed ordinance/resolution for Jurisdictions' actions clarifies provisions of Section 8.2 of the Franchise to ensure annual reports provided by Frontier include subscriber numbers.

Attachments:

Exhibit A: Model Franchise Term Extension Ordinance & Model Acceptance Form

MHCRC Resolution No. 2018-01

Exhibit B: MHCRC-Frontier Settlement Agreement

MHCRC Contacts:

Julie S. Omelchuck, MHCRC Program Manager
(503) 823-4188 | julie.omelchuck@portlandoregon.gov

Scott Ellertson, MHCRC Program Coordinator
(503) 823-0039 | scott.ellertson@portlandoregon.gov

EXHIBIT A

Recommended Model Ordinance (or Resolution) for Frontier Cable Franchise Term Extension
with Model Acceptance Form (Exhibit 1)
Per MHCRC Res. 2018-01 (adopted November 19, 2018)
For consideration by MHCRC Jurisdiction Elected Bodies

Extend term of Frontier cable franchise (**Ordinance or Resolution**)

The **City** ordains (**or resolves**):

Section 1. RECITALS

The **City** finds:

1. The Mt. Hood Cable Regulatory Commission (“MHCRC” or “Commission”) was created by an Intergovernmental Agreement dated December 24, 1992) (the “IGA”) to carry out cable regulation and administration on behalf of Multnomah County and the cities of Gresham, Fairview, Portland, Troutdale, and Wood Village (the “Jurisdictions”). Among other things, the Commission acts in an advisory capacity to the Jurisdictions in connection with renewal or extension of any cable franchise of the Jurisdictions. As set forth in the IGA, the Jurisdictions have reserved full authority to act on their own behalf regarding any proposed renewal or extension of the term of a cable franchise. However, each Jurisdiction has agreed to take no action in these areas until the Commission has had an opportunity to give prior consideration to the matter.
2. The cable franchises were granted by the Cities of Fairview, Gresham, Troutdale, and Wood Village (“Cities”) to Verizon Northwest, Inc. (“Grantee”) effective November 18, 2008 (“Franchise/s”), and the Grantee and the Franchise/s were duly transferred to and accepted by Frontier Communications Corporation and all appropriate Frontier subsidiaries (collectively “Frontier”) with the approval of the Cities in 2010. After the transfer, Frontier renamed the Grantee Frontier Communications Northwest Inc.
3. The Franchise/s will expire on December 31, 2018.
4. At a meeting held November 19, 2018, the MHCRC recommended the Cities grant an extension of the term of the Franchise/s to December 31, 2022, on certain conditions.
5. The public interest will be served by granting an extension of the term of the **City** Franchise to December 31, 2022, on certain conditions.
6. MHCRC staff has verified that Frontier has no objection to extending the term of the **City** Franchise to December 31, 2022, on certain conditions.

NOW, THEREFORE, the **City** (**directs or resolves**):

- (a) Subject to the conditions set out in the acceptance form attached as Exhibit A to this (Ordinance or Resolution), the City approves an extension of the term of the cable franchise granted by City to Frontier, effective December XX, 2018 (“Franchise/s”) from January 1, 2019 to December 31, 2022.
- (b) Section 3.3.1 of the Franchise/s is amended to delete the date “December 31, 2018” and substitute the date “December 31, 2022”.
- (c) Section 8.2 of the Franchise/s is amended to add at the end of the last sentence the following: “, and reporting annual subscriber counts.”
- (d) All other terms and provisions of the Franchise/s, together with all related documents and agreements pertaining thereto, shall continue in effect without modification.
- (e) On or before January 1, 2019 Frontier Communications Corporation, as Guarantor of the Franchise/s, shall file a written, executed acceptance of this Ordinance, meeting the approval of the City Legal Counsel. The written acceptance shall be in the form attached hereto as Exhibit 1.
- (f) The executed acceptance shall be unqualified and shall be construed to be an acceptance of all the terms, conditions and restrictions contained therein.
- (g) The failure, refusal or neglect by Frontier Communications Corporation, as Guarantor of the Franchise, to file such written acceptance by such time shall constitute an abandonment and rejection of the rights and privileges conferred hereby and this (ordinance or resolution) shall thereupon be null and void.

(Emergency Clause – optional if needed to ensure passage & acceptance prior to January 1, 2019)

Section 2. The City declares that an emergency exists because the current Frontier cable franchise expires December 31, 2018; therefore, this (ordinance or resolution) shall be in full force and effect from and after its passage.

EXHIBIT 1 – MODEL ACCEPTANCE ORDINANCE
Acceptance of Extension Of Term Of Cable Franchise
Frontier Communications/Jurisdiction

CITY NAME
c/o City contact
City Address
City, State Zip

cc to: Mt. Hood Cable Regulatory Commission
111 SW Columbia St, Suite 600
Portland, OR 97201

This is to advise the **City** that Grantee Frontier Communications Northwest Inc. and Grantee's Guarantor Frontier Communications Corporation hereby unqualifiedly accept the provisions applicable to them of **(Ordinance or Resolution)** No. _____, **(passed or adopted)** by the **City** on the ____ of ____, 2018, extending the term of the cable franchise granted by the Cities of Fairview, Gresham, Troutdale, and Wood Village were duly transferred to Frontier Communications Corporation (effective January 5, 2010) ("Franchise/s") to December 31, 2022 and agree, as applicable, to abide by the following terms and conditions:

- a. In all respects and without exception, Grantee and Grantee's Guarantor Frontier Communications Corporation agree and acknowledge that the extension of the term of the Franchise/s will not affect, diminish, impair or supersede the binding nature of the existing valid ordinances, franchises, resolutions and agreements applicable to operation of the cable system, including, but not limited to any existing guarantees, and that during the term of the extension Grantee shall comply with each and every provision of the Franchise/s including all lawful applicable ordinances, orders, contracts, agreements, commitments, side letters, and regulatory actions taken pursuant thereto, as applicable, whether prior or subsequent to the date of the term extension that is the subject of this Acceptance.
- b. Grantee and Grantee's Guarantor Frontier Communications Corporation do not waive and expressly reserve all legal rights they may have under the current Franchise/s and applicable law, and Grantee and Grantee's Guarantor Frontier Communications Corporation specifically acknowledge and expressly accept that the **City** does not waive and expressly reserves all legal rights and authority in regard to any and all non-compliance under the Franchise/s that may now exist or may later be discovered to have existed during the term of the Franchise/s, whether prior or subsequent to the date of the term extension that is the subject of this Acceptance.

**FRONTIER COMMUNICATIONS
NORTHWEST INC.**

By _____
Name:
Title:

Date: _____, 2018

STATE OF _____)
) ss.
County of _____)

This Acceptance was acknowledged before
me on the _____ day of _____,
2018, by _____
as _____, a
duly authorized officer of Frontier
Communications Northwest Inc.

**FRONTIER COMMUNICATIONS
CORPORATION**

By _____
Name:
Title:

Date: _____, 2018

Notary Public for _____
My Commission Expires _____

STATE OF _____)
) ss.
County of _____)

This Acceptance was acknowledged before
me on the _____ day of _____,
2018, by _____
as _____, a
duly authorized officer of Frontier
Communications Corporation

Notary Public for _____
My Commission Expires _____

APPROVED AS TO FORM:

City Legal Counsel

EXHIBIT B

**SETTLEMENT AGREEMENT BETWEEN MT. HOOD CABLE REGULATORY
COMMISSION AND FRONTIER COMMUNICATIONS CORPORATION BY AND ON
BEHALF OF ITSELF AND THE GRANTEE**

WHEREAS, this Agreement is between Frontier Communications Corporation by and on behalf of itself and of the Grantee as defined below (“Frontier”) and the Mt. Hood Cable Regulatory Commission (“MHCRC” or “Commission”). Frontier and the MHCRC may be individually referred to hereafter as a “Party” or jointly as the “Parties”;

WHEREAS, the Commission was created by Intergovernmental Agreement (dated December 24, 1992) (“IGA”) to carry out cable regulation and administration on behalf of Multnomah County and the cities of Gresham, Fairview, Portland, Troutdale, and Wood Village (“the Jurisdictions”);

WHEREAS, the Cities of Gresham, Fairview, Troutdale and Wood Village (“Cities”) granted cable television franchises beginning November 18, 2008 (“Franchise/s”) to Verizon Northwest, Inc. (“Grantee”), a subsidiary of Verizon Communications, Inc., (“Verizon”) for franchise terms expiring on December 31, 2018;

WHEREAS, the Grantee and Franchise/s granted by the Cities were duly transferred to and accepted by Frontier Communications Corporation and all appropriate Frontier subsidiaries (collectively “Frontier”) with the approval of each of the Cities in 2010 on the MHCRC’s recommendation per MHCRC Res. 2009-05, adopted by the MHCRC December 7, 2009;

WHEREAS, Frontier renamed the Grantee Frontier Communications Northwest Inc. after transfer;

WHEREAS, MHCRC and Frontier have negotiated the terms of a four (4) year extension of the Franchise/s, which MHCRC has recommended to the Cities for approval;

WHEREAS, during extension negotiations the MHCRC has alleged non-compliance issues related to the provision of PEG Access Channels in high definition (HD) and issued related non-compliance notice;

WHEREAS, Frontier has responded to the non-compliance notice and disputes the allegations of non-compliance;

WHEREAS, the MHCRC and Frontier have also determined that Frontier wishes to be relieved of certain additional obligations that are otherwise required under the Franchise/s, and the MHCRC is willing to relieve Frontier of those obligations in exchange for the benefits herein;

WHEREAS, the MHCRC and Frontier desire to resolve certain non-compliance issues related to the provision of HD PEG Access Channels, and to otherwise address the matters described above;

NOW THEREFORE, in exchange for the mutual benefits and undertakings described herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

1. On or before January 31, 2019, Frontier will activate the reserve eight (8) access channels as additional PEG Access Channels in HD format. Further, Frontier waives its right to a due process hearing under Section 14.6 of the Franchise/s and acknowledges and agrees that if the HD format PEG Access Channels are not activated by January 31, 2019, the MHCRC may impose fines in the amount of \$500.00 (five hundred dollars) per day, and/or exercise other remedies available under Section 14 of the Franchise/s without further notice.

2. The MHCRC and Frontier agree that: (a) MHCRC will not enforce Frontier's obligation to pay the Franchise Grant set forth in Section 7.3.1 of the Franchise/s during the extension term, and (b) Frontier shall provide to MetroEast Community Media, without charge: (i) on or before the 90th day following adoption of Franchise extension ordinance or resolution by all of the Cities, construct and activate, and (ii) through the term of the extension, provide the connections, Ethernet Virtual Private Line services and equipment as shown and described in Attachment 1: Frontier-MetroEast Logic Diagram (collectively the "PEG Connections"). Further, Frontier acknowledges and agrees that if Frontier fails to fulfill its obligations with regard to the PEG Connections, the MHCRC may impose fines in the amount of \$500 (five hundred dollars) per day, up to an annual cap of \$40,000 or exercise other remedies available under Sections 14 of the Franchise/s after providing notice and an opportunity to cure, and Frontier waives its right to a due process hearing under Section 14.6 of the Franchise/s and further agrees that any fines imposed hereunder would not count towards any cap on fines in the Franchise/s.

3. Frontier agrees that its commitments in this Agreement are provided voluntarily.

4. This Agreement shall inure to the benefit of, and shall be binding on the Parties' respective successors and assigns.

5. This Agreement may not be modified or amended, nor any of its terms waived, except by a writing signed by duly authorized representatives of the Parties.

6. This Agreement shall be construed and enforced in accordance with the laws of the State of Oregon without regard to conflicts of law principles. All actions or suits brought hereunder or arising out of this Agreement shall be brought in the appropriate State or Federal courts in Oregon.

7. This Agreement has been negotiated by the MHCRC under its authority to carry out cable regulation and administration on behalf of the Cities. The Cities shall be deemed third-party beneficiaries of this Agreement and shall be entitled to enforce the same with regard to their respective interests.

8. This Agreement is freely and voluntarily entered into by the Parties, without any duress or coercion, and after each Party has consulted with its counsel. Each Party hereto has carefully and completely read all of the terms and provisions of this Agreement. Each Party acknowledges that this is a full, complete and final mutual release as set forth previously herein.

9. Each Party covenants and agrees that it will not sue or bring or assert any action, claim or cause of action, in any jurisdiction or forum against the other Party asserting any claim waived or released by this Agreement. Each Party may plead this Agreement as a complete defense and bar to any claim waived or released by this Agreement, and, in such event, the Party bringing such barred action, claim, or demand shall indemnify and hold the other party harmless from and against any and all costs and expenses arising therefrom (including reasonable attorneys' fees and expenses incurred in connection therewith). For the avoidance of doubt, each Party acknowledges and accepts that the other Party may participate in the FCC's Second Further Notice of Proposed Rulemaking proceeding in MB Docket No. 05-311 (*In the Matter of Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992* (FCC 18-131)) without violating the covenants and agreements in the prior sentences. If any provision of this Agreement is found to be unenforceable in a final judicial or administrative proceeding, the Parties shall enter into good faith negotiations with the intent of reaching an agreement that would place the Parties substantially in the same position as if this Agreement were fully enforceable. If the negotiations do not result in agreement between the parties within sixty days from the date of the final decision referred to in the preceding sentence, then either Party may call for binding arbitration within thirty days. Such arbitration shall have the goal of placing the Parties in the same positions they would occupy if this Agreement had been fully enforceable. The Parties shall select an independent, mutually acceptable arbitrator, who shall have available the full range of appropriate remedies. The arbitrator's decision shall be final and binding on both parties. The parties will each pay their own costs to appear before the arbitrator and will share the arbitrator's costs equally.

10. This Agreement may be executed in counterparts, each of which when so executed shall be deemed to be an original copy, and all of which together shall constitute one agreement binding on all parties hereto,

11. This Agreement shall be effective on the date when it has been executed by each of the Parties.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by duly authorized representatives of each Party as follows:

Mt. Hood Cable Regulatory Commission

By: 

Name: LEIF HANSON

Its: CHAIR

Dated: 11/19/18

Frontier Communications Corporation

By: _____

Name: _____

Its: _____

Dated: _____

Exhibit B

12/11/18 Council Mtg. Item #4

RESOLUTION NO. 1979

A RESOLUTION APPROVING A FRANCHISE FOR CABLE SERVICES BETWEEN VERIZON NORTHWEST INC. AND THE CITY OF TROUTDALE

THE TROUTDALE CITY COUNCIL FINDS AS FOLLOWS:

1. Verizon Northwest Inc., a corporation duly organized under the applicable laws of the State of Washington ("Verizon"), has requested a nonexclusive cable services franchise to construct, install, maintain, extend and operate a cable communications system within the incorporated boundaries of the City of Troutdale.
2. The City of Troutdale is a "franchising authority" in accordance with Title VI of the Communications Act (see 47 U.S.C. §522(10)) and is authorized to grant one or more nonexclusive cable services franchises.
3. Verizon is in the process of upgrading its telephone system by installing a Fiber to the Premises Network ("FTTP Network") in the franchise area for the transmission of cable and non-cable services.
4. Verizon's FTTP Network will occupy the Public Rights-of-Way within the City of Troutdale, and Verizon desires to use portions of the FTTP Network once installed to provide cable services in the franchise area.
5. The Mt. Hood Cable Regulatory Commission ("MHCRC") was created by Intergovernmental Agreement (IGA") to carry out cable regulation and administration on behalf of Multnomah County and the cities of Gresham, Fairview, Portland, Troutdale, and Wood Village ("the Jurisdictions"). Among other things, the MHCRC acts in an advisory capacity to the Jurisdictions in connection with granting of any cable services franchises by the Jurisdictions. As set forth in the IGA, any grant of a cable services franchise is an area where the Jurisdictions have reserved full authority to act on their own behalf, but each Jurisdiction has agreed to take no action in this area until the MHCRC has had a prior opportunity to consider the matter;
6. The MHCRC and Verizon were unable to negotiate a mutually acceptable franchise agreement and on October 2, 2008, MHCRC recommended the Jurisdictions approve the franchise agreement with Verizon that contained provisions not agreed to by Verizon.

7. The City of Gresham entered into a cable franchise agreement with Verizon on November 18, 2008 which agreement provides for participation by the City of Troutdale such that certain terms and conditions of the franchise agreement will apply collectively to Gresham and to Troutdale.

8. Verizon's provision of cable services will further longstanding City of Troutdale goals of providing for facilities-based, competitive cable services alternatives for cable customers within the franchise area and granting of a competitive cable services franchise, with the terms and obligations herein, is in the public interest.

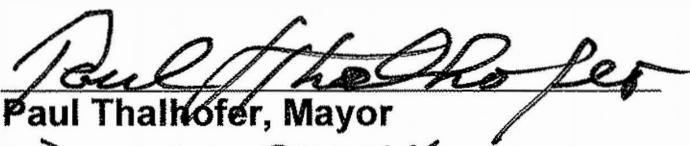
NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF TROUTDALE

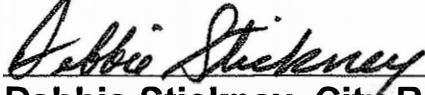
The Mayor is authorized and directed to execute on behalf of the City of Troutdale an Addendum to the Cable Services Franchise Agreement between the City of Gresham and Verizon Northwest Inc., substantially in accordance with the attached Exhibit C.

YEAS: 4

NAYS: 3 Mayor Thalhofer, Councilor Thomas, Councilor Ripma

ABSTAINED: 0


Paul Thalhofer, Mayor
December 30, 2008
Date


Debbie Stickney, City Recorder

Adopted: December 16, 2008

EXHIBIT "C"

ADDENDUM

**To The Cable Franchise Agreement
Between The
City Of Gresham, Oregon
And
Verizon Northwest Inc.**

BY AND BETWEEN

THE CITY OF TROUTDALE, OREGON

AND

VERIZON NORTHWEST INC

THIS ADDENDUM to the Cable Franchise Agreement Between the City of Gresham, Oregon and Verizon Northwest Inc., ("Addendum") is entered into by and between the City of Troutdale, a municipal corporation duly organized under the applicable laws of the State of Oregon (the "City"), and Verizon Northwest Inc., a corporation duly organized under the applicable laws of the State of Washington ("Grantee").

WHEREAS, Grantee has requested a nonexclusive franchise to construct, install, maintain, extend and operate a cable communications system in the Franchise Area;

WHEREAS, Grantee has negotiated and entered into a Cable Franchise Agreement with the City of Gresham, Oregon, dated November 18, 2008 (the "Franchise Agreement"), which provides for participation by the City as a Participating Jurisdiction such that certain terms and conditions of the Franchise Agreement will apply collectively to Gresham and the City;

WHEREAS, the City, and Grantee have agreed to be bound by the terms and conditions set forth herein and in the Franchise Agreement;

NOW, THEREFORE, in consideration of the City's grant of a franchise to Grantee, Grantee's promise to provide Cable Services to residents of the Franchise/Service Area pursuant to and consistent with the Communications Act, pursuant to the terms and conditions set forth herein and in the Franchise Agreement, and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged;

THE PARTIES DO HEREBY AGREE AS FOLLOWS:

1. **FRANCHISE AGREEMENT**

The purpose of this Addendum is to create a binding, enforceable contract between the City and Grantee. Except as otherwise provided herein and in the Franchise Agreement (attached hereto as Attachment 1), the City and Grantee hereby agree that the terms and conditions of the Franchise Agreement shall be binding on the parties hereto. With respect to the franchise granted by this Addendum, the term "City" in the Franchise Agreement shall mean the City of Troutdale. As set forth in the terms and conditions of the Franchise Agreement, certain provisions shall apply collectively to Gresham and all Participating Jurisdictions. Specifically, as set forth in the terms and conditions of Section 2.3 of the Franchise Agreement, the City has no independent rights under the following sections of the Franchise Agreement but instead these sections shall apply collectively to all jurisdictions that participate in the Franchise Agreement: PEG Access channels under Section 7.1, including the grant under Subsection 7.1.2; the Franchise Grant under Subsection 7.3.1; reimbursement of travel expenses under Section 10.1; audit reimbursement under Subsection 10.3.2.1; fines under Section 14.2; and a Security Fund under Section 14.9.

2. **DEFINITIONS**

Except as provided herein, all of the capitalized terms in this Addendum which are not otherwise defined herein shall have the meanings given to them in the Franchise Agreement.

3. REVOCATION BY GRESHAM

In the event the City of Gresham ("Gresham") revokes the Franchise Agreement, this Addendum shall remain in effect except as set forth in this Section 3. Certain terms and conditions of the Franchise Agreement were negotiated as an indivisible whole for the benefit of all Participating Jurisdictions and Grantee has relied on this fact. If Gresham revokes the Franchise Agreement, the parties to this Addendum agree to amend the terms and conditions of the Franchise Agreement to make equitable adjustments to the following provisions of the Franchise Agreement: PEG Access Channels under Section 7.1, audit reimbursement under Section 10.3.2.1, fines under Section 4.2.2, and a Security Fund under Section 14.9 (collectively, the Indivisible Sections). If the parties are unable to reach agreement on the amendment of the Indivisible Sections within ninety (90) days after the revocation by Gresham become effective, each party agrees to submit the matter to mediation at the request of the other party. If mediation is not successful, the parties agree to submit the matter to arbitration in accordance with the Oregon Uniform Arbitration Act, ORS 36.600-36.740.

4. EXHIBIT A

For purposes of the franchise granted by this Addendum, Exhibit A to the Franchise Agreement is hereby replaced with Exhibit A attached hereto.

5. EFFECTIVE DATE

For purposes of the franchise granted by this Addendum, the Effective Date shall be the date of last signature below.

6. ENTIRE AGREEMENT

This Addendum (including Exhibit A) and the terms and conditions set forth in the Franchise Agreement attached hereto constitute the entire agreement of the parties hereto with respect to the subject matter hereof and shall not be modified except by written instrument executed by both parties.

7. SUCCESSORS

This Addendum (including Exhibit A) and the terms and conditions set forth in the Franchise Agreement attached hereto shall be binding upon and inure to the benefit of the parties and their respective successors, assigns, and transferees.

TO EFFECTUATE THIS ADDENDUM, each of the parties has caused this Addendum to be executed by its duly authorized representative on the date set forth below.

SIGNATURE PAGE FOLLOWS

CITY OF TROUTDALE

APPROVED AS TO FORM:

By: Paul Thalkofter
Paul Thalkofter, Mayor

David J. Ross, City Attorney

Date: Dec. 29 2008

VERIZON NORTHWEST INC.

By: Tim McCallion
Tim McCallion, President

FORM APPROVED
Attorney
Date 1/7/09

Date: 1/7/2009

EXHIBITS

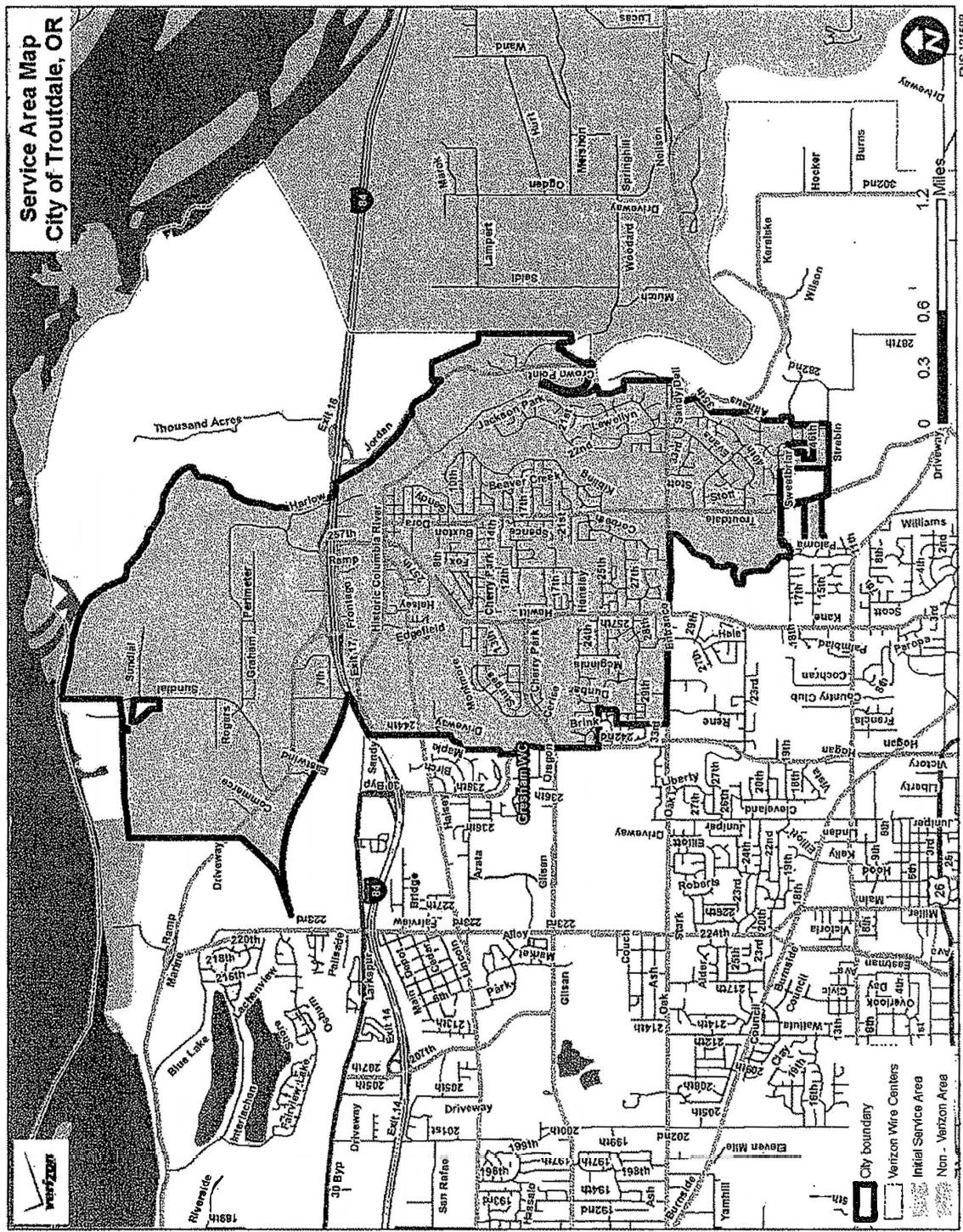
Exhibit A: Franchise Area Map

ATTACHMENTS

Attachment 1: Cable Franchise Agreement Between the City of Gresham, Oregon and Verizon Northwest Inc., dated November 18, 2008

EXHIBIT A

FRANCHISE AREA MAP



ATTACHMENT 1

**CABLE FRANCHISE AGREEMENT BETWEEN THE
CITY OF GRESHAM, OREGON AND VERIZON NORTHWEST INC.
DATED NOVEMBER 18, 2008**

CABLE FRANCHISE AGREEMENT

BETWEEN THE
CITY OF GRESHAM, OREGON
AND
VERIZON NORTHWEST INC.

November 18, 2008

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EXHIBIT D - CUSTOMER SERVICE STANDARDS

EXHIBIT E - GRANTEE PARENT STRUCTURE

EXHIBIT F - SAMPLE PERFORMANCE BOND

**CABLE FRANCHISE AGREEMENT
BETWEEN THE
CITY OF GRESHAM, OREGON
AND
VERIZON NORTHWEST INC.**

THIS CABLE FRANCHISE AGREEMENT (the "Franchise" or "Agreement") is entered into by and between the City of Gresham, a municipal corporation duly organized under the applicable laws of the State of Oregon (the "City"), and Verizon Northwest Inc., a corporation duly organized under the applicable laws of the State of Washington ("Grantee").

WHEREAS, Grantee has requested a nonexclusive franchise to construct, install, maintain, extend and operate a cable communications system in the Franchise Area as designated in this Franchise;

WHEREAS, the City is a "franchising authority" in accordance with Title VI of the Communications Act (*see* 47 U.S.C. §522(10)) and is authorized to grant one or more nonexclusive cable franchises;

WHEREAS, Grantee is in the process of upgrading its telephone system by installing a Fiber to the Premises Network ("FTTP Network") in the Franchise Area for the transmission of Cable and Non-Cable Services;

WHEREAS, Grantee's FTTP Network will occupy the Public Rights-of-Way within the City and Grantee desires to use portions of the FTTP Network once installed to provide Cable Services in the Franchise Area; and

WHEREAS, Grantee's provision of Cable Services will further longstanding goals of providing for facilities-based, competitive Cable Services alternatives for cable customers in Grantee's Service Area; and

WHEREAS, the City and Grantee have reached agreement on the terms and conditions set forth herein and have agreed to be bound by those terms and conditions.

NOW, THEREFORE, in consideration of the City's grant of a franchise to Grantee, Grantee's promise to provide Cable Services to residents of the Franchise/Service Area pursuant to and consistent with the Communications Act, pursuant to the terms and conditions set forth herein, the promises and undertakings herein, and other good and valuable consideration, the receipt and the adequacy of which are hereby acknowledged.

THE PARTIES DO HEREBY AGREE AS FOLLOWS:

1. **DEFINITIONS**

Except as otherwise provided herein, for the purpose of this Franchise and all exhibits attached hereto, the definitions and word usages set forth in the Communications Act (as hereinafter defined) are incorporated herein and shall apply in this Franchise. In addition, the definitions below shall apply. The word "shall" is always mandatory and not merely directory.

1.1 *Access Channel*: A video Channel, which Grantee shall make available to the City without charge for non-commercial PEG use for the transmission of Video Programming not under Grantee's editorial control.

1.2 *Additional Service Area*: Shall mean any portion of the Franchise Area not included in the Initial Service Area or Extended Service Area.

1.3 *Affiliate*: Any Person who, directly or indirectly, owns or controls, is owned or controlled by, or is under common ownership or control with, Grantee.

1.4 *Basic Service*: Any service tier that includes the retransmission of local television broadcast signals as well as the PEG Channels required by this Franchise.

1.5 *Cable Regulatory Commission or Commission*: The Mt. Hood Cable Regulatory Commission, or its successor agency, as designated by the legislative body of the City.

1.6 *Cable Service or Cable Services*: Shall be defined herein as it is defined under Section 602 of the Communications Act, 47 U.S.C. § 522(6).

1.7 *Cable System or System*: Shall be defined herein as it is defined under Section 602 of the Communications Act, 47 U.S.C. § 522(7). Subject to Section 3.6.3 and Section 3.9, the Cable System shall be limited to the optical spectrum wavelength(s), bandwidth or future technological capacity that is used for the transmission of Cable Services to Subscribers within the Franchise Area and shall not include the tangible network facilities of (i) a common carrier subject in whole or in part to Title II of the Communications Act or (ii) a provider of Non-Cable Services.

1.8 *Capital Cost*: The expenditure of funds for services, products or other resources, whose useful life can be expected to exceed a period of one (1) year or longer.

1.9 *Channel*: Shall be defined herein as it is defined under Section 602 of the Communications Act, 47 U.S.C. § 522(4), which currently states, "a portion of the electromagnetic frequency spectrum which is used in a cable system and which is capable of delivering a television channel (as television channel is defined by the [FCC] by regulations)."

1.10 *Communications Act*: The Communications Act of 1934, as amended.

1.11 *Designated Access Provider*: The entity or entities designated by the City to manage or co-manage the Public, Education, and Government Access Channels and facilities.

1.12 *Dwelling Unit*: Any building, or portion thereof, that has independent living facilities, including provisions for cooking, sanitation and sleeping, and that is lawfully occupied for residential purposes. Buildings with more than one set of facilities for cooking shall be considered multiple dwelling units unless the additional facilities are clearly accessory.

1.13 *Educational Access Channel*: An Access Channel available for the use of Schools in the Franchise Area.

1.14 *Extended Service Area*: The portion of the Franchise Area depicted as Extended Service Area in Exhibit A.

1.15 *FCC*: The Federal Communications Commission or successor governmental entity thereto.

1.16 *Force Majeure*: An event or events not reasonably within the control of the parties. This includes, but is not limited to, acts of God, landslides, earthquakes, lightning, fires, floods, hurricanes, volcanic activity, severe or unusual weather conditions, washouts, droughts, civil disturbances, acts of terrorism or of the public enemy, war or act of war (whether an actual declaration of war is made or not), partial or entire failure of public utilities, strikes, explosions, lockouts or other labor disturbances, or other similar events.

1.17 *Franchise Area*: The incorporated area (entire existing territorial limits) of the City and such additional areas as may be included in the corporate (territorial) limits of the City during the term of this Franchise.

1.18 *FTTP Network*: Grantee's Fiber to the Premise Telecommunications Network installed in the Franchise Area by Grantee. The FTTP Network is capable of use for Non-Cable Services and Cable Services.

1.19 *Grantee*: Verizon Northwest Inc., and its lawful and permitted successors, assigns and transferees.

1.20 *Government Access Channel*: An Access Channel available for the use of the City.

1.21 *Gross Revenue*: All revenue, including any and all cash, credits, property, or consideration of any kind, which is earned or derived by Grantee and/or its Affiliates from the operation of Grantee's Cable System to provide Cable Services in the Franchise Area. Gross Revenue shall be reported to Grantor using the "accrual method" of accounting. Gross Revenue shall include, but is not limited to, the following items so long as all other cable providers in the Service Area include the same in Gross Revenues for the purposes of calculating franchise fees:

- (a) fees charged for Basic Service;
- (b) fees charged to Subscribers for any service tier other than Basic Service;
- (c) fees charged for premium Channel(s), e.g. HBO, Cinemax, or Showtime;
- (d) fees charged to Subscribers for any optional, per-channel, or per-program services;
- (e) charges for installation, additional outlets, relocation, disconnection, reconnection, and change-in-service fees associated with Cable Services;
- (f) fees for downgrading any level of Cable Service programming;
- (g) fees for service calls;
- (h) fees for leasing of Channels;
- (i) revenue from customer equipment, including converters (e.g. set top boxes, high definition converters, and digital video recorders) and remote control devices;
- (j) advertising revenue as set forth herein;

- (k) revenue from the sale or lease of access Channel(s) or Channel capacity;
- (l) revenue from the sale or rental of Subscriber lists;
- (m) revenues or commissions received from the carriage of home shopping channels;
- (n) fees for any and all audio programming services provided as Cable Service;
- (o) revenue from the sale of program guides;
- (p) late payment fees;
- (q) forgone revenue that Grantee chooses not to receive in exchange for trades, barters, services, or other items of value;
- (r) revenue from NSF check charges;
- (s) revenue received from programmers as payment for distribution of programming content on the Cable System, including launch fees; and
- (t) to the extent Grantee chooses to itemize amounts on its Subscriber or customer billings for Cable Service-related fees, taxes, other expenses incurred by Grantee that are imposed on Grantee by governmental agencies or other third parties, such itemized amounts are also part of Gross Revenue.

Gross Revenue shall include amounts earned during any period regardless of whether (1) the amounts are paid in cash, in trade or by means of some other benefit to the Grantee or any Affiliate; (2) the goods or services with which the revenue is associated are provided at cost or the revenue amount can be matched against an equivalent expenditure; and (3) the amounts are initially recorded by the Grantee or an Affiliate.

Gross Revenues shall not be net of (1) any operating expense; (2) any accrual, including, without limitation, any accrual for commissions; or (3) any other expenditure, regardless of whether such expense, accrual or expenditure reflects a cash payment. Revenues which are not directly attributable to specific Subscribers or the City, such as advertising revenue and home shopping commissions, shall be allocated to systems and the City on a per Subscriber basis measured in a consistent manner from period to period.

Notwithstanding the foregoing, Gross Revenue shall be subject to the following limitations, exclusions or deductions:

1.21.1 Revenues of both Grantee and an Affiliate that represent a transfer of funds between the Grantee and the Affiliate, and that would otherwise constitute Gross Revenues of both the Grantee and the Affiliate, shall be counted only once for purposes of determining Gross Revenues. Similarly, operating expenses or capital expenditures of the Grantee which are payable from Grantee's revenue to an Affiliate and which may otherwise constitute revenue of the Affiliate, shall not constitute additional Gross Revenue for the purposes of this Franchise. Revenue of an Affiliate constitutes Gross Revenue to the extent the treatment of such revenue as revenue of the Affiliate and not of Grantee has the intentional or unintentional effect of evading the payment of franchise fees that would otherwise be payable to the City hereunder;

1.21.2 Bad debts written off by Grantee in the normal course of its business shall be deducted, provided, however, that bad debt recoveries shall be included in Gross Revenue during the period collected;

1.21.3 Refunds, rebates, or discounts made to Subscribers or other third parties shall be deducted;

1.21.4 Any revenues classified as or attributed to, in whole or in part, Non-Cable Services revenue under federal or state law shall be deducted or excluded but only such amounts as are directly charged or are properly allocable to Non-Cable Services;

1.21.5 Any revenue of Grantee or any Person that is received directly from the sale of merchandise through any Cable Service distributed over the Cable System shall be excluded, notwithstanding that portion of such revenue that represents or can be attributed to a Subscriber fee or a payment for the use of the Cable System for the sale of such merchandise, which portion shall be included in Gross Revenue;

1.21.6 Revenues from the sale of Cable Services on the Cable System to a reseller for resale shall be excluded when the reseller is required by the City to pay franchise fees and/or PEG fees, as applicable, to the City on the resale of the Cable Services;

1.21.7 Any tax of general applicability imposed upon Subscribers by a city, state, federal, or any other governmental entity and which such governmental entity requires be collected from Subscribers by Grantee and remitted to the taxing entity shall be excluded;

1.21.8 Any forgone revenue that Grantee chooses not to receive in exchange for its provision of free or reduced cost cable or other communications services to any Person shall be excluded, including without limitation, employees of Grantee and public institutions or other institutions designated in the Agreement; provided, however, that such forgone revenue that Grantee chooses not to receive in exchange for trades, barters, services, or other items of value in place of cash consideration shall be included in Gross Revenue;

1.21.9 Revenues from the sales of capital assets or sales of surplus equipment shall be excluded, provided that this exclusion shall not include retail sales directly to Subscribers by Grantee of converters, remote controls and other Subscriber equipment used in the provision of Cable Service over the Cable System;

1.21.10 Reimbursement by programmers of marketing costs incurred by Grantee for the introduction of new programming pursuant to a written marketing agreement shall be excluded; or

1.21.11 Telephone directory or Internet advertising revenue shall be excluded, including, but not limited to, yellow page, white page, banner advertisement, and electronic publishing revenue.

1.22 *Initial Service Area:* The portion of the Franchise Area as outlined in Exhibit A.

1.23 *Institutional Network or I-NET:* Dedicated capacity to provide one-way and bi-directional communication services to and among PEG Institutions pursuant to Section 611 of the Communications Act, 47 U.S.C. §531.

1.24 *Non-Cable Services*: Any service that does not constitute the provision of Cable Services to Subscribers in the Franchise Area.

1.25 *PEG*: Public, Educational, and Governmental, collectively.

1.26 *PEG Institutions*: Any School; agency of government, excluding federal governments; public library; or community service organization, with at least one physical site located within the Franchise Area.

1.27 *Person*: An individual, partnership, association, joint stock company, trust, corporation, or governmental entity.

1.28 *Public Access Channel*: An Access Channel available for the use by individual members of the general public, organizations and groups in the Franchise Area.

1.29 *Public Rights-of-Way*: The surface and the area across, in, over, along, upon and below the surface of the public streets, roads, bridges, sidewalks, lanes, courts, ways, alleys, and boulevards, including public utility easements and public lands and waterways used as Public Rights-of-Way, as the same now or may thereafter exist, that are under the jurisdiction or control of the City. Public Rights-of-Way do not include the airwaves above a right-of-way with regard to cellular or other nonwire communications or broadcast services.

1.30 *School*: Any educational institution, public or private, registered by the State of Oregon pursuant to ORS 345.505-.525, excluding home schools, including but not limited to primary and secondary schools, colleges and universities.

1.31 *Service Area*: All portions of the Franchise Area where Cable Service is being offered, including the Initial Service Area, the Extended Service Area, and any Service Areas added pursuant to 4.1.1.3.

1.32 *Service Date*: The date that Grantee first provides Cable Service on a commercial basis directly to multiple Subscribers in the Franchise Area. Grantee shall memorialize the Service Date by notifying the City in writing of the same, which notification shall become a part of this Franchise.

1.33 *Subscriber*: A Person who lawfully receives Cable Service over the Cable System with Grantee's express permission.

1.34 *Telecommunications Facilities*: Grantee's facilities providing Telecommunications Services and Information Services, including its FTTP Network facilities.

1.35 *Telecommunication Services*: Shall be defined herein as it is defined under Section 3 of the Communications Act, 47 U.S.C. § 153(46).

1.36 *Title II*: Title II of the Communications Act.

1.37 *Title VI*: Title VI of the Communications Act.

1.38 *Video Programming*: Shall be defined herein as it is defined under Section 602 of the Communications Act, 47 U.S.C. § 522(20).

2. CABLE REGULATORY COMMISSION AS AGENT

2.1 *Purpose and Scope of Agreement*: The purpose of this Franchise is to create a binding, enforceable contract between the City and the Grantee.

2.2 *Intergovernmental Agreement*.

2.2.1 The governing body of the City has adopted this Franchise as its own, under its independent government authority and has elected to provide for a Cable Regulatory Commission (the "Commission") created through an Intergovernmental Agreement (attached as Exhibit B) ("Intergovernmental Agreement"). The cities of Fairview, Gresham, Troutdale, Wood Village and unincorporated Multnomah County (the "jurisdictions") are parties to the Intergovernmental Agreement. The City has agreed to designate the Commission as its representative and agent under this Franchise, except as specifically stated otherwise herein, and to be bound by certain decisions and actions taken by the Commission as set forth in the Intergovernmental Agreement. Throughout this Franchise Agreement, references to the City are intended to include the Commission acting on behalf of the City, unless otherwise stated or such powers are reserved to the City in the Intergovernmental Agreement. In fulfilling the terms of this Franchise, the Grantee is entitled to rely upon, look to, communicate with, and comply with the decisions and orders of the Commission unless otherwise stated herein. Nothing in this Franchise shall be construed to empower the Commission to act contrary to the provisions of the Intergovernmental Agreement. The City retains all powers reserved to it in the Intergovernmental Agreement.

2.2.2 Any jurisdiction has the right to withdraw from the Intergovernmental Agreement. In the event the City does withdraw, the Grantee will deal separately with the City or the City's designee, and the Commission shall no longer serve as representative or agent of the City. The City agrees that it will not withdraw from the Intergovernmental Agreement without first providing written notice to the Grantee and providing Grantee with an opportunity to state its position on such withdrawal. The City further agrees that it will not amend the Intergovernmental Agreement without first providing written notice to the Grantee and providing Grantee with an opportunity to state its position on such amendment.

2.2.3 Any withdrawal from or amendment to the Intergovernmental Agreement shall not be construed as amending this Franchise.

2.2.4 Withdrawal of a jurisdiction from the Intergovernmental Agreement shall not affect this Franchise which shall remain in effect except as set forth in this Subsection 2.2.4. Certain provisions of this Franchise, including the PEG Access Channels, have been negotiated as an indivisible whole for the benefit of all Participating Jurisdictions (as hereinafter defined) and Grantee has relied on this fact in entering into this Agreement. If the City withdraws from the Intergovernmental Agreement, it shall be entitled to receive the five percent (5%) franchise fee set forth in Section 8 and the PEG/I-Net Grant set forth in Section 7.5 of this Franchise, for Grantee's Gross Revenues attributable to the City's territorial limits and the Grantee agrees to

good faith negotiations with the City with respect to the following provisions of the Agreement: PEG Access Channels under Section 7.1, audit reimbursement under Section 10.3.2.1, fines under Section 14.2.2, or a Security Fund under Section 14.9 (collectively, "Sections Subject to Renegotiation"). The purpose of the negotiation is to modify the Sections Subject to Renegotiation so as to continue to provide the benefits of the Sections Subject to Renegotiation to the City to the extent such benefits may be provided without any additional cost (whether by direct payment to the City, increased labor or material costs, or otherwise) to Grantee over and above the cost Grantee would have incurred had the City not withdrawn. If the Grantee and the City are unable to reach agreement on the modification of the Sections Subject to Renegotiation within ninety (90) days after the withdrawal of the City becomes effective, each party agrees to submit the matter to mediation at the request of the other party. Until the Grantee and the City reach agreement on any Sections Subject to Renegotiation, Grantee shall have no additional obligations under those sections beyond that which Grantee would have had had the City not withdrawn. Except as modified above, this Franchise Agreement shall remain in effect.

2.3 *Participating Jurisdictions:* The parties acknowledge that the cities of Fairview, Troutdale and Wood Village, as well as unincorporated Multnomah County, may choose with Grantee's consent and by approval and execution of an addendum to this Franchise Agreement, to be bound by the terms and conditions of this Agreement ("Participating Jurisdictions"). In such event, the terms and conditions of this Agreement shall be applied collectively to all the jurisdictions that participate and Grantee shall not be subject to duplicative requirements in any Participating Jurisdiction, particularly with respect to PEG Access Channels under Section 7.1, including the grant under Subsection 7.1.2; the Franchise Grant under Subsection 7.3.1; reimbursement of travel expenses under Section 10.1; audit reimbursement under Subsection 10.3.2.1; fines under Section 14.2; or a Security Fund under Section 14.9

3. GRANT OF AUTHORITY; LIMITS AND RESERVATIONS

3.1 *Grant of Authority:* Subject to the terms and conditions of this Agreement and the Communications Act, the City hereby grants Grantee the right to own, construct, operate and maintain a Cable System along the Public Rights-of-Way within the Franchise Area, in order to provide Cable Service. No privilege or power of eminent domain is bestowed by this grant; nor is such a privilege or power bestowed by this Agreement.

3.2 *Regulatory Authority Over the FTTP Network:* Grantee's FTTP Network is being constructed and will be operated and maintained as an upgrade to and/or extension of its existing Telecommunications Facilities for the provision of Non-Cable Services. The City acknowledges that jurisdiction over such Telecommunications Facilities is governed by federal and state law, and the City does not and will not assert jurisdiction over Grantee's FTTP Network in contravention of those laws. As provided in Section 621 of the Communications Act, 47 U.S.C. § 541, the City's regulatory authority under Title VI of the Communications Act is not applicable to the construction, installation, maintenance, or operation of Grantee's FTTP Network to the extent the FTTP Network is constructed, installed, maintained, or operated for the purpose of upgrading and/or extending Grantee's existing Telecommunications Facilities for the provision of Non-Cable Services. Nothing in this Franchise shall affect the authority of the City to adopt and enforce lawful regulations with respect to Grantee's FTTP Network as a Telecommunications Facility in the Public Rights-of-Way.

3.3 Term and Effective Date:

3.3.1 *Term:* The term of this Franchise ("Term") shall be from the Effective Date through and including December 31, 2018, unless the Franchise is earlier revoked as provided herein.

3.3.2 *Effective Date:* This Agreement shall become effective on November 18, 2008 (the "Effective Date").

3.4 *Grant Not Exclusive:* The Franchise and the rights granted herein to use and occupy the Public Rights-of-Way to provide Cable Services shall not be exclusive, and the City reserves the right to grant other franchises for similar or other uses of the Public Rights-of-Way, or any portions thereof, to any Person, or to make any such use themselves, at any time during the term of this Franchise. Any such rights which are granted shall not adversely impact the authority as granted under this Franchise.

3.5 *Franchise Subject to Federal Law:* Notwithstanding any provision to the contrary herein, this Franchise is subject to and shall be governed by all applicable provisions of federal law as it may be amended, including but not limited to the Communications Act.

3.6 No Waiver:

3.6.1 The failure of the City on one or more occasions to exercise a right or to require compliance or performance under this Franchise, the Communications Act or any other applicable State or Federal law shall not be deemed to constitute a waiver of such right or a waiver of compliance or performance by the City, nor to excuse Grantee from complying or performing, unless such right or such compliance or performance has been specifically waived in writing.

3.6.2 The failure of Grantee on one or more occasions to exercise a right under this Franchise or applicable law, or to require performance under this Franchise, shall not be deemed to constitute a waiver of such right or of performance of this Agreement, nor shall it excuse the City from performance, unless such right or performance has been specifically waived in writing.

3.6.3 Neither party waives any of its rights under state or federal law, except as otherwise set forth in this Franchise Agreement. Moreover, neither party waives its rights under any applicable law regarding the adoption and enforcement of lawful regulations with respect to Grantee's FTTP Network as a Telecommunications Facility in the Public Rights-of-Way.

3.7 Construction of Agreement:

3.7.1 The provisions of this Franchise shall be liberally construed to effectuate their objectives.

3.7.2 Nothing herein shall be construed to limit the scope or applicability of Section 625 of the Communications Act, 47 U.S.C. § 545.

3.7.3 Notwithstanding any provision to the contrary herein, this Franchise is subject to and shall be governed by all applicable provisions of federal and state law as they may be amended, including but not limited to the Communications Act. Should any change to state and federal law after the Effective Date have the lawful effect of materially altering the terms and conditions of this Franchise to the detriment of Grantee or the City, then Grantee and the City shall modify this Franchise to ameliorate such adverse effects on, and preserve the affected benefits of, the Grantee and/or the City to the extent possible consistent with the change in law. If the parties cannot reach agreement on the above-referenced modification to the Franchise, then, at Grantee's or the City's option, the parties agree to submit the matter to mediation. In the event mediation does not result in an agreement, then, at Grantee's or the City's option, the parties agree to submit the matter to non-binding arbitration in accordance with the commercial arbitration rules of the American Arbitration Association. The non-binding arbitration and mediation shall take place in the Franchise Area, unless the parties' representatives agree otherwise. In any negotiations, mediation, and arbitration under this provision, the parties will be guided by the purpose set forth below. In reviewing the claims of the parties, the mediators and arbitrators shall be guided by the purpose of the parties in submitting the matter for guidance. The parties agree that their purpose is to modify the Franchise so as to preserve intact, to the greatest extent possible, the benefits that each party has bargained for in entering into this Franchise and ameliorate the adverse effects of the change in law in a manner not inconsistent with the change in law. Should the parties not reach agreement, including not mutually agreeing to accept the guidance of the mediator or arbitrator, this Subsection 3.7.3 shall have no further force or effect. To the extent permitted by law, if there is a change in federal law or state law that permits Grantee to opt out of or terminate this Franchise, then Grantee agrees not to exercise such option.

3.8 *Police Powers:* In executing this Franchise Agreement, the Grantee acknowledges that its rights hereunder are subject to the lawful police powers of the City to adopt and enforce general ordinances necessary to the safety and welfare of the public and Grantee agrees to comply with all lawful and applicable general laws and ordinances enacted by the City pursuant to such power. Nothing in this Franchise shall be construed to prohibit the reasonable, necessary and lawful exercise of the City's police powers. However, if the reasonable, necessary and lawful exercise of the City's police power results in any material alteration of the terms and conditions of this Franchise, then the parties shall modify this Franchise after good faith negotiations to the satisfaction of the parties to ameliorate the negative effects on Grantee of the material alteration. If the parties cannot reach agreement on the above-referenced modification to the Franchise, then Grantee may terminate this Agreement after providing the notice to Subscribers required under Section 14.11 hereof without further obligation to the City, or, at Grantee's option, the parties agree to submit the matter to arbitration in accordance with the Oregon Uniform Arbitration Act , ORS 36.600-36.740.

3.9 *Termination of Telecommunications Services:* Notwithstanding any other provision of this Franchise, if Grantee ceases to provide Telecommunications Services over the FTTP Network at any time during the Term and is not otherwise authorized to occupy the Public Rights-of-Way in the Franchise Area, the City may regulate the FTTP Network as a cable system to the extent permitted by Title VI.

3.10 Competing Cable Systems:

3.10.1 The parties acknowledge that there is an incumbent cable operator already providing cable service within the Franchise Area. The incumbent cable operator provides capacity on its cable system for PEG Access Channels, has existing assignments for the PEG Access Channels, provides PEG Access Capital funding and provides I-Net capacity and support. The parties agree that the obligations set forth in Section 7 are intended to require Grantee to provide PEG Access Channels, I-Net Capital funding; and PEG Capital funding that is substantially equivalent to that provided by the incumbent franchised cable operator. Grantee agrees and acknowledges that, solely for the purposes of Section 3.10, the provisions of any other franchise issued or administered by the City with respect to the provision of Cable Services and in effect as of the Effective Date of this Franchise, are reasonably non-discriminatory and competitively neutral.

3.10.2 If, after the Effective Date of this Franchise, the City grants a cable services franchise agreement to another cable operator, and such cable operator provides Cable Services in Grantee's Service Area which franchise requires:

3.10.2.1 A lower percentage of Gross Revenue than the PEG/ I-Net Grant required under Section 7.5.1 of this Franchise, then, at the Grantee's request, the parties agree that Grantee's obligations in Section 7.5.1 of this Franchise will be modified to the same percentage of Gross Revenue as such other cable operator's franchise agreement; or

3.10.2.2 Fewer PEG Access Channels than are required under Section 7.1 of this Franchise, excluding the one Access Channel in Section 7.1.1 provided for distribution of PEG Access Channel programming information to Subscribers, then at the Grantee's request, the parties agree that the number of PEG Access Channels in Section 7.1 of this Franchise will be modified to the same number of PEG Access Channels as such other cable operator's franchise agreement.

3.10.3 Grantee, by acceptance of this franchise, acknowledges that it has not been induced to enter into this franchise by any understanding or promise or other statement, whether verbal or written, by or on behalf of the City, or by any other Person.

4. PROVISION OF CABLE SERVICE

4.1 Service Area:

4.1.1 *Initial Service Area:* Grantee shall make Cable Service available to significant numbers of Dwelling Units in the Initial Service Area and may make Cable Service available to businesses in the Initial Service Area, within twelve (12) months of the Service Date of this Franchise, and shall make Cable Service available to all Dwelling Units in the Initial Service Area within three (3) years of the Service Date of the Franchise, except: (A) for periods of Force Majeure; (B) for periods of delay caused by the City or any other actions or inactions of any government instrumentality or public utility not resulting from Grantee's own delay; (C) for periods of delay resulting from Grantee's inability to obtain authority to access rights-of-way in the Service Area; (D) in areas where developments or buildings are subject to claimed exclusive arrangements with other providers; (E) in areas, developments or buildings where Grantee

cannot access under reasonable terms and conditions after good faith negotiation, as determined by Grantee; (F) in developments or buildings where Grantee is unable to provide Cable Service for technical reasons or that require non-standard facilities that are not available on a commercially reasonable basis; (G) in areas where the Dwelling Unit density does not meet the density requirements set forth in Subsection 4.1.1.1; and (H) for documented work delays caused by waiting for utility providers to service or monitor utility poles to which Grantee's FTTP Network is attached, or caused by documented unavailability of materials and/or qualified labor to perform the work necessary to the extent that such unavailability of materials or labor was reasonably beyond the ability of Grantee to foresee or control.

4.1.1.1 *Density Requirement:* Grantee shall make Cable Services available to Dwelling Units in all areas of the Service Area where the average density is equal to or greater than 20 Dwelling Units per mile as measured in strand footage from the nearest technically feasible point on the active FTTP Network. After the time stated for providing Cable Service as set forth in Subsections 4.1.1, should an area within the Initial Service Area or Extended Service Area meet the density requirements through new construction, Grantee shall provide Cable Service to such area within one hundred eighty (180) days of receiving a request for service.

4.1.1.2 *Extended Service Area:* Within twenty-four (24) months following the Service Date, Grantee shall begin providing Cable Service in the Extended Service Area subject to the conditions of Subsection 4.1.1 above and the other terms set forth herein and shall make Cable Service available to all Dwelling Units in the Extended Service Area within four (4) years following the Service Date.

4.1.1.3 *Additional Service Areas:* Except for the Initial Service Area and Extended Service Area, Grantee shall not be required to provide Cable Services to any other areas within the Franchise Area during the term of this Franchise. If Grantee desires to add a portion of the Additional Service Areas to the Service Area, Grantee shall notify the Commission in writing of such addition and provide an updated map of the Service Area at least ten (10) days prior to providing Cable Services in such areas. All provisions of this Franchise shall apply to any Additional Service Areas which are receiving Cable Service from Grantee.

4.2 *Availability of Cable Service:* Grantee shall make Cable Service available to all Dwelling Units and may make Cable Service available to businesses within the Service Area in conformance with Section 4.1 and Grantee shall not discriminate between or among any individual or Subscriber in the availability or provision of Cable Service.

4.3 *Standard and Non-Standard Installations:* In the areas where Grantee provides Cable Service, Grantee shall be required to connect, at Grantee's cost other than the standard installation charge, all residential Dwelling Units that require a drop of not more than three hundred thirty five (335) feet from the Dwelling Unit requesting Cable Service to the nearest point from which the FTTP Network is designed to serve the site (a "Standard Installation" under this Franchise); provided that, Grantee shall have no obligation to provide Cable Services to Dwelling Units which require an installation in excess of a Standard Installation, unless the Subscriber requesting such connection agrees to pay Grantee's actual costs incurred for the

portion of the residential installation that exceeds a Standard Installation or actual costs incurred to connect any non-residential Dwelling Unit Subscriber.

5. SYSTEM OPERATION

5.1 *FTTP Network:* As provided in Section 3.2, the parties recognize that Grantee's FTTP Network is being constructed and will be operated and maintained as an upgrade to and/or extension of its existing Telecommunications Facilities. The jurisdiction of the City over such Telecommunications Facilities is restricted by federal and state law, and the City agrees that it shall not assert jurisdiction over Grantee's FTTP Network in contravention of those limitations.

5.2 *Cable System Tests:* Grantee shall perform all tests necessary to demonstrate compliance with the requirements of the Franchise, and to ensure that the Cable System components are operating as required. All tests shall be conducted in accordance with applicable federal rules.

5.2.1 Grantee shall conduct tests on the Cable System as follows:

5.2.1.1 All applicable tests required by the FCC; and

5.2.1.2 Any other tests reasonably necessary to determine compliance with this Franchise or in response to subscriber complaints.

5.2.2 Grantee shall sign all records of tests provided to the City.

5.2.3 The City shall have the right to witness and/or review all required tests under Subsection 5.2.1. Grantee shall provide the City with at least two business days' notice of, and the opportunity to observe, any such tests performed. To the extent the City utilizes contractors for these purposes, such contractors shall sign a nondisclosure agreement prior to admittance to Grantee's facilities or to witnessing such tests.

5.2.4 Grantee shall retain written reports of any test results and shall submit the reports to the City upon request. The City shall have the same rights the FCC has to verify Grantee's test data.

6. SYSTEM FACILITIES

6.1 *System Characteristics:* The Cable System shall meet or exceed all applicable FCC technical standards and the following requirements:

6.1.1 The System shall be designed with a digital carrier passband between 50 and 860 MHz. The Cable System shall be capable of standard digital, HDTV, video-on-demand, as well as other future services.

6.1.2 The System shall be designed to be an active two-way plant for subscriber interaction, if any, required for selection or use of Cable Service.

6.1.3 *Power Outages:* The Cable System shall have protection against outages due to power failures, so that back-up power is available at a minimum of at least 24 hours at the Cable System headend and, conforming to industry standards, in no event rated for less than four (4) hours at each power supply site.

6.2 *Interconnection:* Grantee shall design its Cable System so that it may be interconnected with other cable systems in the Franchise Area. Interconnection of systems may be made by direct cable connection, microwave link, satellite, or other appropriate methods.

6.3 *Emergency Alert System:* Grantee shall comply with all applicable federal and state regulations regarding the emergency alert system ("EAS"). The City may identify authorized emergency officials for activating the EAS. The City may also develop a local plan containing methods of emergency alert system message distribution, subject to applicable federal and state laws.

6.4 *Compliance with Safety Requirements:* All work authorized and required herein shall comply with all safety requirements, rules and practices, and employ all necessary devices as required by applicable law and, by way of illustration not limitation, with the National Electrical Code, National Electric Safety Code, and Occupational Safety and Health Administration (OSHA) standards.

6.5 *Inspection of Facilities:* The City may inspect any of Grantee's facilities and equipment to confirm performance under this Agreement upon at least twenty-four (24) hours notice to Grantee. In all instances, a qualified representative of Grantee must be available to accompany the inspection. To the extent the City utilize contractors for these purposes, such contractors shall sign a nondisclosure agreement prior to admittance to Grantee's facilities.

7. PEG ACCESS AND I-NET

7.1 *PEG Access Channels:*

7.1.1 Subject to Section 3.10.2, Grantee shall provide eight (8) PEG Access Channels as part of Basic Service which shall be fully accessible to all Subscribers within the Service Area. Grantee shall provide one additional Access Channel as part of Basic Service, to be used by the City or its designee(s) for the distribution of PEG Access Channel programming information to Subscribers.

7.1.2 Within ten (10) days after the Effective Date of this Agreement, the City or its designee(s) shall inform Grantee of the general type of initial use of the PEG Access Channels (e.g. Public, Educational, or Governmental Access Channel) provided by Grantee under Subsection 7.1.1. Grantee may transmit PEG Access Channels within and without the City's jurisdictional boundaries. Grantee shall initially assign the PEG Access Channels on its channel line-up as requested by the City to the extent such channel assignments do not interfere with Grantee's existing or planned channel line-up. If the general type of content on a PEG Access Channel changes, Grantee shall be provided with at least forty-five (45) days notice of the change(s) so that Grantee can update its channel listing as appropriate. In the event Grantee changes the channel assignment of one or more PEG Access Channels, Grantee shall provide at least forty-five (45) days advance notice to the Commission and shall provide a grant of two

thousand five hundred dollars (\$2,500) for costs associated with notice of the PEG Access Channel reassignment. Grantee shall identify the PEG Access Channels in Grantee's on-screen channel listing, in the local area channel listings on Grantee's website and in print materials provided to Subscribers. Grantee shall ensure that the terminology used to identify the PEG Access Channels, including the channel identification, on Grantee's on-screen channel listing is not inaccurate or misleading.

7.1.3 Subject to Section 3.10.2, Grantee shall reserve eight (8) additional PEG Access Channels, for a total of seventeen (17) PEG Access Channels. Grantee shall activate a reserved PEG Access Channel following a written request from the City or its designee(s) when the following criteria have been met, as applicable to the type of PEG Access Channel to be activated:

7.1.3.1 The City or its designee(s) must have identified and documented a community need for additional programming capacity that the City or its designee(s) believe cannot be fulfilled by existing Public, Educational or Governmental Access Channels;

7.1.3.2 The existing Public, Educational or Governmental Access Channels must be utilized for PEG programming at least eight (8) hours per day, for any four (4) consecutive weeks, which programming for purposes of this calculation shall not include programming that is more than fifty percent (50%) character generated; and

7.1.3.3 Subject to the conditions in Subsection 7.2.2, as long as the origination point is the PEG Access Headend (as defined in Subsection 7.2.2), the additional PEG Access Channel shall be made available within one hundred twenty (120) days following the City's written request, provided that, at least thirty (30) days prior to the request for activation, the City, or its designee(s), have provided Grantee with documentation that the criteria have been met. If the signal source location is not the PEG Access Headend, the timing of the availability and other conditions will be by mutual agreement of the City (or its designee(s)) and Grantee, provided that the City or its designee(s) will be required to comply with all conditions set forth in Subsection 7.2.2. In no event shall the origination point be located outside the Franchise Area.

7.1.4 Grantee shall maintain all PEG Access Channel signals in substantially the form received, at a level of technical quality and reliability that complies with all applicable FCC technical standards and consistent with local television broadcast channels available to all Subscribers in Grantee's Basic Service. Grantee shall use equipment and procedures that minimize the degradation of signals that do not originate with Grantee.

7.1.5 If a PEG Access Channel provided under this Section 7 is not being utilized, the City shall notify Grantee and Grantee may utilize such PEG Access Channel, in its sole discretion, until such time as the City, or its designee(s), elect to utilize the PEG Access Channel.

7.2 Designated Access Provider and PEG Connection:

7.2.1 The City has designated MetroEast Community Media located at 829 NE Eighth Street, Gresham, Oregon 97030-5643, or its successors or assignees, as the Designated Access Provider. The City may designate up to a total of six (6) Designated Access Providers to control and manage the use of the PEG Access Channels and resources provided by Grantee under this Franchise. Grantee shall cooperate with the Designated Access Providers in the use of the Cable System for the distribution of PEG Access Channels.

7.2.2 The City or its designee(s) shall cause to be provided suitable signals for the PEG Access Channels to Grantee at MetroEast Community Media, 829 NE Eighth Street, Gresham, Oregon 97030-5643 (the "PEG Access Headend"). The Access Channel signal for each PEG Access Channel shall be provided as composite video on a coaxial cable and two balanced audio +4dBm on two shielded audio cables to the Grantee's encoding device at the PEG Access Headend. Grantee shall provide, install, and maintain in good working order the equipment necessary for transmitting the PEG Access Channel signal from the PEG Access Headend, or other signal source locations designated under Subsection 7.1.3.3, for distribution to Subscribers. Grantee's obligation with respect to such upstream transmission equipment and facilities shall be subject to the availability, without charge to Grantee, of: (a) suitable required space, environmental conditions, and electrical power supply; (b) access to and pathway within the facility housing the PEG Access Headend; and (c) such cooperation of the City and any designee(s) as is reasonably necessary for Grantee to fulfill such obligations. The City represents and warrants that to the best of its knowledge, no incumbent cable operator consent is necessary for the Grantee to transmit PEG signals, including but not limited to, any consent related to the facilities of any incumbent cable operator used to transmit PEG content to an origination or other point from auxiliary locations. If the PEG Access Headend relocates or if the City designates a different signal source location for an Access Channel, the City or its designee(s) shall fund all direct costs to construct a connection from the new site or location to the nearest point on the FTTP Network.

7.2.3 If Grantee makes changes to its Cable System or signal transmission technology, which directly affects the signal quality, the connection at the PEG Access Headend, or transport of the PEG Access Channels, Grantee shall, at its own expense, make any necessary changes at the PEG Access Headend, including technical assistance and equipment and reimbursement of the Designated Access Provider's reasonable costs directly associated with the change, so that the requirements of this Section 7 are continuous and remain in effect.

7.2.4 Upon request by the City, and based on a demonstrated need, Grantee shall work in good faith with the City and other cable operators that have a cable services franchise for any part of the Service Area, to interconnect with other cable operators in order to hand off PEG Access Channel signals. Grantee shall use reasonable efforts to agree upon mutually convenient, cost-effective and technically viable interconnection of the PEG Access Channel signals. Such interconnection shall preserve the technical quality of the PEG Access Channels.

7.3 *Additional Requirements:*

7.3.1 In addition to the PEG/I-Net Grant, and in lieu of providing free Cable Service to public schools and other items, Grantee shall pay the Commission on behalf of the City, a Franchise Grant (the "Franchise Grant"). The Franchise Grant shall be payable as

follows: within sixty (60) days of the Service Date, Grantee shall pay a lump sum of sixty nine thousand six hundred eighty dollars (\$69,680) and by February 15 of each calendar year thereafter, Grantee shall pay three thousand four hundred eighty dollars (\$3,480) for the remaining term of this Agreement.

7.3.2 *Free Cable Service:* Subject to Section 4.1, Grantee shall provide, to MetroEast Community Media, located at 829 NE Eighth Street, Gresham, Oregon 97030-5643, without charge, one Standard Installation as defined in Section 4.3, one service outlet activated with Basic Service and related necessary equipment to receive Basic Service. Grantee shall charge for installing, if requested to do so, more than one outlet or concealed inside wiring and for the provision of Basic Service to any additional service outlets. Cable Service may not be resold or otherwise used in contravention of Grantee's rights with third parties respecting programming. Equipment provided by Grantee, if any, shall be replaced at retail rates if lost, stolen, or damaged.

7.3.3 *Technology Advancements:* As Grantee develops and advances the functionality of its set-top box or any other subscriber access technologies, Grantee agrees to consider additional and improved methods to provide Subscribers with information about the PEG Access Channels and programming whenever technically feasible and economically reasonable. Grantee shall meet with the Commission, at its request, at least every two (2) years, during the Term for the purposes of discussing developments in Grantee's set-top box technology or other subscriber access technologies which may improve access by Subscribers to information about PEG Access Channels and programming; provided that the Commission may not request such a meeting during the first twelve (12) months following the Effective Date of this Franchise.

7.4 *Institutional Network:*

7.4.1 Grantee acknowledges that other Cable Operators have provided an Institutional Network or I-Net in the Franchise Area paid for by the City and other jurisdictions. The parties acknowledge that the public interest would not be served by duplicating existing I-Net facilities or services provided under other cable services franchises.

7.4.2 The City or their authorized designee(s) and Grantee may mutually agree, in a separate written agreement or an amendment hereto, on I-Net capacity, connections, facilities and/or services to be provided by Grantee to meet identified I-Net needs. Grantee may deduct the agreed upon incremental, direct costs of providing such I-Net capacity, facilities and/or services from I-Net funds provided under Section 7.5.

7.5 *PEG/I-Net Grant:*

7.5.1 Subject to 3.10.2, Grantee shall provide an annual grant to the Commission, as agent for the City, consisting of three percent (3%) of Gross Revenues to be used to support PEG Capital Costs and I-NET Capital Costs (the "PEG/I-Net Grant").

7.5.2 The City shall allocate the PEG/I-Net Grant at the City's discretion to provide support for PEG Capital Costs and I-Net Capital Costs incurred by Designated Access Providers and PEG Institutions. No funds provided by Grantee as a PEG/I-Net Grant shall be

paid to another cable operator in the Franchise Area for equipment to be owned by another cable operator or an affiliate of another cable operator. The PEG/I-Net Grant provided by Grantee may be used by Designated Access Providers and PEG Institutions to fund Capital Costs to enable or enhance use of the I-NET owned by another cable operator so long as any equipment purchased with the PEG/I-Net Grant is not owned by another cable operator.

7.5.3 The PEG/I-Net Grant payment, shall be remitted to the Commission in quarterly installments with the Franchise fee payment required under Section 8.1.

7.5.4 The City shall provide Grantee with a report annually explaining the distribution of funds granted pursuant to this Section 7.5.

7.6 The City shall require, through contract with the Designated Access Provider(s) or otherwise, Persons whose Video Programming is transmitted on any PEG Access Channel to agree in writing to authorize Grantee to transmit programming consistent with this Agreement and to defend and hold harmless Grantee and the City from and against any and all liability or other injury, including the reasonable cost of defending claims or litigation, arising from or in connection with transmission of programming on the PEG Access Channel(s), including claims for failure to comply with applicable federal laws, rules, regulations or other requirements of local, state or federal authorities; for claims of libel, slander, invasion of privacy, or the infringement of common law or statutory copyright; for unauthorized use of any trademark, trade name or service mark; and for any other injury or damage in law or equity, which result from the transmission of programming on a PEG Access Channel.

7.7 The City shall require the Designated Access Provider(s) to include the Grantee as an additionally named insured in the Designated Access Provider's liability insurance policy with respect to any claim for injury, damage, loss, liability, cost or expense arising from Video Programming or other transmission placed on the PEG Access Channels provided by Grantee under this Franchise, but not if arising out of or by reason of any negligence, willful misconduct or any other act done by Grantee or its officers, agents, or employees.

7.8 To the extent permitted by federal law, Grantee shall be allowed to pass through to Subscribers, and identify as a separate line item on each Subscriber bill, the costs of the PEG/I-Net Grant, the Franchise Grant, and any other amount of the total bill assessed to satisfy requirements imposed on Grantee by this Agreement to support PEG Access Channels or the use of PEG Access Channels.

8. FRANCHISE FEES AND PEG/I-NET GRANT PAYMENTS

8.1 *Payment to the City:* Grantee shall pay to the City a franchise fee of five percent (5%) of annual Gross Revenue attributable to the City. In accordance with Title VI, the twelve (12) month period applicable under the Franchise for the computation of the franchise fee shall be a calendar year. Such payments, together with PEG/I-Net Grant payments under Section 7 of this Franchise, shall be remitted to the Commission in quarterly installments no later than forty-five (45) days following the end of each calendar quarter. Grantee shall be allowed to submit or correct any payments that were incorrectly omitted, and shall be refunded any payments that were incorrectly submitted, in connection with the quarterly franchise fee remittances within

ninety (90) days following the close of the calendar year for which such payments were applicable.

8.2 *Supporting Information:* Each franchise fee and PEG/I-Net Grant payment shall be accompanied by a report prepared by a representative of Grantee showing the basis for the computation in substantially the form attached hereto as Exhibit C. No later than one hundred twenty (120) days after the end of each calendar year, Grantee shall furnish to the Commission an annual summary of franchise fee calculations, substantially in the form attached hereto as Exhibit C but showing annual rather than quarterly amounts.

8.3 *Limitation on Franchise Fee Actions:* The parties agree that the period of limitation for filing an action for recovery of any franchise fee or PEG/I-Net Grant payment payable hereunder shall be five (5) years from the date on which payment by Grantee was due.

8.4 *Bundled Services:* If Cable Services subject to the franchise fee required under this Article 8 are provided to Subscribers in conjunction with Non-Cable Services, Grantee shall not allocate revenue between Cable Services and Non-Cable Services for the purpose of evading or substantially reducing Grantee's franchise fee obligations to the City.

8.5 *Interest Charge on Late Payments:* If any quarterly franchise fee payment due under this Franchise remains unpaid after the due date ("Past Due Amounts"), Grantee shall pay the City interest on such Past Due Amounts in addition to the Past Due Amounts. The interest shall accrue on the Past Due Amounts from the due date until it is paid in full ("Period of Delinquency"). Grantee shall pay the City interest at a rate per annum equal to the highest Bank Prime Rate during the Period of Delinquency plus two percent (2%). The "Bank Prime Rate" shall mean the prime lending rate as it appears in *The Wall Street Journal* during the Period of Delinquency. The City's acceptance of payment shall not be construed as an agreement that the amount paid was correct, nor shall acceptance be construed as a release of any claim which the City may have for additional sums payment under provisions of this Section 8.

8.6 *PEG Access Support Not Franchise Fees:* Grantee agrees that the PEG/I-Net Grant and Franchise Grant set forth in Section 7 shall in no way modify or otherwise affect Grantee's obligations to pay franchise fees to the City. Grantee agrees that although the sum of franchise fees and the payments set forth in Section 7 may total more than five percent (5%) of Grantee's Gross Revenues in any twelve (12)-month period, the additional commitments are not to be offset or otherwise credited in any way against any franchise fee payments under this Franchise.

9. CUSTOMER SERVICE

9.1 *Customer Service Standards.* Grantee shall comply with the City's Customer Service Standards as of the Effective Date, which are attached hereto as Exhibit D, with the following minor variances to those standards.

9.1.1 *Minor Variances.*

9.1.1.1 *Local Office and Office Hours:* If Grantee chooses not to establish a local office in accordance with the requirements of Exhibit D Section II – Local

Office and Office Hours – Grantee shall: (a) provide for the pick up or drop off of equipment free of charge by having Grantee picking up equipment from a Subscribers residence or by Grantee providing Subscriber with pre-paid mailer; and (b) provide for bill payments over the phone free of charge through a live, qualified customer service representative.

9.1.1.2 *Telephone Answering Time:* The requirements of Exhibit D Section III.B – Telephone Answer Time – shall be replaced with: Under Normal Operating Conditions, calls received by Grantee shall be answered within thirty (30) seconds and, if the call needs to be transferred, transfer time shall not exceed thirty (30) seconds. Grantee shall meet this standard for ninety percent (90%) of the calls it receives at all call centers receiving calls from Subscribers, as measured on a cumulative quarterly calendar basis. Measurement of this standard shall include all calls received by Grantee at all call centers receiving calls from Subscribers, whether they are answered by a live representative, by an automated attendant, or abandoned after 30 seconds of call waiting.

9.1.1.3 *Installations:* Under the requirements of Exhibit D Section IV - Installations, Disconnections, Outages and Service Calls – Grantee shall perform Standard Installations, as defined under Section 4.3 of this Franchise, in accordance with the Customer Service Standards, except in cases where a Standard Installation requires Grantee's placement on the customer premise of an Optical Network Terminal, then Grantee shall perform the installation within no more than fourteen (14) days after a service order has been placed.

9.1.2 *Binding Nature:* The Customer Service Standards and the minor variances herein shall be binding and not subject to change for the term of this Franchise unless mutually agreed in writing by the parties, notwithstanding any other provision herein.

9.2 *Obscenity:* Grantee shall not transmit, or permit to be transmitted, over any Channel subject to its editorial control any obscene programming in violation of state or federal law. Grantee shall be deemed to have transmitted or permitted a transmission of obscene Programming only if a court of competent jurisdiction has found that Grantee's officers or employees, acting in their authorized capacity, have knowingly permitted, in violation of state or federal law, programming which is obscene under state or federal law to be transmitted over any Channel that is subject to Grantee's editorial control.

9.3 *Parental Control Device:* Upon request by any Subscriber, Grantee shall make available a parental control or lockout device to enable a Subscriber to control access to both the audio and video portions of any or all Channels. Grantee shall inform its Subscribers of the availability of the lockout device at the time of their initial subscription and periodically thereafter.

9.4 *Subscriber Contracts:* Grantee's terms of service and contracts with Subscribers shall be consistent in all material respects with the requirements of this Franchise.

9.5 *Regulation of Equipment for Hearing Impaired:* Grantee shall comply with applicable federal and state laws regarding equipment for hearing impaired individuals.

9.6 *Downgrade and Disconnect Charges:*

9.6.1 *Downgrade Charges:* Unless otherwise allowed by law, Grantee shall not impose any Downgrade Charges, except as otherwise provided in Subsection 9.6.1.1 below. As used in this Section, "Downgrade Charge" means any charge, rate or financial liability imposed upon a Subscriber for implementing a request for a change or reduction of Cable Services to less expensive Cable Services or tiers.

9.6.1.1 Grantee may impose Downgrade Charges if:

- (a) The Subscriber has been notified of the Grantee's Downgrade Charge pursuant to the terms and conditions of the Subscriber's terms of service; and/or
- (b) There is a delay caused by the Subscriber in returning equipment related to the downgrade of service.

9.6.2 *Disconnection Charges:* Charges for Cable Service will be discontinued at the time of a request by the Subscriber for disconnection of Cable Service, except that equipment charges may be applied until equipment has been returned. No period of notice prior to the requested disconnect can be required of a Subscriber by Grantee. No charge shall be imposed upon the Subscriber for or related to total disconnection of Cable Service or for any Cable Service delivered after the effective date of the disconnect request, unless early disconnection charges apply pursuant to the Subscriber's service contract. If the Subscriber fails to specify an effective date for disconnection, the Subscriber shall not be responsible for Cable Service received after the day following the date the disconnect request is received by Grantee. For purposes of this subsection, the term "disconnect" shall include Subscribers who elect to cease receiving Cable Service from Grantee.

9.7 *Discriminatory Practices:* Grantee shall not deny Cable Service, or otherwise discriminate against Subscribers on the basis of race, color, religion, age, sex, national origin, sexual orientation or physical or mental disability in violation with applicable federal or state laws, rules and regulations.

9.8 *Permission of Property Owner or Tenant:* Grantee shall not install or attach any of its facilities or devices to any residence or other property without first securing the permission of the owner or tenant of any property involved, except where there is an existing utility easement reserved by plat or other conveyance or unless such installation or attachment is otherwise authorized by law. Grantee shall ensure that Subscribers premises are restored to pre-existing conditions if damaged by Grantee's employees or agents in any respect in connection with the installation, repair or disconnection of Cable Service.

9.9 *Privacy and Personalized Data:* Grantee shall comply with all applicable federal and state laws regarding privacy, unauthorized monitoring or cable tapping, sales of subscriber lists, and collection, use, sale or sharing of Personalized Data. For purposes of Section 9.9, "Personalized Data" means the name and address or other information regarding an individual Subscriber, which is associated with or extracted from data obtained from the Subscriber's use of Grantee's Cable Services.

10. REPORTS AND RECORDS

10.1 *Open Books and Records:* Upon reasonable written notice to Grantee and with no less than thirty (30) business days written notice to Grantee, the Commission on behalf of the City shall have the right to inspect Grantee's and any Affiliate's books and records pertaining to Grantee's provision of Cable Service in the Franchise Area at any time during normal business hours and on a nondisruptive basis at a mutually agreed location within the Portland metropolitan area, as reasonably necessary to ensure compliance with the terms of this Franchise. Such notice shall specifically reference the section or subsection of the Franchise which is under review, so that Grantee may organize the necessary books and records for appropriate access by the Commission. Grantee shall maintain any books and records for at least five (5) years for Franchise compliance purposes. Grantee shall not be required to provide Subscriber information in violation of Section 631 of the Communications Act, 47 U.S.C. §551. If any books, records, maps, plans or other requested documents are too voluminous, not available locally in the Portland metropolitan area, or for security reasons cannot be copied and moved, then Grantee may request that the inspection take place at a location mutually agreed to by the Commission and Grantee, provided that the Grantee must pay all reasonable travel expenses incurred in inspecting those documents above those that would have been incurred had the documents been produced in the Portland metropolitan area up to a maximum of two hundred dollars (\$200) per day.

10.2 *Proprietary Books and Records:* Grantee acknowledges that information submitted to the Commission on behalf of the City is subject to the Oregon Public Records Law, and may be open to public inspection. If Grantee believes that information requested is confidential and proprietary, Grantee shall provide the following documentation to the Commission: (i) specific identification of the information; and (ii) a statement attesting to the reason(s) Grantee believes the information is confidential. The Commission, as the designated representative and agent of the City under this Franchise, shall take reasonable steps to protect the proprietary and confidential nature of any books, records, Service Area maps, plans, or other documents that are provided pursuant to this Agreement to the extent they are designated as such by Grantee, consistent with the Oregon Public Records Law, including treating any information derived from records identified by Grantee as being confidential or proprietary as confidential and only disclosing such information to employees, representatives, and agents thereof that have a need to know or in order to enforce the provisions hereof. Should the Commission be required under state law to disclose information derived from Grantee's books and records, the City agrees that the Commission shall provide Grantee with reasonable notice and an opportunity to seek appropriate protective orders prior to disclosing such information. Notwithstanding anything to the contrary set forth herein, Grantee shall not be required to provide copies of any confidential information relating to such Cable Service where the Commission or the City cannot lawfully protect the confidentiality of the information, but the Commission shall have the right to review such records on a confidential basis. Grantee shall not be required to disclose any of its or an Affiliate's books and records not relating to the provision of Cable Service in the Service Area.

10.3 *Audit of Fee Payments:*

10.3.1 Acceptance of any payment made pursuant to Section 7 (PEG/I-Net) or Section 8 (Franchise Fees and PEG/I-NET Grant Payments) of this Franchise shall not be construed as an accord that the amount paid is, in fact, the correct amount. The Commission, on behalf of the City, and the Grantee shall make every effort to informally consult and resolve any questions or issues regarding franchise fee or PEG/I-Net Grant payments and nothing herein shall be construed to preclude such informal consultations or informal review of Grantee's books. The Commission, on behalf of the City, may conduct an audit in relation to payments made by Grantee no more than once every three (3) years during the Term. As a part of the audit process, the Commission or the Commission's designee may inspect Grantee's books of accounts relative to the Franchise Area at any time during regular business hours and after thirty (30) calendar days prior written notice. The scope of the audit shall be limited to the records of the previous five (5) years up to and including the most recent calendar quarter, and shall not include any records or period of time that has been previously audited

10.3.2 Grantee agrees to give its full cooperation in any audit. Grantee shall not be required to provide responses to written inquiries within less than thirty (30) calendar days of such request.

10.3.2.1 If the results of any audit indicate that Grantee (i) paid the correct franchise fee and PEG/I-Net Grant, (ii) overpaid the franchise fee and PEG/I-Net Grant and is entitled to a refund or credit, or (iii) underpaid the franchise fee and PEG/I-Net Grant by five percent (5%) or less of the correct amounts due, then the City shall pay any costs they incur related to the audit. If the results of the audit indicate Grantee underpaid the franchise fee and PEG/I-Net Grant by more than five percent (5%) of the correct amounts due, then Grantee shall pay the reasonable, documented, third-party costs of the audit, which costs shall be limited to ten thousand dollars (\$10,000). The City agree that any audit shall be performed in good faith. If any audit discloses an underpayment of the franchise fee and PEG/I-Net Grant by more than five percent (5%) of the correct amounts due, Grantee shall pay the City the amount of the underpayment, together with interest computed as set forth in Section 8.5.

10.3.2.2 Any auditor employed by the City shall not be compensated on a success based formula, e.g., payment based on a percentage of underpayment, if any. Grantee shall be provided a reasonable opportunity to review the results of any audit and to dispute any audit results which indicate an underpayment to the City.

10.4 *Information Required:* Grantee shall provide the Commission a current copy of the following information at the intervals indicated:

10.4.1 A current schedule of all Cable Services rates and charges (annually or upon change);

10.4.2 A current schedule of Video Programming services, tiers and/or packages and Channel assignments (annually or upon change);

10.4.3 A monthly Cable Services sample customer bill, including copies of all communications of a general nature related to Cable Services sent to Subscribers with bills, beginning no more than ninety (90) days after the Effective Date (and monthly thereafter);

10.4.4 Copies of other communications of a general nature sent to Subscribers related to Cable Services, excluding communications sent to individual Subscribers which name that Subscriber (upon request);

10.4.5 A copy of Subscriber privacy policies (annually or upon change); and

10.4.6 A copy of the Subscriber service agreement(s) and related terms and conditions (annually or upon change).

10.5 *General Reports:* The City shall have the right to request, in writing, information as is appropriate and reasonable to determine whether Grantee is in compliance with this Franchise. Grantee shall provide the City such information in a format as Grantee customarily prepares such report or information. Grantee shall fully cooperate with the City and shall provide such information and documents as necessary and reasonable for the City to evaluate compliance.

10.6 *Copies of Federal and State Documents:* Grantee shall submit to the Commission a list, or copies of actual documents, of all pleadings, applications, notifications, communications and documents of any kind, submitted by Grantee or its parent corporations or Affiliates to any federal, state or local courts, regulatory agencies or other governmental bodies of such documents specifically related to the operation of Grantee's Cable System or Grantee's provision of Cable Services within the Franchise Area. Grantee shall submit such list of documents to the Commission no later than thirty (30) days after filing, mailing or publication thereof. Grantee shall not claim confidential, privileged or proprietary rights to such documents unless under applicable federal, state, or local law such documents have been determined to be confidential by a court of competent jurisdiction, or a federal or state agency or a request for confidential treatment is pending. To the extent allowed by law, any such confidential material determined to be exempt from public disclosure shall be retained in confidence by the Commission and its duly authorized agents and shall not be made available for public inspection.

11. INSURANCE AND INDEMNIFICATION

11.1 *Insurance:*

11.1.1 Grantee shall maintain in full force and effect, at its own cost and expense, continuously during the Franchise Term, the following insurance coverage:

11.1.1.1 Commercial General Liability Insurance in the amount of two million dollars (\$2,000,000) combined single limit for property damage and bodily injury. Such insurance shall cover the construction, operation and maintenance of the Cable System, and the conduct of Grantee's Cable Service business in the Franchise Area.

11.1.1.2 Automobile Liability Insurance in the amount of one million dollars (\$1,000,000) combined single limit for bodily injury and property damage coverage.

11.1.1.3 Workers' Compensation Insurance meeting all legal requirements of the State of Oregon.

11.1.1.4 Employers' Liability Insurance in the following amounts: (A) Bodily Injury by Accident: one hundred thousand dollars (\$100,000); and (B) Bodily Injury by Disease: one hundred thousand dollars (\$100,000) employee limit; five hundred thousand dollars (\$500,000) policy limit.

11.1.2 The City shall be designated as an additional insured under each of the insurance policies required in this Section 11 except Workers' Compensation and Employer's Liability Insurance.

11.1.3 Grantee shall not cancel any required insurance policy without obtaining alternative insurance in conformance with this Agreement. The insurance certificates shall contain a provision stating that the insurer shall provide thirty (30) days prior written notice to the Commission of intent to non-renew, cancel, or make a material adverse change in coverage. If the insurance is canceled or materially altered so as to be out of compliance with the requirements of this Section 11.1 during the term of this Franchise, Grantee shall provide a replacement policy.

11.1.4 Each of the required insurance policies shall be with insurers authorized or permitted to do business in the State of Oregon, with an A- VII or better rating for financial condition and financial performance by Best's Key Rating Guide, Property/Casualty Edition.

11.1.5 The insurance shall be without prejudice to coverage otherwise existing and shall name the City, and its officers, agents, and employees as additional insureds as their interest may appear, except the Workers' Compensation and Employer's Liability Insurance.

11.1.6 Grantee shall provide the Commission, within fifteen (15) days of the Effective Date of this Franchise, a certificate of insurance certifying the coverage required above, which certificate shall be subject to the approval of the City's Legal Counsel as to whether the certificate and the insurance certified is consistent with the requirements of this Section 11.1. Failure to maintain adequate insurance as required under this Section 11.1 shall be cause for revocation of this Franchise by the City after the process set forth in Section 14.

11.1.7 The City shall require as a condition of any separate agreement between the City and a Designated Access Provider, that the Designated Access Provider shall include the Grantee as a named insured in the Designated Access Provider's liability insurance policy with respect to any claim for injury, damage, loss, liability, cost or expense arising from programming or other transmission placed by the Designated Access Provider on PEG Access Channels or the Institutional Network (but not if arising out of or by reason of any act done by the Grantee or its officers, agents or employees).

11.2 *Indemnification:*

11.2.1 Grantee shall indemnify, save and hold harmless, and defend the City, its officers, agents, boards and employees, from and against any liability for claims, damages, cost and expense, including court and appeal costs and reasonable attorneys' fees or expenses, arising out of or by reason of: (i) any construction, operation, excavation, reconstruction or maintenance of its Cable System; (ii) any other act done under this Agreement by or for Grantee, its agents or employees under this Agreement; or (iii) any negligence or willful misconduct by the Grantee,

its agents or its employees. The City shall give Grantee written notice of its obligation to indemnify the City within ten (10) days of receipt of a claim or action pursuant to this subsection, or thirty (30) days provided that the timing of such notice does not prejudice Grantee. Notwithstanding the foregoing, Grantee shall not indemnify the City for any damages, liability or claims resulting from the willful misconduct or negligence of the City, its officers, agents, employees, attorneys, consultants, or independent contractors or for any activity or function conducted by any Person other than Grantee in connection with PEG Access or use of the I-Net or EAS.

11.2.2 With respect to Grantee's indemnity obligations set forth in Subsection 11.2.1, Grantee shall provide the defense of any claims brought against the City by selecting counsel of Grantee's choice to defend the claim, subject to the consent of the City, which shall not unreasonably be withheld. Nothing herein shall be deemed to prevent the City from cooperating with Grantee and participating in the defense of any litigation by its own counsel at its own cost and expense. Grantee shall have the right to settle or compromise any claim or action arising hereunder, subject to the prior written approval of the indemnified party, which approval shall not be unreasonably withheld. In the event that the terms of any such proposed settlement include the full satisfaction and release of the City without any requirement for further non-procedural actions or public statements by the City, and the City does not consent to the terms of such settlement or compromise, Grantee shall not settle the claim or action but its obligation to indemnify the City shall in no event exceed the amount of such settlement.

12. TRANSFER OF FRANCHISE

12.1 Subject to 47 U.S.C. § 537, no "Transfer of the Franchise" shall occur without the prior consent of the City, provided that such consent shall not be unreasonably withheld, delayed or conditioned. No such consent shall be required, however, for a transfer in trust, by mortgage, by other hypothecation, by assignment of any rights, title, or interest of Grantee in the Franchise or Cable System in order to secure indebtedness, or otherwise excluded under this Article 12.

12.2 A "Transfer of the Franchise" shall mean any transaction in which:

12.2.1 An ownership or other interest in Grantee is transferred, directly or indirectly, from one Person or group of Persons to another Person or group of Persons, so that control of Grantee is transferred; or

12.2.2 The rights held by Grantee under the Franchise are transferred or assigned to another Person or group of Persons.

Notwithstanding Subsections 12.2.1 and 12.2.2, a Transfer of the Franchise shall not include transfer of an ownership or other interest in Grantee to the parent of Grantee or to another Affiliate of Grantee; transfer of an interest in the Franchise or the rights held by Grantee under the Franchise to the parent of Grantee or to another Affiliate of Grantee; any action which is the result of a merger of the parent of Grantee; or any action which is the result of a merger of another Affiliate of Grantee. The parent of Grantee is shown in Exhibit E.

12.3 Grantee shall make a written request ("Request") to the Commission and the City for approval of any Transfer of the Franchise and furnish all information required by law and/or reasonably requested by the Commission and the City in respect to their consideration of a proposed Transfer of the Franchise. In reviewing a Request related to a Transfer of the Franchise, the Commission and the City may inquire into the legal, technical and financial qualifications of the prospective transferee. Grantee shall assist the Commission and the City in so inquiring.

12.4 The City shall render a final written decision on the Request within one hundred twenty (120) days of the Request, provided the City have received all reasonably requested information. Failure by the Grantee or prospective transferee to provide such information will automatically toll the time period set forth in 47 U.S.C. § 537.

12.5 Subject to the foregoing, if the City fails to render a written decision on the Request within one hundred twenty (120) days, unless such time period is tolled under Section 12.4 hereof, the Request shall be deemed granted unless Grantee and the City agree to an extension of time. The City may condition said Transfer of the Franchise upon such terms and conditions as it deems reasonably appropriate, provided, however, any such terms and conditions so attached shall be related to the legal, technical, and financial qualifications of the prospective transferee or to the resolution of outstanding and unresolved issues of Grantee's noncompliance with the terms and conditions of this Agreement.

12.6 Grantee shall ensure that any transferee or assignee shall, prior to consummation of any transaction resulting in such a transfer or assignment of this Franchise, agree in writing to be bound by the terms of this Franchise and to assume the obligations and liabilities to the City or their predecessor under this Franchise

12.7 The consent or approval of the City to any Request by the Grantee shall not constitute a waiver or release of any rights of the City.

12.8 Grantee shall immediately report to the City, as soon as it becomes known, the initiation of bankruptcy proceedings.

13. RENEWAL OF FRANCHISE

13.1 The City and Grantee agree that any proceedings undertaken by the City that relate to the renewal of this Franchise shall be governed by and comply with the applicable provisions of Section 626 of the Communications Act, 47 U.S.C. § 546.

14. ENFORCEMENT AND TERMINATION OF FRANCHISE

14.1 *Enforcement by the Commission:* Pursuant to the Intergovernmental Agreement, the Commission has the authority to take certain actions on behalf of the City and other jurisdictions jointly and separately, and in its own right, to enforce or administer this Franchise, except those powers retained by the jurisdictions. In addition to other rights under the Intergovernmental Agreement, the City retains the right to review any action of the Commission to: (1) find the Grantee in violation of this Franchise; or (2) impose any penalty or financial remedy. As provided in the Intergovernmental Agreement, the affected jurisdictions may

overturn such Commission action and return the matter to the Commission for further proceedings as directed by the affected jurisdictions. In addition, the City retains full authority, as provided in the Intergovernmental Agreement, to revoke or terminate this Franchise. It is the parties' intent that the Commission will enforce this Franchise on behalf of the City, except for the exercise of that authority retained by the City, and that the amount of any financial penalty under this Agreement shall be on a consolidated basis for the City and all Participating Jurisdictions and no financial penalty shall be assessed more than once or by multiple jurisdictions for the same violation. As used in this Section 14, the term "Commission" means the City acting through the Commission to the extent of its authority as provided in the Intergovernmental Agreement.

14.2 *Remedies:* Subject to applicable federal and state law, in the event the Commission, after following the procedures set forth in Sections 14.2 through 14.4, determines that Grantee is in material violation of any provision of this Franchise, the Commission may apply any of the following remedies:

14.2.1 Order Grantee to correct or cure the violation within a reasonable time frame as the Commission shall determine;

14.2.2 Impose reasonable penalties as set forth in Section 14.7, subject to the City's right of review;

14.2.3 Pursue any other legal or equitable remedy available under this Franchise or any applicable law; or

14.2.4 In the case of a substantial material default of a material provision of the Franchise, recommend to the City that it seek to revoke the Franchise in accordance with Section 14.10.

14.3 *Application of Remedies:* In determining which of the foregoing remedies is appropriate, and in the exercise of specific remedies, the City, acting through the Commission where applicable as provided in the Intergovernmental Agreement, shall consider, among other things: (1) the nature and extent of the violation(s); (2) whether Grantee has a history of similar violation(s); (3) the remedy that can be expected to deter such violation(s) in the future; (4) the damage suffered by the public and the cost of remedying the violation(s); (5) the Persons burdened by the violation(s); and (6) any other matters the Commission deems appropriate.

14.4 *Notice of Violation:* If at any time, the Commission believes that Grantee has not complied with the terms of the Franchise, the Commission on behalf of the City shall notify Grantee in writing of the exact nature of the alleged noncompliance (for purposes of this Section 14, the "Noncompliance Notice") at least thirty (30) days prior to exercising any of the City's rights under this Franchise.

14.5 *Grantee's Right to Cure or Respond:* If Grantee removes or otherwise cures the asserted violation within thirty (30) days from receipt of the Noncompliance Notice, or if cure is not reasonably possible within thirty (30) days and the Grantee initiates good faith efforts reasonably satisfactory to the Commission to cure within thirty (30) days and the efforts continue in good faith, the Commission shall not exercise the City's rights under this Section 14. Upon

cure of any noncompliance, the Commission shall provide written confirmation that such cure has been effected.

14.6 *Grantee Due Process Hearing:* Subject to Section 14.5, in the event that: (1) Grantee fails to remove or otherwise cure the alleged noncompliance within thirty (30) days after receipt of the Noncompliance Notice; or (2) Grantee does not undertake and continue good faith efforts reasonably satisfactory to the Commission to remedy the alleged noncompliance; then the Commission shall commence a formal hearing process under the Rules of Procedure adopted by the Commission. The Commission shall provide Grantee at least thirty (30) days prior written notice of such hearing, not inclusive of the thirty (30) days under Section 14.4. If after the hearing, the Commission determines that a violation exists, the Commission may invoke the remedies set forth in Section 14.2.

14.7 *Fines:*

14.7.1 Reasonable penalties under Section 14.2.2 shall be limited to the following:

		Up to 15,000 Subscribers	Over 15,000 Subscribers
Fines, per day, incident, or other measure of violation for the items below		\$500	\$700
Annual Cap on Fines			
Failure to meet build commitment or provide free drop		\$15,000	\$20,000
Failure to provide PEG Channels or PEG/I-Net Grant		\$30,000	\$40,000
Failure to provide reports or insurance		\$15,000	\$20,000
Violation of Customer Service Standards		\$30,000	\$40,000
Violation of any other provision of the Franchise Agreement		\$15,000	\$20,000

14.7.2 If the Commission elects to assess a fine pursuant to this Section 14.7, such election shall constitute the exclusive remedy for the violation for which the fine was assessed for a period of sixty (60) days. Thereafter, the remedies provided for in this Franchise are cumulative and are not exclusive; the exercise of one remedy shall not prevent the exercise of another or the exercise of any rights of the City at law or equity, provided that the cumulative

remedies may not be disproportionate to the magnitude and severity of the breach for which they are imposed.

14.8 *Minor Variances*: The Commission may, upon request of the Grantee or on its own motion, permit Grantee to vary its manner of performance under this Franchise so long as the variance does not result in a substantial change in the terms of this Franchise or a substantial reduction in the services to be provided.

14.9 *Security Fund*: Prior to the Service Date, Grantee shall establish and provide to the Commission on behalf of the City, a security fund ("Security Fund"), as security for the faithful performance by Grantee of all material provisions of this Franchise. The Security Fund shall be maintained at the amount of fifty thousand dollars (\$50,000) and the form of the security may, at Grantee's option, be a performance bond, letter of credit, cash deposit, cashier's check or any other security acceptable to the Commission.

14.9.1 If Grantee posts a performance bond, it shall be substantially in the form of Exhibit F.

14.9.2 In the event that a performance bond provided pursuant to this Franchise is not renewed or is cancelled, Grantee shall provide new security pursuant to this Section 14 within thirty (30) days of such cancellation or failure to renew.

14.9.3 Neither cancellation, nor termination nor refusal by surety to extend the bond, nor inability of Grantee to file a replacement bond or replacement security for its obligations, shall constitute a loss to the City recoverable under the bond. However, if Grantee fails to maintain the security required by Section 14.9, after the procedures set forth in 14.4, 14.5, 14.6, the Commission may treat the delay as a substantial material default under Section 14.2.4.

14.10 *Revocation*: Should the City seek to revoke this Franchise after following the procedures set forth above in this Section 14, including the hearing described in Section 14.4, the City shall give written notice to Grantee of such intent. The notice shall set forth the specific nature of the noncompliance. Grantee shall have ninety (90) days from receipt of such notice to object in writing and to state its reasons for such objection. In the event the City has not received a satisfactory response from Grantee, the City may then seek termination of the Franchise at a second hearing. The City shall cause to be served upon Grantee, at least thirty (30) business days prior to such hearing, a written notice specifying the time and place of such hearing and stating its intent to revoke the Franchise.

14.10.1 At the designated hearing, Grantee shall be provided a fair opportunity for full participation, including the right to be represented by legal counsel, to introduce relevant evidence, to require the production of evidence, to compel the relevant testimony of the officials, agents, employees or consultants of the City, to compel the testimony of other persons as permitted by law, and to question and/or cross examine witnesses. A complete verbatim record and transcript shall be made of such hearing.

14.10.2 Following the hearing, Grantee and all parties to the hearing shall be provided up to thirty (30) days to submit its proposed findings and conclusions in writing and thereafter the City shall determine whether to revoke this Franchise based on the information

presented by all parties, or, where applicable, grant additional time to Grantee to effect any cure. If the City determines that the Franchise shall be revoked, the City shall promptly provide Grantee with a written decision setting forth its reasoning. Grantee may appeal such determination of the City to an appropriate court, which shall have the power to review the decision of the City. The scope of review shall be as provided by applicable law. Grantee shall be entitled to such relief as the court finds appropriate. Such appeal must be taken within sixty (60) days of Grantee's receipt of the determination of the City.

14.10.3 The City may, at its sole discretion, take any lawful action which it deems appropriate to enforce the City's rights under the Franchise in lieu of revocation of the Franchise.

14.11 *Grantee Termination:* Grantee shall have the right to terminate this Franchise and all obligations hereunder within ninety (90) days after the end of three (3) years from the Service Date of this Franchise, if at the end of such three (3) year period Grantee does not then in good faith believe it has achieved a commercially reasonable level of Subscriber penetration on its Cable System. Grantee may consider Subscriber penetration levels outside the Franchise Area in this determination. Notice to terminate under this Section 14.11 shall be given to the Commission in writing, with such termination to take effect no sooner than one hundred twenty (120) days after giving such notice. Grantee shall also be required to give its then current Subscribers not less than ninety (90) days prior written notice of its intent to cease Cable Service operations.

14.12 *Continuity of Service:* In the event that Grantee elects to terminate Cable Services under this Franchise pursuant to Section 14.11, Grantee shall cooperate with the Commission and the City to reasonably transition Subscribers to other cable operators.

15. EQUAL EMPLOYMENT OPPORTUNITY

Grantee shall comply with all applicable federal and state laws affording nondiscrimination in employment to all individuals regardless of their race, color, religion, age, sex, national origin, sexual orientation or physical disability.

16. MISCELLANEOUS PROVISIONS

16.1 *Actions of Parties:* In any action by the City or Grantee that is mandated or permitted under the terms hereof, such party shall act in a reasonable, expeditious, and timely manner. Furthermore, in any instance where approval or consent is required under the terms hereof, such approval or consent shall not be unreasonably withheld, delayed or conditioned.

16.2 *Binding Acceptance:* This Agreement shall bind and benefit the parties hereto and their respective heirs, beneficiaries, administrators, executors, receivers, trustees, successors and assigns, and the promises and obligations herein shall survive the expiration date hereof.

16.3 *Preemption:* In the event that federal or state law, rules, or regulations preempt a provision or limit the enforceability of a provision of this Agreement, the provision shall be read to be preempted to the extent, and for the time, but only to the extent and for the time, required by law. In the event such federal or state law, rule or regulation is subsequently repealed, rescinded, amended or otherwise changed so that the provision hereof that had been preempted is

no longer preempted, such provision shall thereupon return to full force and effect, and shall thereafter be binding on the parties hereto, without the requirement of further action on the part of the City.

16.4 *Force Majeure*: If the Grantee is wholly or partially unable to carry out its obligations under this Franchise as a result of Force Majeure, the Grantee shall give the City prompt notice of such Force Majeure, describing the same in reasonable detail, and Grantee's obligations under this Franchise shall not be deemed in violation or default for the duration of the Force Majeure. Grantee agrees to use its best efforts to remedy as soon as possible, under the circumstances, Grantee's inability, by reason of Force Majeure, to carry out its responsibilities and duties under this Franchise.

16.5 *Notices*: Unless otherwise expressly stated herein, notices required under the Franchise shall be mailed first class, postage prepaid, to the addressees below. Each party may change its designee by providing written notice to the other party.

16.5.1 Notices to Grantee shall be mailed to:

Verizon Northwest Inc.
Attn: Tim McCallion, President
112 Lakeview Canyon Road
Thousand Oaks, CA 91362

16.5.2 with a copy to:

Mr. Jack H White
Senior Vice President & General Counsel – Verizon Telecom
One Verizon Way
Room VC43E010
Basking Ridge, NJ 07920-1097

16.5.3 Notices to the City or the Commission shall be mailed to:

Mt. Hood Cable Regulatory Commission
1120 SW Fifth Avenue, Room 1305
Portland, OR 97204

16.6 *Entire Agreement*: This Franchise and the Exhibits hereto constitute the entire agreement between Grantee and the City and it supersedes all prior or contemporaneous agreements, representations or understanding (whether written or oral) of the parties regarding the subject matter hereof. Any ordinances or parts of ordinances relating to Cable Service, or other regulations, requirements or policies relating to Cable Service, that conflict with the provisions of this Franchise are superseded by this Franchise.

16.7 *Amendments*: Amendments to this Franchise shall be mutually agreed to in writing by the parties.

16.8 *Captions:* The captions and headings of articles, sections, and subsections throughout this Agreement are intended solely to facilitate reading and reference to the sections and provisions of this Agreement. Such captions shall not affect the meaning or interpretation of this Agreement.

16.9 *Severability:* If any section, subsection, sentence, paragraph, term, or provision hereof is determined to be illegal, invalid, or unconstitutional, by any court of competent jurisdiction or by any state or federal regulatory authority having jurisdiction thereof, such determination shall have no effect on the validity of any other section, subsection, sentence, paragraph, term or provision hereof, all of which will remain in full force and effect for the term of the Franchise.

16.10 *Recitals:* The recitals set forth in this Agreement are incorporated into the body of this Agreement as if they had been originally set forth herein.

16.11 *Modification:* This Franchise shall not be modified except by written instrument executed by both parties.

16.12 *FTTP Network Transfer Prohibition:* Under no circumstance including, without limitation, upon expiration, revocation, termination, denial of renewal of the Franchise or any other action to forbid or disallow Grantee from providing Cable Services, shall Grantee or its assignees be required to sell any right, title, interest, use or control of any portion of Grantee's FTTP Network including, without limitation, the Cable System and any capacity used for Cable Service or otherwise, to the City or any third party. Grantee shall not be required to remove the FTTP Network or to relocate the FTTP Network or any portion thereof as a result of revocation, expiration, termination, denial of renewal or any other action to forbid or disallow Grantee from providing Cable Services to the extent the Grantee's FTTP Network is lawfully occupying the Public Rights-of-Way. This provision is not intended to contravene leased access requirements under Title VI or PEG requirements set forth in this Agreement. Furthermore, nothing in this provision shall be intended to waive any rights the City may have with respect to the purchase, removal or relocation of the FTTP Network under telecommunications laws and regulations. Such matters are outside the scope of this provision, and the parties reserve their rights with respect to such matters.

16.13 *Independent Review:* The City and Grantee acknowledge that they have received independent legal advice in entering into this Franchise. In the event that a dispute arises over the meaning or application of any term(s) of this Agreement, such term(s) shall not be construed by the reference to any doctrine calling for ambiguities to be construed against the drafter of the Agreement.

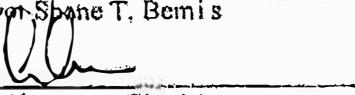
SIGNATURE PAGE FOLLOWS

AGREED TO THIS 18th DAY OF November, 2008:

CITY OF GRESHAM

By: 

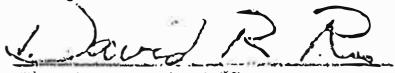
Mayor Shane T. Bemis

By: 

Erik Kvarsten, City Manager

Date: 11-19-08

APPROVED AS TO FORM:



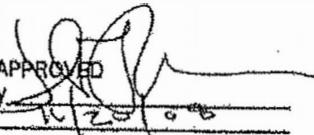
City Attorney's Office

VERIZON NORTHWEST INC.

By: 

Tim McCollum, President

Date: 11/20/08

FORM APPROVED
Attorney 
Date 11/20/08

EXHIBITS

Exhibit A: Franchise Area Map

Exhibit B: Intergovernmental Agreement

Exhibit C: Quarterly Franchise Fee Remittance Form

Exhibit D: Customer Service Standards

Exhibit E: Grantee Parent Structure

Exhibit F: Sample Performance Bond

AGREED TO THIS 18th DAY OF November, 2008:

CITY OF GRESHAM

By: 

May 17, 2008
Shane T. Bemis

By: 

Erik Kvarsten, City Manager

Date: 11/19/08

APPROVED AS TO FORM:



City Attorney's Office

VERIZON NORTHWEST INC.

By: _____
Tim McCallion, President

Date: _____

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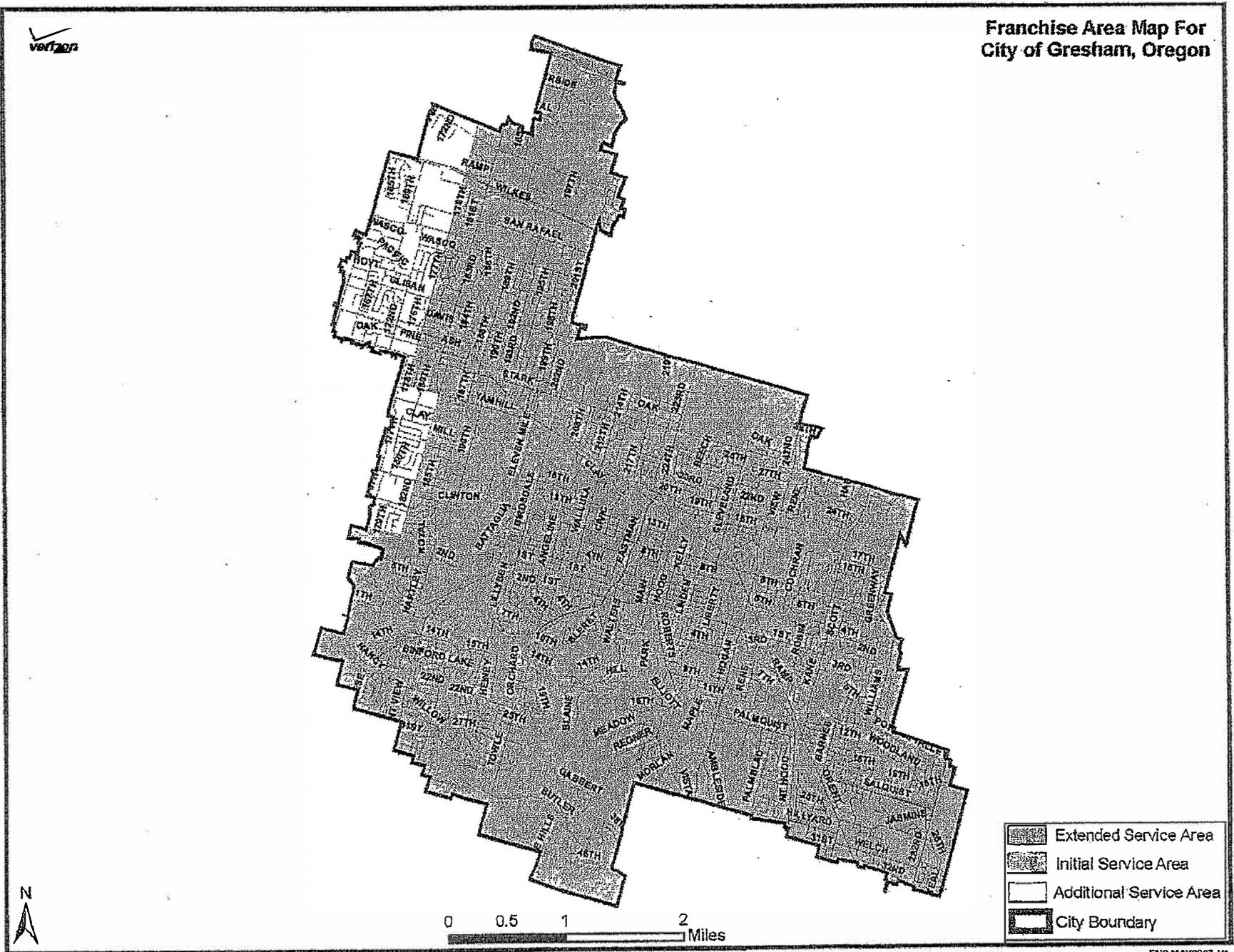


EXHIBIT A - FRANCHISE AREA MAP

EXHIBIT B
INTERGOVERNMENTAL AGREEMENT

The Jurisdictions' Intergovernmental Agreement, in effect on the Effective Date of this Franchise, is attached hereto for reference only. The City shall provide Grantee with a copy of any amendments to the Intergovernmental Agreement.

MT. HOOD CABLE REGULATORY COMMISSION
INTERGOVERNMENTAL AGREEMENT
AS AMENDED MARCH 1998

THIS AGREEMENT is between each of the cities of Fairview, Wood Village, Troutdale, Gresham and Portland, all municipal corporations duly incorporated under the laws of the State of Oregon, and Multnomah County, a home rule county formed under the laws of the State of Oregon, hereinafter referred to as the "Jurisdictions." This Agreement is made pursuant to ORS 190.003 to ORS 190.110, the general laws and constitution of the State of Oregon, and the laws and charters of the Jurisdictions.

Section 1. General Purposes. The Jurisdictions have each separately entered into various franchise agreements providing for the construction and operation of cable communications systems within their boundaries. The City of Portland created the Portland Cable Regulatory Commission, and Multnomah County, Gresham, Troutdale, Fairview and Wood Village created the Multnomah Cable Regulatory Commission, each with the general purpose to regulate and administer cable franchise agreements for the Jurisdictions. The Jurisdictions wish to form a unified cable regulatory commission. The formation of a unified regulatory commission serves the public interest in that the boundaries of the Jurisdictions do not necessarily coincide with the service areas of the Grantees, or with the needs of the citizens within each Jurisdiction or franchise, regarding cable communications. In addition, a unified commission can provide enhanced public benefits in franchising and regulation, and economies of scale in its operation.

To further this public interest and these purposes, the Jurisdictions desire to create a unified cable regulatory commission to jointly regulate and administer franchise agreements within their boundaries. The commission will further serve as an advisory body to the Jurisdictions on matters relating to cable communications and function as the Jurisdictions' representative for regional, state or national cable communications policy matters.

Section 2. Definitions.

A. "Cable Communications System" or "System" - any system of antennas, cables, amplifiers, towers, microwave links, cable casting studios, and any other conductors, receivers, home terminals, convertors, equipment or facilities, designed and constructed for the purpose of producing, receiving, amplifying, storing, processing or distributing audio, video, digital or other forms of electronic or electrical signals.

B. "Commission" means the Mt. Hood Cable Regulatory Commission as formed under this Intergovernmental Agreement.

C. "Grantee" - any person who is authorized by a franchise agreement or seeks authority to construct, operate and maintain a cable communications system operated within the territories of

the Jurisdictions.

D. "Jurisdiction" - any municipality or county which enters into this Agreement.

E. "Multnomah Community Television" means the designated provider of PEG access for the cities of Fairview, Gresham, Troutdale and Wood Village, and Multnomah County.

F. "PEG" means public, educational and governmental cable access within the meaning of franchise agreements administered by the Commission, and applicable law.

G. "Person" - any corporation, partnership, proprietorship, association, individual or organization authorized to do business in the State of Oregon, or any natural person.

Section 3. Commission Creation and Powers. A unified regulatory commission, the Commission is created to carry out the purposes set forth in this Agreement and to administer the cable communications franchises granted by the Jurisdictions. The Commission is vested with all the powers, rights and duties necessary to carry out these purposes that are vested by law in each Jurisdiction, its officers and agencies, subject only to the limitations contained in this Agreement and in the cable communications franchise agreements. "Law" includes the federal laws and Constitution, the Oregon constitution and laws as well as the charters, ordinances and other regulations of each Jurisdiction.

A. Regulatory Authority. The Commission has the authority to act on behalf of the Jurisdictions jointly and separately, and in its own right, to oversee and regulate any cable communications system operated pursuant to the cable communications franchise agreements entered into by the Jurisdictions. The Commission has full authority to take any action necessary to enforce or administer franchise agreements for operation of cable communications systems, except where the power to take a specific action is either limited or reserved to the Jurisdictions by the provisions of Section 4 of this Agreement.

B. Contracting Authority. The Commission may make such contracts, grants, and take such other action as it deems necessary and appropriate to accomplish the general purposes of this Agreement. All contracts made shall conform to the requirements of Oregon law.

Section 4. Powers Retained by Jurisdictions.

A. Discretionary Review. Commission action to; (1) find a Grantee in violation of its franchise agreement, or; (2) impose any penalty or financial remedy, or; (3) regulate, establish or approve any Grantee rate or charge, or; (4) determining PEG capital grant purposes and evaluation criteria as set forth in Section 9.E.2 of this Agreement, shall become effective 30 days after the Commission's final decision. Any such Commission final decision shall not be effective unless a copy of the final decision is filed with the Recorder of each affected Jurisdiction within 10 days of such action. Such final decisions are subject to review by the governing body of each affected

Jurisdiction. Within a 30-day period, any affected Jurisdiction may notify the Commission of its intent to exercise review authority. The Commission shall notify all affected Jurisdictions within 10 days of receiving the review notice. If a majority of the affected Jurisdictions acts within 60 days to overturn the Commission's final decision, such decision shall not become effective, and the matter shall be returned to the Commission for further proceedings as directed by the affected Jurisdictions.

1. Affected Jurisdiction means any Jurisdiction which is a party to the franchise agreement with the Grantee to which the Commission's final decision applies.

2. Recorder means a Jurisdiction's Clerk, Recorder or Auditor.

B. Full Authority. As set forth herein, the Jurisdictions reserve the authority to act on their own behalf. Each Jurisdiction agrees to make a good faith effort to weigh the impact of such actions on the overall operation of a cable system and the continuity of the Commission. Each Jurisdiction agrees to take no action in these areas until the Commission has had a prior opportunity to consider the matter.

Authority retained by the Jurisdictions includes:

1. Any decision to grant, revoke, terminate, extend, amend, renew or refuse to renew a franchise agreement.

2. Any decision concerning a change of ownership or control of a cable communications system or a Grantee.

3. Any decision to purchase or condemn a Grantee's interest, in part or in whole, whether or not pursuant to a termination, revocation or expiration of a franchise agreement.

4. Any decision regarding cable regulation which requires adoption of any ordinance or resolution by the Jurisdictions.

5. Any decision which requires the amendment of this Agreement.

6. Any authority which is reserved to or retained by the Jurisdictions by franchise agreement and which may not otherwise be delegated to the Commission.

Section 5. Commission Members.

A. The Composition. The Commission shall be composed of Commissioners appointed by the Jurisdictions. Each Jurisdiction, except Portland, shall select and appoint one representative to serve as its Commissioner. Portland shall select and appoint three representatives to serve as its Commissioners.

B. Quorum and Voting. The majority of the members of the Commission shall constitute a quorum. No Commission action shall be in effect except on a majority vote by those Commissioners present.

C. Term of Office and Succession. Commissioners shall be appointed to serve until their successors are appointed and assume their responsibilities, but shall serve under procedures authorized by the governing body of the Jurisdiction appointing them. However, a Jurisdiction's appointee shall not have any ownership interest in a Grantee. A vacancy on the Commission shall be filled by the governing body of the Jurisdiction whose position on the Commission is vacant.

Section 6. Meetings, Rules of Procedure and Officers.

A. Meetings to be Public. Meetings of the Commission shall be conducted pursuant to the Oregon Public Meetings law.

B. Rules of Procedure. At the first organizational meeting, or as soon thereafter as practicable, the Commission shall adopt rules governing its procedures including, but not limited to:

1. Times and places of regular meetings;
2. The method and manner of calling special meetings;
3. The method, term and manner of election of officers;
4. The responsibilities and duties of officers; and
5. The procedures for execution of writings and legal documents.

C. Officers. At the first organizational meeting, the Commission shall elect from among its members an interim chairperson and an interim vice-chairperson. The chairperson, and in his or her absence the vice-chairperson, shall preside at all meetings, call special meetings, and determine the order of business, until such time as rules requiring otherwise are adopted.

Section 7. Administration and Staffing Services.

The Commission shall contract with the City of Portland (the City) for administrative services as described in the attached Administrative Services Agreement (Exhibit 1). The Commission is authorized to amend, extend, or terminate the Administrative Services Agreement.

Section 8. Transfer of Staff and Assets.

A. Transferred Employees.

1. Upon termination of the administrative services agreement between the Commission and Multnomah County (the County), the County shall transfer Julie S. Omelchuck to the City's Office of Cable Communications and Franchise Management (Cable Office), providing that the County is no longer performing any cable regulatory services. Pursuant to ORS 236.630, Julie S. Omelchuck shall be placed in a position found by the City to be comparable to the position she enjoyed under the County's employment. The City shall consider Julie S. Omelchuck's education and physical qualifications, experience, and the salary, duties and responsibilities of her prior employment. The County shall furnish all of Julie S. Omelchuck's employment records to the City at the time of transfer. No affected employee shall be deprived of their employment by the County solely because of the transfer of administrative cable regulatory services to the City. The County shall find positions of employment within the County for all other affected employees.

2. The County shall pay each transferred employee all holiday and compensatory time, and any vacation leave time in excess of eighty hours, accumulated by such employee up to the date of the transfer. In addition, funds shall be transferred to the City from within the existing County cable office budget to cover accumulated sick leave, up to the date of transfer, for each transferred employee. The final amount of the payment for accumulated sick leave shall be determined by mutual agreement between the City and the Commission. The County shall reimburse the City for insurance premium costs, if any, resulting from health insurance coverage of preexisting conditions for any transferred employees. If at any time in the future Julie S. Omelchuck transfers back to the County by operation of the terms of Section 8A, the obligations for holiday, compensatory time and vacation leave time under this subsection shall apply equally to the City.

3. Any employees transferred by the County to the Cable Office shall be returned to the County if the transferred employee remains in a comparable employment position within the Cable Office and any one of the following events occurs: 1. The administrative services agreement between the City and the Commission is terminated; 2. The City withdraws from this Agreement; 3. The County withdraws from this Agreement; or 4. The Commission is dissolved under the terms of this Agreement.

4. This consolidation has presented unique circumstances resulting in the employee transfer provisions set forth in this Section. Due to these unique circumstances, the agreements contained in this Section shall not serve as precedent for any future employee transfer discussions between the City and the County.

B. Equipment assets, as listed in Exhibit 2, and general office supplies of the Multnomah Cable Regulatory Commission shall physically transfer to the City and shall become assets of the Commission.

C. The Jurisdictions shall share in the start up costs of the Commission proportionate to the FY 1993-94 budget contribution percentage of the respective Jurisdictions.

Section 9. Receiving and Distributing Funds.

A. The Commission shall comply with applicable state and local laws as to budget preparation and for audit of its books and records. The Jurisdictions may inspect all Commission books and records.

B. The annual budget adopted by the Commission shall be transmitted to the Jurisdictions by April 1. Each Jurisdiction shall review the Commission adopted budget prior to June 1 of each year. Upon approval by all Jurisdictions, the Commission-adopted budget shall become effective. If one or more Jurisdictions does not approve, the budget shall be returned to the Commission for modification and resubmitted to the Jurisdictions for approval. If all Jurisdictions do not approve a Commission budget by July 1, the previous fiscal year budget, less 10 percent, shall continue in effect until all Jurisdictions approve a Commission budget.

The Commission shall have the authority, subject to its approved annual budget, to expend funds for any lawful purpose up to the total amount of the approved budget. The Commission must seek approval by the Jurisdictions of budget amendments over the total amount of the approved budget. All Jurisdictions must approve such budget amendments for them to become effective. No Jurisdiction may amend, reduce or increase the approved Commission budget.

C. The cost allocation of each Jurisdiction in support of the Commission's approved budget shall be determined by the Commission during the annual budget process. The annual approved budget shall establish the specific cost allocation of each Jurisdiction and a schedule for all payments.

D. 1. The Commission is authorized to receive and collect cable franchise fees for all the Jurisdictions except Portland. The Commission shall distribute such franchise fees according to the terms of the franchise agreements with the Grantees, and the Commission budgets approved by the Jurisdictions. However, the Commission shall allocate, on an annual basis, sixty percent (60%) of cable franchise fees received from the cities of Fairview, Gresham, Troutdale, and Wood Village, and Multnomah County, to Multnomah Community Television for the provision of PEG access services within those Jurisdictions as the designated PEG provider. Fees collected in excess of budgeted amounts shall be returned to the Jurisdictions from which such fees are attributable.

2. The Commission shall not collect the City of Portland cable franchise fees. The City of Portland agrees to transfer quarterly its share of the cost allocation in accordance with the approved Commission budget.

3. All other funds arising out of cable franchise agreements shall be collected by the Commission. The Commission shall allocate such funds in accordance with the franchise agreements and the Commission budgets approved by the Jurisdictions.

E. 1. The Commission shall serve as the Grantmaking Board for decisions on

distributing PEG capital funds as grants, as provided in the cable franchise agreements administered by the Commission under this Agreement. The Commission shall establish procedures and timelines for decisions on distributing such grant funds.

2. The Commission shall establish the purposes for PEG capital grants, and evaluation criteria for grant applications, compatible with the terms and conditions of the cable franchise agreements. The Commission shall review such purposes and evaluation criteria at least biennially. Commission determinations of such purposes and evaluation criteria under this Section 9.E.2 shall be subject to review by the Jurisdictions under Section 4 of this Agreement.

3. The Commission shall distribute grants of PEG capital funds based upon such purposes and evaluation criteria as have been developed under Section 9.E.2.

4. The total amount of PEG capital funds, including the total amount of grant funds to be distributed by the Commission under this Section 9.E., shall be included in the Commission's annual budget as transmitted to the Jurisdictions under Section 9.B.

Section 10. Effective Date. This Agreement shall become effective upon its adoption by all Jurisdictions. Any Jurisdiction entering into this shall adopt an authorizing ordinance and shall forward a certified copy to the City of Portland. Within 30 days of the effective date of this Agreement, the City of Portland shall forward copies of the authorizing ordinances to the Secretary of State.

Section 11. Duration and Termination.

A. Duration. The duration of this Agreement is perpetual and the Commission shall continue from year to year, subject to subsection 11.B. The Commission shall forward this Agreement to the Jurisdictions every three years for their review.

B. Termination. In order for any Jurisdiction to withdraw from this Agreement and to prevent obligations for its financial contribution to the Commission for the ensuing year, a Jurisdiction may only withdraw from the Commission by filing a written notice of withdrawal with the Commission by November 1 of any year, effective at the end of that fiscal year. Membership shall continue until the effective date of the withdrawal. However, the withdrawing Jurisdiction shall not take action on the Commission's annual budget. Prior to the effective date, the member Jurisdiction may rescind its withdrawal notice at any time.

Section 12. Assets. If a Jurisdiction withdraws before dissolution of the Commission, the Jurisdiction shall have no claim against the assets of the Commission. In the event of dissolution, all remaining assets of the Commission, after payment of obligations, shall be distributed among the then existing Jurisdictions in proportion to the most recent budget cost allocation percentage of the respective Jurisdictions. Jurisdictions may agree to buy out each others portion of assets.

Section 13. Dissolution. The Jurisdictions may dissolve the Commission and terminate this Agreement at any time by mutual agreement of all Jurisdictions. The Commission shall continue to exist after the dissolution for such period, no longer than three months, as is necessary to wind up its affairs but for no other purposes.

Section 14. General Terms.

A. Severability. The terms of this Agreement are severable and a determination by any Court or agency having jurisdiction over the subject matter of this Agreement that results in the invalidity of any part, shall not affect the remainder of this Agreement.

B. Interpretation. The terms and provisions of this Agreement shall be liberally construed in accordance with its general purposes.

C. Increasing Member Units of Government. The Commission may develop a method for allowing other units of local government to enter into this Agreement, subject to the full authority provision of subsection 4.B. A fee or cost for such entrance may be imposed.

D. Amendments. The terms of this Agreement shall not be amended without the written authorization of the governing bodies of all Jurisdictions.

E. 1. General Indemnification. Each Jurisdiction shall be responsible for the negligent acts or omissions of the Jurisdiction, or its officers, agents or employees, in carrying out the terms of this Agreement, subject to the limitations and conditions of the Oregon Tort Claims Act, ORS 30.260, et seq., and the Oregon Constitution, Article XI, Section 9.

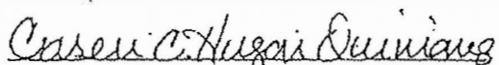
2. By entering into this Agreement, the Jurisdictions are creating a public body under ORS Chapter 190 which is separately responsible for providing coverage for its officers, agents and employees, subject to the limitations and conditions of the Oregon Tort Claims Act, ORS 30.260, et seq.

APPROVED AND EXECUTED by the appropriate officer(s) who are duly authorized to execute this Agreement on behalf of the governing body of each Jurisdiction.

City of Fairview


Edward W. Hall
Mayor

Attest:


Cassey C. Hugai
City Recorder

City of Gresham

Thurman M. Robert

Mayor

John F. Denker

City Manager

Multnomah County

Douglas J. Kirk

County Chair

REVIEWED BY:

Thomas Spangler

County Counsel

City of Portland

Z. O.

Commissioner

APPROVED AS TO FORM:

Benjamin Walters, Deputy

City Attorney

City of Troutdale

Bulftt MaChoper

Mayor

Attest:

George Martin

City Recorder

City of Wood Village

Donald H. MacLachlan

Mayor

Attest:

Damey Blaskey

City Recorder

EXHIBIT 1

12/23/92

AGREEMENT BETWEEN
THE CONSOLIDATED CABLE COMMUNICATIONS COMMISSION
AND THE CITY OF PORTLAND
FOR ADMINISTRATIVE SUPPORT SERVICES

WHEREAS, the City of Portland is a home rule city, incorporated under the laws of the State of Oregon, and

WHEREAS, the Consolidated Cable Communications Commission has been created by an Intergovernmental Agreement between the Cities of Fairview, Gresham, Portland, Troutdale and Wood Village and Multnomah County, pursuant to ORS Chapter 190, the general laws and constitution of the State of Oregon and the laws and charters of the participating jurisdictions, and

WHEREAS, the Consolidated Cable Communications Commission has a need for administrative and support services, and

WHEREAS, the City of Portland has the ability to furnish such services and is willing to do so,

NOW THEREFORE, the City of Portland (City) and the Consolidated Cable Communications Commission (Commission) agree as follows:

Section I. General Purpose. The general purpose of this Agreement is for the City to provide administrative support services to the Commission. It is the intention of the City and the Commission that the Commission shall retain full independent authority to act on all matters related to the purposes for which the Commission was created and to retain all powers granted to it under the Intergovernmental Agreement, as it was written and as it may be amended from time to time. By this Agreement, the City and the Commission do not intend to confer any liability upon the City for any action of the

Commission, independent of any liability that may now exist, or may arise in the future, because of the City's participation in the Intergovernmental Agreement which created the Commission.

Section 2. General Administrative Services.

A. The City agrees to provide the Commission with administrative and staffing support services in the areas of purchasing, fiscal administration, routine cable regulatory legal services, personnel and general support services, as set forth in this Agreement. The Commission shall follow City procedural requirements for purchasing, fiscal administration, personnel and general support services. The Commission shall retain full authority to act on all matters related to the powers granted to it by this Agreement.

B. The City shall defend, hold harmless and indemnify the Commission, its members or its agents from any and all claims, demands, settlements or judgments, including all costs and attorney fees, which arise from any City activity the City has agreed to provide pursuant to this Agreement. The Commission agrees to promptly notify the City Attorney of any claims or demands made against the Commission as a result of any activity of the Commission. The City shall not have any additional liability as a result of this Agreement for any action of the Commission apart from any liability which may result from the City's participation as a jurisdiction in this Agreement.

Section 3. Purchasing. The City agrees to act as the purchasing agency of the Commission and will furnish purchasing agent services to the Commission upon its request provided that in any matter or purchase where the final determination of the successful bidder may be determined under Oregon law by

some criteria other than price, the Commission shall retain final authority to determine a successful bidder or proposal. The City of Portland City Council shall act as the local Public Contract Review Board for the Commission and have jurisdiction over any public contract matter properly brought before a local Public Contract Review Board pursuant to the terms of ORS Chapter 279.

Section 4. Fiscal Administrative Services. The City shall furnish to the Commission the full range of financial administration services requested by the Commission from time to time. These services shall include, but are not limited to, maintenance of Commission accounts, provision of accounts payable, accounting of all Commission revenues and expenditures, assistance in preparing an annual budget and when necessary, budget amendments, preparation of budget monitoring reports on the same frequency as utilized by the City, inclusion of the Commission's approved annual budget within the City's annual budget for transmission to and approval by the Multnomah County Tax Supervision and Conservation Commission, and financial review and external audit services.

The City shall be authorized to receive and expend funds on behalf of the Commission as adopted by the Jurisdictions in the annual budget and at the direction of the Commission. The City will account for such funds in a segregated, dedicated account.

No later than November 1 of each year, the City shall return to the Commission any compensation paid by the Commission to the City for the preceding fiscal year pursuant to Section 8, which was not expended or obligated by June 30 of that fiscal year.

Section 5. General Staff Support. The City agrees to provide sufficient staff to perform the administrative and support services provided in the Commission's approved annual budget. The Commission will set a work plan for each fiscal year and establish regulatory policies for the staff to implement on an ongoing basis. The City agrees to work through its Cable Commissioners to request changes in the Commission's work plan or policies. All decisions regarding creation, filling or reclassification of staff positions, or hiring, disciplining or terminating staff, shall be made by the City, after consultation with the Commission.

Section 6. General Support Services. The City agrees to provide to the Commission the full range of support services generally available to City bureaus and agencies on the same basis, terms, and conditions as such services are generally made available. These services include, but are not limited to, mail pick up and delivery services, access to City vehicles, printing and duplication, telecommunications services, data processing, and management and insurance of physical assets.

Section 7. Cable Regulatory Legal Services. The City agrees to provide routine cable regulatory legal services to the Commission as needed. The Commission may separately contract with third parties or with the City for extraordinary legal services such as rate review, renewal negotiations, litigation or administrative hearings regarding possible cable franchise violations.

Section 8. Compensation. The Commission agrees to pay the City

compensation for the administrative and support services to be provided under this Agreement. The payment shall be made out of the Commission's annual approved budget. By December 31 of each year, the City and the Commission shall agree on the amount to be paid for services for the following fiscal year. The amount shall be based on an estimate of the City's anticipated actual costs of providing such services to the Commission. The City shall keep records of such costs, and such records shall be available for inspection by the Commission upon request.

Section 9. Evaluation. The Commission shall conduct an annual evaluation of the City's administrative services to ensure that the Commission's needs are being met.

Section 10. Term. The term of this Agreement shall be perpetual, unless terminated by the parties pursuant to the terms herein.

Section 11. Termination. This Agreement may be terminated by either party effective July 1st of any year by giving written notice of the intent to terminate on or before the December 31st prior to the July 1st termination date. In addition, this Agreement may be terminated by written agreement of both the City and the Commission effective ninety (90) days after the effective date of the termination agreement.

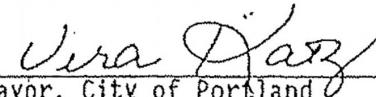
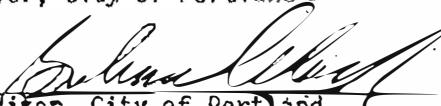
Section 12. Notices. Notices to the Commission shall be sent to the location of its principal office, to the attention of the Chairperson of the Commission. Notices sent to the City shall be sent to the Office of Cable

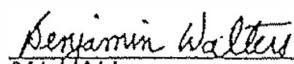
Communications and Franchise Management. All notices required under this Agreement shall be sent by certified mail, return receipt requested.

Section 13. Transition. The Commission and the City recognize that on the effective date of this Agreement there continues in existence a similar administrative services agreement between the Commission and Multnomah County (County). These two agreements authorize both the City and the County to provide similar services for the Commission. In order to facilitate the orderly transfer from the County to the City of the administrative services provided to the Commission, the agreement between the Commission and the County may remain in force to a date no later than April 15, 1993. The Commission shall withdraw from the County and transfer to the City, at the Commission's election, the services covered by the County/Commission agreement and this Agreement. The transfer of all services provided by the County to the Commission under the existing County/Commission agreement shall be completed by no later than April 15, 1993.

Section 14. Effective Date: This Agreement will be effective upon its adoption by the Commission.

Chair,
Consolidated Cable
Communications Commission


Vira Daz
Mayor, City of Portland

Barbara A. Smith
Auditor, City of Portland


Benjamin WALTERS
City Attorney
Approved as to Form

MULTNOMAH CABLE REGULATORY COMMISSION
EQUIPMENT ASSETS INVENTORY

November 30, 1992

<u>ITEM</u>	<u>ASSET ID</u>	<u>MAKE/MODEL</u>	<u>SERIALS #</u>	<u>INSTALLED PRODUCTS</u>
Computers (1 only)	29474	Zenith laptop Supersport SX	004DE002864	42MB HD, 3.25" 1.44MB Floppy, 640KB RAM < 2 serial & Parallel & 1 Parallel Ports; DOS 3.3, WORDPERFECT.
Computer (1 only)	28435	WANG 381	Z033Z2	40MB HD, 5.25" 1.2MB & 3.5" 1.44MB Floppy, 650KB RAM, Hercules Video Card, 2 serial & 1 Parallel Ports, WANG; DOS 5.0, WANG System Services, WORDPERFECT, PRIDE, PCLIS, LOTUS
Monitor	-0-	Zenith	019ND0726NOB	
Printer (1 only)	-0-	Kodak Lazer Jet		
File Cabinets (2 each)	-0-	Steel, two drawer, metal		
Supply Cabinet (1 only)	02557	Steel 8' x 4'		
Desk	-0-	Metal with formica top		
Chair Brown Desk Chair	23786			

MULTNOMAH CABLE REGULATORY OFFICE
FURNITURE INVENTORY

Page 2 of 2

November 30, 1992

<u>ITEM</u>	<u>ASSET ID</u>	<u>MAKE/MODEL</u>	<u>SERIALS #</u>	<u>INSTALLED PRODUCTS</u>
Chair Brown Guest Chair	23785			
Chair Red Desk Chair	-0-			
Typewriter (1 only)	02564	IBM Selectric II	6890552	
Dictaphone (1 only)	05094	Sony BM-25A	622065	
Electric Stapler (1 only)	-0-	FC-90 Isaberg AB Sweden	111445	
		A908		
Tape Recorder (1 only)	-0-	Realistic CAT NO. 14-1052A		
Adding Machines (2 each)	23784	Texas Instruments	135963	
Pencil Sharpener (1 only)	-0-	Boston	68000	
Coffee Pot (1 only)	-0-	Norelco 12 cup	HB5193	

EXHIBIT C
QUARTERLY FRANCHISE FEE REMITTANCE FORM

Jurisdiction, State
 Franchise Fee and PEG / I-Net Remittance Report

For the Month of : Month - Month

	Month-Year	Month-Year	Month-Year
1 Monthly Recurring Cable Service Charges (e.g., Basic, Enhanced Basic, Premium and Equipment Rental)	\$XXXX.XX	\$XXXX.XX	\$XXXX.XX
2 Usage Based Charges (e.g., Pay Per View, Installation)	\$XXXX.XX	\$XXXX.XX	\$XXXX.XX
3 Advertising	\$XXXX.XX	\$XXXX.XX	\$XXXX.XX
4 Home Shopping	\$XXXX.XX	\$XXXX.XX	\$XXXX.XX
5 Late Payment	\$XXXX.XX	\$XXXX.XX	\$XXXX.XX
6 Other (Leased Access & Other Misc.)	\$XXXX.XX	\$XXXX.XX	\$XXXX.XX
7 Franchise Fee Billed	\$XXXX.XX	\$XXXX.XX	\$XXXX.XX
8 PEG Fee Billed	\$XXXX.XX	\$XXXX.XX	\$XXXX.XX
Less.			
1 Bad Debt	\$XXXX.XX	\$XXXX.XX	\$XXXX.XX
Total Receipts Subject to Franchise Fee Calculation	\$XXXX.XX	\$XXXX.XX	\$XXXX.XX
Franchise Fee Rate XXX%	\$XXXX.XX	\$XXXX.XX	\$XXXX.XX
Franchise Fee Due	Xxx Quarter 200X		\$XXXX.XX
PEG / I-Net Grant Due	\$XXXXXX.XX	\$XXXXXX.XX	\$XXXXXX.XX
	Xxx Quarter 200X		\$XXXXXX.XX

Verizon is hereby requeston that this information be treated by the Franchise Authority as confidential business information.

EXHIBIT D
CUSTOMER SERVICE STANDARDS

Resolution No. 2479
Adopted by the Gresham City Council, June 5, 2001

RESOLUTION NO. 2479

A RESOLUTION ADOPTING CUSTOMER SERVICE STANDARDS
AS APPROVED BY THE MT. HOOD CABLE REGULATORY
COMMISSION (MHCRC)

The City of Gresham Finds:

1. The current franchises between the City of Gresham and cable providers require that the cable providers comply with the City's cable television consumer protection policy.
2. The City of Gresham has not adopted such policies and therefore FCC standards for customer service are applicable.
3. The Mt. Hood Cable Regulatory Commission has approved a recommendation from its Customer Service Standards Task Force that a single set of customer service standards be established by all MHCRC member jurisdictions. The Task Force reviewed the service standards of various jurisdictions and sought the input from current franchise holders in developing the draft Customer Service Standards.
4. The MHCRC has approved the Customer Service Standards and recommends adoption by each member jurisdiction.

THE CITY OF GRESHAM RESOLVES:

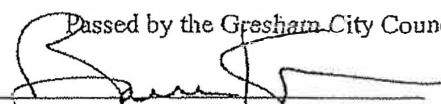
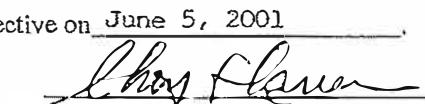
The City of Gresham adopts the Customer Service Standards as approved by the Mt. Hood Cable Regulatory Commission attached as Exhibit A.

Yes: BECKER, HORNER, LASSEN, HANNA, BUTTS, HAVERKAMP

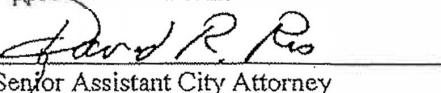
No: NONE

Absent: THOMPSON

Abstain: NONE

Passed by the Gresham City Council and effective on June 5, 2001.

City Manager 
Mayor

Approved as to Form:


Senior Assistant City Attorney

ATTACHMENT 2

FINAL CUSTOMER SERVICE STANDARDS

TABLE OF CONTENTS

I. DEFINITIONS

- A. Normal Business Hours
- B. Normal Operating Conditions
- C. Service Interruption

II. LOCAL OFFICE AND OFFICE HOURS

III. TELEPHONE ANSWERING STANDARDS

- A. Telephone availability
- B. Telephone answer time
- C. Busy signals

IV. INSTALLATIONS, OUTAGES AND SERVICE CALLS

V. NOTICE REQUIREMENTS

VI. BILLING

- A. Bills shall be clear and fully itemized
- B. Billing disputes
- C. Refund checks
- D. Credits for service

VII. REPORTING

I. DEFINITIONS

A. Normal Business Hours

"Normal Business Hours" means those hours during which most similar businesses in the community are open to serve customers. In all cases, Normal Business Hours must include some evening hours at least one night per week and some weekend hours.

B. Normal Operating Conditions

"Normal Operating Conditions" means those service conditions which are within the control of the cable operator. Those conditions which are not within the control of the cable operator include, but are not limited to, natural disasters, civil disturbances, power outages, telephone network outages, and severe or unusual weather conditions. Those conditions which are ordinarily within the control of the cable operator include, but are not limited to, special promotions, pay-per-view events, rate increases, regular peak or seasonal demand periods, and maintenance or upgrade of the cable system.

The listed examples are not meant to be all-inclusive, and operators must adjust their staffing and operations to maintain compliance with the service standards in anticipation of events and conditions within their control.

C. Service Interruption

"Service Interruption" means the loss of picture or sound on one or more cable channels.

II. LOCAL OFFICE AND OFFICE HOURS

Customer service center and bill payment locations shall be open at least during Normal Business Hours and shall be conveniently located.

Cable operator customer service centers must be adequately staffed and able to respond to subscribers and the public not less than 50 hours per week, with a minimum of nine hours per day on weekdays and five hours on weekends excluding legal holidays.

As used herein, "adequately staffed" means customer service representatives are available to respond to customers who come to the service center in at least the following ways:

1. To accept payments;
2. To exchange or accept returned converters or other company equipment;
3. To respond to inquiries; and
4. To schedule and conduct service or repair calls.

III. TELEPHONE ANSWERING STANDARDS-

A. Cable system office hours and telephone availability

The cable operator shall maintain a local, toll-free or collect call telephone access line which shall be available to its subscribers 24 hours a day, seven days a week. Cable operators shall provide, in at least one prominent location, an easily identifiable telephone number for local customer service on all bills, account statements or statements of service to its subscribers.

Toll-free telephone lines, either staffed or with answering capability, providing at least emergency referral information, must be operational 24 hours a day, including weekends and holidays.

Trained company representatives shall be available to respond to customer telephone inquiries during Normal Business Hours.

After Normal Business Hours, the access line may be answered by a service or an automated response system, including an answering machine. Inquiries received after Normal Business Hours must be responded to by a trained company representative on the next business day.

B. Telephone Answering Time

Under Normal Operating Conditions, telephone answer time by a customer representative, including wait time, shall not exceed thirty (30) seconds when the connection is made. If the call needs to be transferred, transfer time shall not exceed thirty (30) seconds. These standards shall be met no less than ninety (90) percent of the time under Normal Operating Conditions, measured on a calendar quarterly basis.

C. Busy Phones

Under Normal Operating Conditions, the customer shall receive a busy signal less than three (3) percent of the time.

IV. INSTALLATIONS, DISCONNECTIONS, OUTAGES AND SERVICE CALLS

Under Normal Operating Conditions, each of the following standards shall be met no less than ninety five (95) percent of the time measured on a quarterly basis:

Standard installations shall be performed within seven (7) business days after an order has been placed.

Under Normal Operating Conditions the cable operator shall begin work on Service Interruptions promptly and no later than 24 hours after the interruption becomes known. The cable operator must begin working on other service problems the next business day after notification of the service problem. Working on Service Interruptions must be more than merely acknowledging it.

The appointment alternatives for installations, service calls and other installation activities shall be either a specific time or, at maximum, a four-hour time block during Normal Business Hours.

The operator may schedule service calls and other installation activities outside of Normal Business Hours for the express convenience of the customer.

The cable operator shall be deemed to have honored a scheduled appointment under the provisions of this section when a technician arrives within the agreed upon time and, if the subscriber is absent when the technician arrives, the technician leaves written notification of arrival and return time, and a copy of that notification is kept by the cable operator.

A cable operator may not cancel an appointment with a customer after the close of business on the business day prior to the scheduled appointment. Rescheduling an appointment is an independent obligation and does not necessarily excuse the missed appointment.

If a cable operator representative is running late for an appointment with a customer and will not be able to keep the appointment as scheduled, the customer shall be contacted. The appointment shall be rescheduled, as necessary, at a time which is convenient for the customer.

V. NOTICE REQUIREMENTS -

Communications between cable operators and cable subscribers

Notifications to subscribers--

The cable operator shall provide written information on each of the following areas at the time of service installation, at least annually to all subscribers, and at any time upon request:

- (1) Products and services offered;
- (2) Prices and options for programming services and conditions of subscription to programming and other services;
- (3) Installation and service maintenance policies;
- (4) Instructions on how to use the cable service;
- (5) Channel positions programming carried on the system; and,
- (6) Billing and complaint procedures, including the address and telephone number of the local franchise authority's cable office.

Customers shall be notified of any changes in rates, programming services or channel positions as soon as possible in writing. Notice must be given to subscribers a minimum of thirty (30) days in advance of such changes if the change is within the control of the cable operator. In addition, the cable operator shall notify subscribers thirty (30) days in advance of any significant changes in the other information required by this Section V. Notwithstanding any other provision of Part 76 of the Code of Federal Regulations, a cable operator shall not be required to provide prior notice of any rate change that is the result of a regulatory fee, franchise fee, or any other fee, tax, assessment, or charge of any kind imposed by any Federal agency, State, or franchising authority on the transaction between the operator and the subscriber.

VI. BILLING

Bills shall be clear, concise and understandable. Bills must be fully itemized, with itemizations including, but not limited to, basic and premium service charges and equipment charges. Bills shall also clearly delineate all activity during the billing period, including optional charges, rebates and credits.

In case of a billing dispute, the cable operator must respond to a written complaint from a subscriber within seven (7) calendar days.

Refunds--Refund checks shall be issued promptly, but no later than either the customer's next billing cycle following resolution of the request or thirty (30) days, whichever is earlier. The cable operator may withhold a refund pending the customer returning the equipment supplied by the cable operator if service is terminated.

Credits--Credits for service shall be issued no later than the customer's next billing cycle following the determination that a credit is warranted.

VII. REPORTING

Cable operators shall file reports to the Mt. Hood Cable Regulatory Commission on a quarterly basis showing the performance of their customer service standard obligations under this section. The quarterly reports shall cover the periods January 1 through March 31; April 1 through June 31; July 1 through September 31; and October 1 through December 31. The reports shall be due no later than 30 days following the end of a quarter. The reports shall include, at a minimum, figures and narrative indicating performance of the standards for:

Local office hours;
Telephone call center hours;
Telephone answering
Busy signal statistics
Standard installations
Service interruptions
Appointment windows: made, cancelled, and rescheduled
Notice requirements
Billing (refunds and credits)

EXHIBIT E
GRANTEE PARENT STRUCTURE AS OF SEPTEMBER 30, 2008

Verizon Northwest parent: GTE Corporation 100%

GTE Corporation Parents:

Verizon Communications Inc. 92.88%

NYNEX Corporation 5.93% (which is 100% owned by Verizon Communications Inc.)

Bell Atlantic Global Wireless, Inc. 1.19% (which is 100% owned by Verizon Investments Inc., which is 100% owned by Verizon Communications Inc.)

EXHIBIT F
PERFORMANCE BOND

Bond No. _____

KNOW ALL MEN BY THESE PRESENTS: That (name & address) (hereinafter called the Principal), and (name and address) (hereinafter called the Surety), a corporation duly organized under the laws of the State of (state), are held and firmly bound unto (name & address) (hereinafter called the Obligee), in the full and just sum of _____ Dollars (\$ _____), the payment of which sum, well and truly to be made, the said Principal and Surety bind themselves, their heirs, administrators, executors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal and Obligee have entered into a Franchise Agreement dated _____ which is hereby referred to and made a part hereof.

WHEREAS, said Principal is required to perform certain obligations under said Agreement.

WHEREAS, the Obligee has agreed to accept this bond as security against default by Principal of performance of its obligations under said Agreement during the time period this bond is in effect.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH that if the Principal shall perform its obligations under said Agreement, then this obligation shall be void, otherwise to remain in full force and effect, unless otherwise terminated, cancelled or expired as hereinafter provided.

PROVIDED HOWEVER, that this bond is executed subject to the following express provisions and conditions:

In the event of default by the Principal, Obligee shall deliver to Surety a written statement of the details of such default within 30 days after the Obligee shall learn of the same, such notice to be delivered by certified mail to address of said Surety as stated herein.

This Bond shall be effective _____, 20_____, and shall remain in full force and effect thereafter for a period of one year and will automatically extend for additional one year periods from the expiry date hereof, or any future expiration date, unless the Surety provides to the Obligee not less than sixty (60) days advance written notice of its intent not to renew this Bond or unless the Bond is earlier canceled pursuant to the following. This Bond may be canceled at any time upon sixty (60) days advance written notice from the Surety to the Obligee.

Bond No. _____

Neither cancellation, termination nor refusal by Surety to extend this bond, nor inability of Principal to file a replacement bond or replacement security for its obligations under said Agreement, shall constitute a loss to the Obligee recoverable under this bond.

No claim, action, suit or proceeding shall be instituted against this bond unless same be brought or instituted and process served within one year after termination or cancellation of this bond.

No right of action shall accrue on this bond for the use of any person, corporation or entity other than the Obligee named herein or the heirs, executors, administrators or successors of the Obligee.

The aggregate liability of the surety is limited to the penal sum stated herein regardless of the number of years this bond remains in force or the amount or number of claims brought against this bond.

This bond is and shall be construed to be strictly one of suretyship only. If any conflict or inconsistency exists between the Surety's obligations as described in this bond and as may be described in any underlying agreement, permit, document or contract to which this bond is related, then the terms of this bond shall supersede and prevail in all respects.

This bond shall not bind the Surety unless it is accepted by the Obligee by signing below.

IN WITNESS WHEREOF, the above bounded Principal and Surety have hereunto signed and sealed this bond effective this _____ day of _____, 2008.

Principal

Surety

By: _____

By:

, Attorney-in-Fact

Accepted by Obligee:

(Signature & date above - Print Name, Title below)

RESOLUTION NO.

A RESOLUTION EXTENDING THE FRONTIER CABLE SERVICES FRANCHISE AGREEMENT WITH THE CITY OF TROUTDALE

THE TROUTDALE CITY COUNCIL FINDS AS FOLLOWS:

1. The Mt. Hood Cable Regulatory Commission (“MHCRC” or “Commission”) was created by an Intergovernmental Agreement dated December 24, 1992) (the “IGA”) to carry out cable regulation and administration on behalf of Multnomah County and the cities of Gresham, Fairview, Portland, Troutdale, and Wood Village (the “Jurisdictions”). Among other things, the Commission acts in an advisory capacity to the Jurisdictions in connection with renewal or extension of any cable franchise of the Jurisdictions. As set forth in the IGA, the Jurisdictions have reserved full authority to act on their own behalf regarding any proposed renewal or extension of the term of a cable franchise. However, each Jurisdiction has agreed to take no action in these areas until the Commission has had an opportunity to give prior consideration to the matter.
2. The cable franchises were granted by the Cities of Fairview, Gresham, Troutdale, and Wood Village (“Cities”) to Verizon Northwest, Inc. (“Grantee”) effective November 18, 2008 (“Franchise/s”), and the Grantee and the Franchise/s were duly transferred to and accepted by Frontier Communications Corporation and all appropriate Frontier subsidiaries (collectively “Frontier”) with the approval of the Cities in 2010. After the transfer, Frontier renamed the Grantee Frontier Communications Northwest Inc.
3. The Franchise/s will expire on December 31, 2018.
4. At a meeting held November 19, 2018, the MHCRC recommended the Cities grant an extension of the term of the Franchise/s to December 31, 2022, on certain conditions.
5. The public interest will be served by granting an extension of the term of the Troutdale Franchise to December 31, 2022, on certain conditions.
6. MHCRC staff has verified that Frontier has no objection to extending the term of the Troutdale Franchise to December 31, 2022, on certain conditions.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF TROUTDALE:

Section 1. Franchise Extension/Amendments.

- (a) Subject to the conditions set out in the acceptance form attached as Attachment A to this Resolution, the City approves an extension of the term of the cable franchise granted by City to Frontier, effective December 11, 2018 (“Franchise/s”) from January 1, 2019 to December 31, 2022.

- (b) Section 3.3.1 of the Franchise/s is amended to delete the date "December 31, 2018" and substitute the date "December 31, 2022".
- (c) Section 8.2 of the Franchise/s is amended to add at the end of the last sentence the following: ", and reporting annual subscriber counts."
- (d) All other terms and provisions of the Franchise/s, together with all related documents and agreements pertaining thereto, shall continue in effect without modification.
- (e) On or before January 1, 2019 Frontier Communications Corporation, as Guarantor of the Franchise/s, shall file a written, executed acceptance of this Resolution, meeting the approval of the City Attorney. The written acceptance shall be in substantially the form attached hereto as Attachment A.
- (f) The executed acceptance shall be unqualified and shall be construed to be an acceptance of all the terms, conditions and restrictions contained therein.
- (g) The failure, refusal or neglect by Frontier Communications Corporation, as Guarantor of the Franchise, to file such written acceptance by such time shall constitute an abandonment and rejection of the rights and privileges conferred hereby and this Resolution shall thereupon be null and void.

Section 2. Effective Date. This Resolution shall be in full force and effect from and after its passage.

YEAS:
NAYS:
ABSTAINED:

Casey Ryan, Mayor

Date

Sarah Skroch, City Recorder
Adopted:

ATTACHMENT A – MODEL ACCEPTANCE ORDINANCE
Acceptance of Extension Of Term Of Cable Franchise
Frontier Communications/Jurisdiction

CITY OF TROUTDALE
c/o Sarah Skroch, City Recorder
219 E. Historic Columbia River Hwy.
Troutdale, OR 97060

cc to: Mt. Hood Cable Regulatory Commission
111 SW Columbia St, Suite 600
Portland, OR 97201

This is to advise the City of Troutdale ("City") that Grantee Frontier Communications Northwest Inc. and Grantee's Guarantor Frontier Communications Corporation hereby unqualifiedly accept the provisions applicable to them of Resolution No. _____, passed by the City on the 11th of December, 2018, extending the term of the cable franchise granted by the Cities of Fairview, Gresham, Troutdale, and Wood Village which were duly transferred to Frontier Communications Corporation (effective January 5, 2010) ("Franchise/s") to December 31, 2022 and agree, as applicable, to abide by the following terms and conditions:

- a. In all respects and without exception, Grantee and Grantee's Guarantor Frontier Communications Corporation agree and acknowledge that the extension of the term of the Franchise/s will not affect, diminish, impair or supersede the binding nature of the existing valid ordinances, franchises, resolutions and agreements applicable to operation of the cable system, including, but not limited to any existing guarantees, and that during the term of the extension Grantee shall comply with each and every provision of the Franchise/s including all lawful applicable ordinances, orders, contracts, agreements, commitments, side letters, and regulatory actions taken pursuant thereto, as applicable, whether prior or subsequent to the date of the term extension that is the subject of this Acceptance.
- b. Grantee and Grantee's Guarantor Frontier Communications Corporation do not waive and expressly reserve all legal rights they may have under the current Franchise/s and applicable law, and Grantee and Grantee's Guarantor Frontier Communications Corporation specifically acknowledge and expressly accept that the City does not waive and expressly reserves all legal rights and authority in regard to any and all non-compliance under the Franchise/s that may now exist or may later be discovered to have existed during the term of the Franchise/s, whether prior or subsequent to the date of the term extension that is the subject of this Acceptance.

Signatures and Acknowledgments Follow On Next Page

**FRONTIER COMMUNICATIONS
NORTHWEST INC.**

STATE OF _____)
) ss.

County of _____)

By _____

Name:

Title:

Date: _____, 2018

This Acceptance was acknowledged before
me on the _____ day of _____,
2018, by

as _____,
a duly authorized officer of Frontier
Communications Northwest Inc.

Notary Public for _____

My Commission Expires _____

**FRONTIER COMMUNICATIONS
CORPORATION**

STATE OF _____)
) ss.

County of _____)

By _____

Name:

Title:

Date: _____, 2018

This Acceptance was acknowledged before
me on the _____ day of _____,
2018, by

as _____,
a duly authorized officer of Frontier
Communications Corporation

Notary Public for _____

My Commission Expires _____

APPROVED AS TO FORM:

City Attorney



CITY OF TROUTDALE



STAFF REPORT

SUBJECT / ISSUE: A report on the Metro 2030 Regional Waste Plan

MEETING TYPE: City Council Regular Mtg.	MEETING DATE: December 11, 2018 STAFF MEMBER: Ryan Largura DEPARTMENT: Public Works
ACTION REQUIRED Information/Discussion PUBLIC HEARING No	ADVISORY COMMITTEE/COMMISSION RECOMMENDATION: Not Applicable Comments:
STAFF RECOMMENDATION: Public comments to be submitted by December 21, 2018.	

EXHIBITS:

- A. Draft of Metro 2030 Regional Waste Plan

Subject / Issue Relates To:

- Council Goals
- Legislative
- Other (describe)

Public Comment Period for 2030 Regional Waste Plan

Issue / Council Decision & Discussion Points:

- ◆ Metro's forthcoming 2030 Regional Waste Plan will have new requirements for the City of Troutdale to meet.
- ◆ This plan is a high level view and contains many unknowns about how the proposed requirements will be put into practice.
- ◆ The City has two existing requirements that should be adopted per Metro and state regulations.
- ◆ Council comments on the 2030 Regional Waste Plan need to be submitted by 5 p.m. on Friday, December 21, 2018:
- ◆ By mail: Metro Regional Waste Plan, 600 NE Grand Ave., Portland, OR 97232

Reviewed and Approved by City Manager:

A blue ink signature of the City Manager, which appears to read "R. Largura".

- ◆ By email: regionalwasteplan@oregonmetro.gov
- ◆ By phone: 503-797-1920

BACKGROUND:

The Metro Charter, the Oregon Constitution, and Oregon statutes grant Metro broad authority for planning, managing and overseeing the regional garbage and recycling system. Metro and local governments work together to manage the system for the region. The 2030 Regional Waste Plan is a blueprint to guide investments in the Metro region's solid waste system and reduce the environmental and health impacts of products from manufacturing to disposal. Because the document is long and involves technical issues, City Staff believes it is appropriate to brief the Council on the plan in anticipation that Council or citizens may want to submit comments to Metro before adoption.

The 2030 Regional Waste Plan is the fourth plan to be adopted since the passage of the initial plan in 1988, and has been mandated by the Oregon Department of Environmental Quality since 1989. The latest plan is intended to move the Metro region toward a sustainable materials management approach that identifies and addresses impacts across the full life cycle of materials and products. This shift is based on recent changes in policy guidance at the federal and state levels, including the adoption of the 2050 Vision and Action Framework for Materials Management in Oregon by the Environmental Quality Commission and implemented by DEQ.

The plan has been written to allow for flexibility, and is considered a "living document" that will guide the aforementioned stakeholders toward a healthier, more resilient and more equitable system. The vast majority of the actions represent guidance to Metro and local governments, rather than requirements. New requirements for local governments, or changes to existing requirements, that result from actions in the 2030 Regional Waste Plan will be developed in consultation with local governments and will go through the regular Metro Council legislative process, which includes consultation with advisory committees and opportunities for public comment. New requirements for local governments may be incorporated into Metro Code or Metro administrative procedures.

These requirements are primarily directed at ensuring comprehensive and consistent recycling and garbage services are provided across the region, together with education, information and technical assistance programs for residents and businesses about waste prevention, reuse and recycling.

The plan calls out current or new requirements for local governments as actions under goals 10, 12, and 14 on pages 113 through 115 of the 2030 Regional Waste Plan. (Attached as Exhibit A) These actions are considered directive actions that are binding on local governments and typically set forth in Metro Code, Chapter 5.10.:

- Goal 10 is to provide regionally consistent services for garbage, recyclables and other priority materials that meet the needs of all users.
- Goal 12 is to manage all garbage and recycling operations to reduce their nuisance, safety and environmental impacts on workers and the public.
- Goal 14 mandates rates for all services that are reasonable, responsive to user economic needs, regionally consistent and well understood.

Actions to “implement” a project or program assume preliminary steps such as planning, budgeting and collaboration and later steps such as monitoring and evaluation. Metro, in collaboration with local governments, will develop multi-year work plans to prioritize implementation of the actions. These plans will include estimates of the financial and staff resources needed to complete the work. The implementation approach outlined in the plan for these specific directive actions are code and authorization, partnership agreements, or both.

Metro envisions continuing to utilize the existing Annual Waste Reduction Program as the primary means for developing and implementing many of the actions in the 2030 Regional Waste Plan and meeting state waste reduction requirements cooperatively with local governments. The program consists of annual work plans developed by Metro and local governments and annual reports submitted by local governments to Metro summarizing progress made by implementing the program. The program will act as an implementation tool for multi-year regional work plans and be implemented through intergovernmental agreements. The agreements will require local governments to comply with Metro Code and state requirements in the Opportunity to Recycle Act (ORS 459A) and its update of Senate Bill 263.

Currently, the City does not officially participate in the Annual Waste Reduction Program because it has not adopted the Business Recycling Requirement. Aside from Metro funding to support the program, the Opportunity to Recycle Act has statutory requirements the City currently does not meet unless it adopts the Business Recycling Requirement and forthcoming Business Food Waste Requirement. It is expected that this issue, along with Food Waste Recycling requirements, will come back to Council soon for review and possible approval of new Ordinances. (See bottom of page 115 of Exhibit A)

PROS & CONS: Not applicable, just a discussion matter.

Current Year Budget Impacts Yes (describe) N/A

Future Fiscal Impacts: Yes (unsure at this point) N/A

City Attorney Approved N/A Yes

Community Involvement Process: Yes (describe) N/A



Exhibit A

12/11/18 Council Mtg. Item #5



Metro

Draft 2030 Regional Waste Plan Equity, health & the environment

If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we've already crossed paths.

So, hello. We're Metro – nice to meet you.

In a metropolitan area as big as Portland, we can do a lot of things better together. Join us to help the region prepare for a happy, healthy future.

Stay in touch with news, stories and things to do.

oregonmetro.gov/news

Follow Oregon Metro:



**METRO COUNCIL
PRESIDENT**

Tom Hughes

METRO COUNCILORS

Shirley Craddick, District 1

Betty Dominguez, District 2

Craig Dirksen, District 3

Kathryn Harrington, District 4

Sam Chase, District 5

Bob Stacey, District 6

AUDITOR

Brian Evans

600 NE Grand Avenue

Portland, OR 97232-2736

503-797-1700

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Introduction

We live in a place where people care—about protecting the environment, conserving resources, keeping people healthy and ensuring that everyone has what they need to thrive.

There's a strong connection between our ability to achieve these values and our decisions about managing waste, especially when we think beyond garbage trucks and recycling bins.

Our regional waste system is more than recycling services and garbage facilities. It encompasses the entire life of the products we use, from design to production to use, until they go to a recycler, landfill or thrift store. Garbage, recycling and related sectors make up a significant part of the Portland region's economy, employing thousands of people and generating more than \$537 million in economic activity each year. Garbage and recycling have a substantial impact on the environment, too: the products we purchase, use and throw away are responsible for more than 35 percent of the region's greenhouse gas emissions.

Over the years, a collaborative approach to planning for the future has helped make greater Portland one of the most livable areas of the country. The 2030 Regional Waste Plan continues that tradition—and builds on it, with a focus on equity, health and the environment.

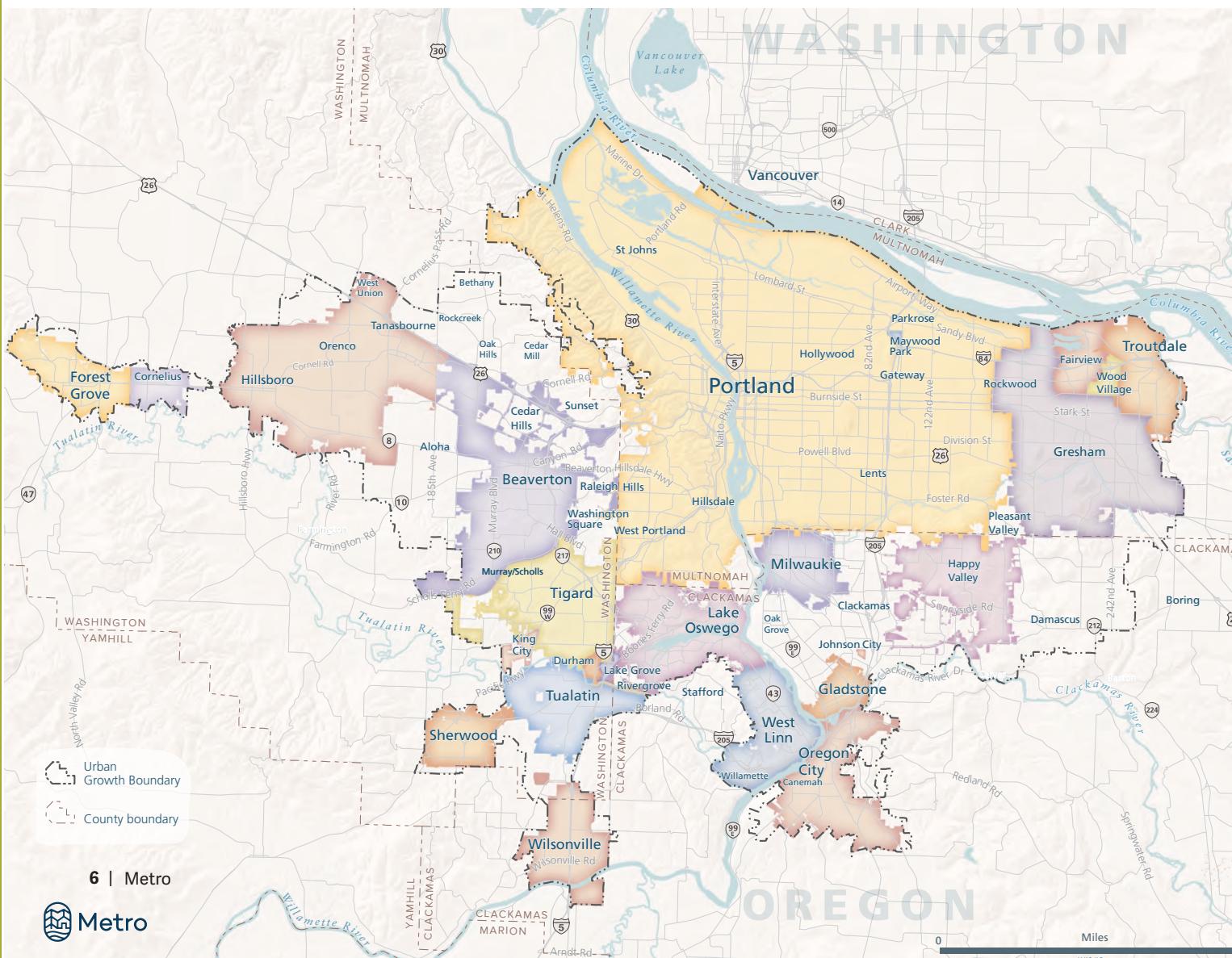
Everyone should be able to enjoy the benefits of our growing region. Currently, not everyone can. A long history of discrimination in law, policy and practices has left communities of color out of the economic benefits of the garbage and recycling system while burdening them with disproportionate harmful impacts. In contrast to past planning efforts, this plan acknowledges racial equity as the backbone of good governance, addressing disparities that people of color experience related to Metro's policies, programs and services.

Equity shows up throughout this plan, from the community-driven process that created it to the goals and actions designed to correct past wrongs and build a more inclusive future.

At a time when climate change and pollution are threatening people and the environment, we must grapple with the fact that these global problems are linked to our patterns of consumption and our growing demands for materials. The products we produce, purchase, use and throw away have impacts locally and globally, and not just when we dispose of them. This plan provides a framework and actions for reducing the impacts of products from throughout their lives, during design and manufacture, when we buy and use them and when we throw them away. The plan also ensures the region's garbage and recycling system is resilient and prepared to recover quickly after a disaster.

As the regional solid waste authority, Metro has the responsibility to ensure that all solid waste generated in the region is managed in a manner that protects public health and safety and safeguards the environment. This plan is designed to address the changes and challenges we face and to provide opportunities to innovate, invest and continue our efforts to protect people and quality of life in the region.

In collaboration with city, county, state, community and business leaders, Metro will use the 2030 Regional Waste Plan as greater Portland's blueprint to respond to the complex and interrelated challenges we face.



Navigating the plan

Values, principles and vision (page 42)

The foundation of the plan, the values, principles and vision will guide how Metro and our partners manage and improve the garbage and recycling system.

Goals and actions (page 48)

The 19 specific goals and 105 related actions will enable the region to achieve its vision by 2030. The goals and actions are grouped into five categories:

- Shared prosperity
- Product design and manufacture
- Product use and consumption
- Product end-of-life management
- Disaster resilience

Measuring progress (page 102)

Specific indicators will be used to measure progress over time.

Implementation (page 108)

Metro is responsible for coordinating and participating in various efforts to implement the plan and assess its performance. Several approaches will be used to implement the actions of the plan. Each action is assigned a lead agency—the primary entity responsible for implementation and reporting progress.

Definitions

The Plan: The entire 2030 Regional Waste Plan.

Life cycle system: The multiple interconnected stages of a product's life, from raw material extraction to design and production to recycling into something new, and the impacts the product has at each stage of its life.

Garbage and recycling system: All the programs, services and facilities that enable residents and businesses to safely, and with the highest environmental benefit, get rid of their discarded items when they no longer have use for them. Metro, cities and counties oversee and manage garbage, recycling and composting services. The system also includes organizations and businesses that provide donation, reuse and repair services to reduce the amount of materials going to the landfills.

From Metro's Strategic plan to advance racial equity, diversity and inclusion:

Racial equity: When race can no longer be used to predict life outcomes, and outcomes for all groups are improved.

Historically marginalized: Groups that have been denied access and/or suffered past institutional discrimination in the United States.

Inclusion: The degree to which diverse individuals are able to participate fully in the decision-making process within an organization or group. While a truly "inclusive" group is necessarily diverse, a "diverse" group may or may not be "inclusive."

Diversity: The variance or difference among people. This variance includes race, ethnicity, gender, age, religion, nationality, language preference, socioeconomic status, disability, sexual orientation, gender identity and others. These differences are tied to a variety of other aspects of diversity such as experience, work styles, life experience, education, beliefs and ideas.

People of color and communities of color: For the purposes of this plan, communities of color are Native Americans, African Americans, Asian Americans and Pacific Islanders, Latinos or Hispanics and immigrants and refugees who do not speak English well, including African immigrants, Slavic and Russian-speaking communities and people from the Middle East.





A new approach to managing waste

Addressing the full life cycle

A NEW
APPROACH

Our regional waste system is more than recycling services and garbage facilities. It encompasses the entire life of the products we use, from design to production to use, until they go to a recycler, landfill or thrift store.

This Regional Waste Plan addresses the entire life cycle of products. The goals and actions are designed to not only improve the way we manage materials at the end of their life, but also to reduce harmful impacts by intervening earlier. There's opportunity to improve how we design and produce products, extract raw materials from the earth, make purchasing decisions and use what we buy. The traditional garbage and recycling system, which handles products and packaging after we are done with them, is just one part of this larger system.

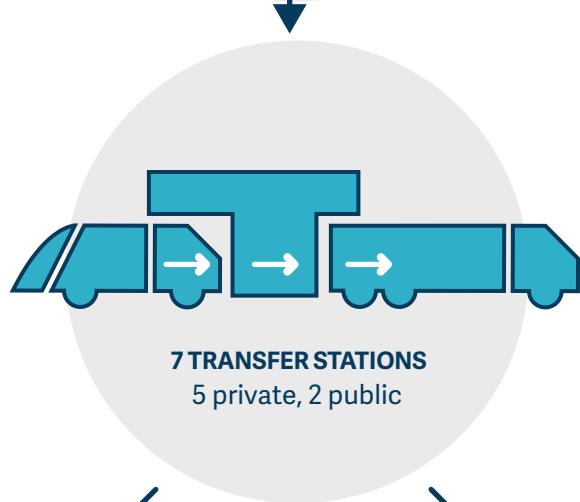
This life cycle approach can result in healthier people and a healthier planet. It can improve access to high-quality services and information, no matter where you live. It can help you decide what to buy or where to get rid of an item you are done using. And it can lessen the negative health and environmental impacts from the materials and products we use every day.

The garbage and recycling system

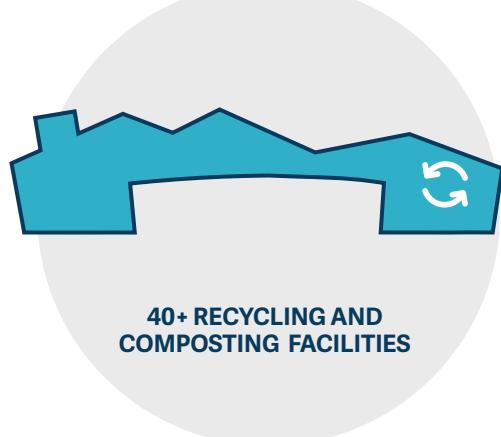
Our regional garbage and recycling system serves a complex network within 24 cities and three counties. It includes:



55 HAULERS



7 TRANSFER STATIONS
5 private, 2 public

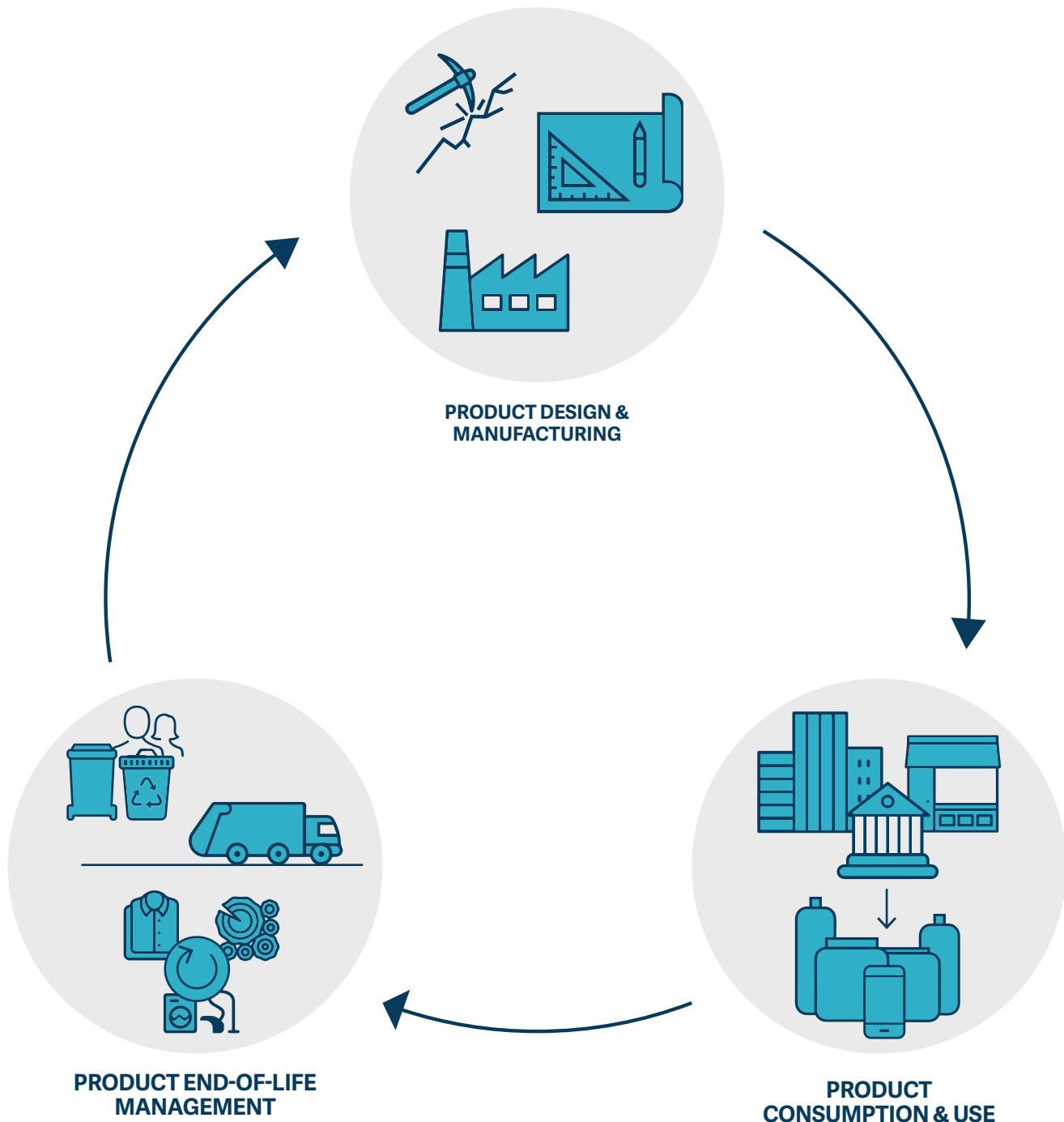


40+ RECYCLING AND COMPOSTING FACILITIES



7 LANDFILLS

The life cycle of products and materials



The life cycle of products and materials

Product design & manufacturing

What it involves:

- Extracting natural resources from the earth by mining, drilling, forest harvesting or other methods
- Designing products and selecting what goes into them
- Producing or manufacturing products
- Transporting and distributing products

Ways to reduce harmful impacts:

- Design products to use fewer newly extracted natural resources and more recyclable materials
- Design products to include safer chemicals and materials
- Design products to be more durable, reusable and recyclable
- Use fewer materials when making products and packaging them
- Use less energy or cleaner energy sources throughout the process
- Share responsibility for reducing impacts among everyone involved with a product across its life cycle

Product consumption & use

What it involves:

- The purchasing decisions of people, companies and institutions
- The use of products by individuals and businesses

Ways to reduce harmful impacts:

- Provide consumers with the tools and education needed to make informed decisions
- Ensure better access to sustainable products

Product end-of-life management

What it involves:

The people, facilities, companies, non-profits and government agencies that handle recyclables and garbage

The activities involved in waste management, including collection, recycling and processing, transfer, transportation and disposal

The reuse community, which adds life to reusable goods like clothes, appliances and lumber

Ways to reduce harmful impacts:

Promote and provide more opportunities for people to safely reuse and repair products

Provide options for donating reusable products before throwing them away

Support efforts to ensure that grocery stores and similar places can safely donate edible and nutritious surplus food to agencies serving people experiencing hunger

Improve options for people to reduce their garbage by providing services such as building deconstruction, recycling and composting for homes and businesses

Foster greater recycling by strengthening markets and collection programs

Ensure that facilities provide benefits to their communities, not just burdens



Leading with equity

Our region is stronger when everyone has access to financial prosperity, a healthy environment and the range of opportunities that allow us to thrive.

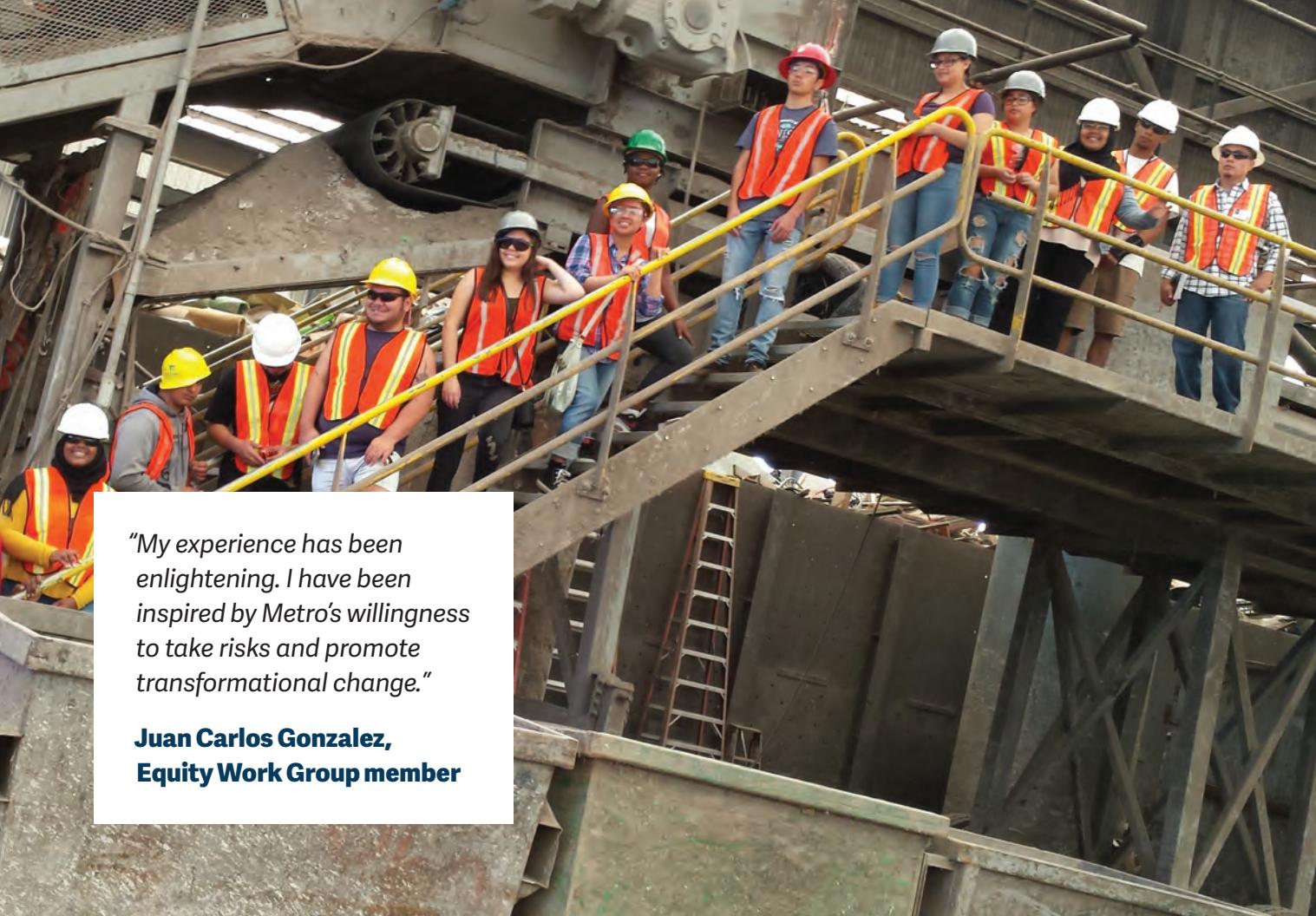
But unfortunately, a long history of exclusionary and discriminatory policies has harmed communities of color in the Portland metropolitan region. As a result, communities of color currently experience the worst economic and social outcomes of any demographic group.

Within the garbage and recycling system, inequities appear in a variety of ways, including:

- The garbage and recycling industry tends to lack diversity in the workforce—except in the job categories that pay the lowest wages.
- Procurement processes for solid waste operations contracts often include barriers to participation for minority-owned and woman-owned small businesses.
- Communities of color experience barriers to accessing Metro's recycling information, education services and household hazardous waste services.
- People of color own few of the businesses that run our region's system.

Metro, cities and counties are committed to creating the conditions that allow everyone to enjoy the benefits of our growing region. With our programs, policies and services, we are working to make this a great place for everyone—today and for generations to come.

To ensure an inclusive process from the start, Metro convened an Equity Work Group to develop the plan's principles. The work group participated in each phase of the process, working alongside staff in drafting elements of the plan. Metro and eight community-based organizations also organized discussions to learn how residents envision the future of the garbage and recycling system. These discussions informed many of the actions in this plan.



"My experience has been enlightening. I have been inspired by Metro's willingness to take risks and promote transformational change."

**Juan Carlos Gonzalez,
Equity Work Group member**

A photograph of a group of people in what looks like a workshop or training session. In the foreground, several people are seen from behind, looking towards a whiteboard. The whiteboard has handwritten text in Spanish. One prominent heading is "Metro Valores". Other visible text includes "Reflejan?", "se reflejan, no añide n", "Metro toma", "us proact", "Metro se involucra", "señalar de e", "readye", "mover la", "Integracion co", and "solamente comunic". To the right of the whiteboard, there is a list titled "Metro Valores" with several bullet points. The people in the foreground are wearing casual clothing, including a black baseball cap, a green t-shirt, and a pink top.

HOW EQUITY IS INCORPORATED IN THE 2030 REGIONAL WASTE PLAN

This plan includes a variety of elements to eliminate barriers and advance racial equity, diversity and inclusion.

- Equity is called out specifically in the set of values.
- The principles provide a framework for key equity considerations to guide plan implementation.
- 40 actions focus directly on advancing equity and reducing disparities.



Environmental impacts of products and materials

Measuring environmental impacts

When people think about reducing waste, they often think about what happens when they throw something away. Can I recycle this box? Are these food scraps compostable? It's important to manage waste at the end of a product's life by reusing, recycling or composting, but intervening earlier can have a larger impact on human health and the environment.

For most products and materials, we can achieve the most environmental benefit by producing them more sustainably, with fewer natural resources, less-toxic materials and less-polluting processes.

Metro and others involved in solid waste management have typically measured the environmental impact of what we produce, consume and throw away by looking at the amount and types of items that show up in the recycling, composting and garbage.

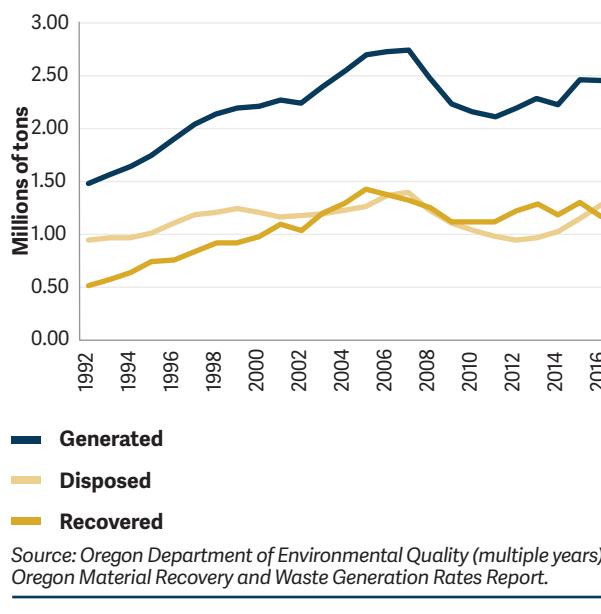
Historically, two main indicators have been used to help understand how much waste we are recycling and how much we are throwing away. The recovery rate is the percentage of all discarded materials and products that do not go to a landfill or incinerator. These materials are either recycled, anaerobically digested, composted or, in the case of wood waste, burned to produce energy. A higher recovery rate is associated with a reduction in environmental impacts due to the benefits of recycling, anaerobic digestion and composting, and, to a lesser extent, energy recovery.

Oregon and the Metro region also measure tons of waste generated. This is the total amount of discarded materials and products generated in a given year. When this number decreases, it is associated with lower environmental impacts since it implies that, overall, the region is consuming fewer goods—at least by weight. It indicates that people and businesses may be wasting less food, reusing and repairing more goods or buying products that have less packaging.

These are not perfect measures of the environmental impact of materials and products because they only measure the weight of what we throw away, not the actual environmental impact. For example, the impact of one pound of discarded batteries, in terms of the greenhouse gas emissions and other toxics associated with making them, is likely to be much greater than the impact of one pound of yard debris.

THE METRO REGION'S WASTE, 1992-2016

Millions of tons of waste generated, disposed and recovered.

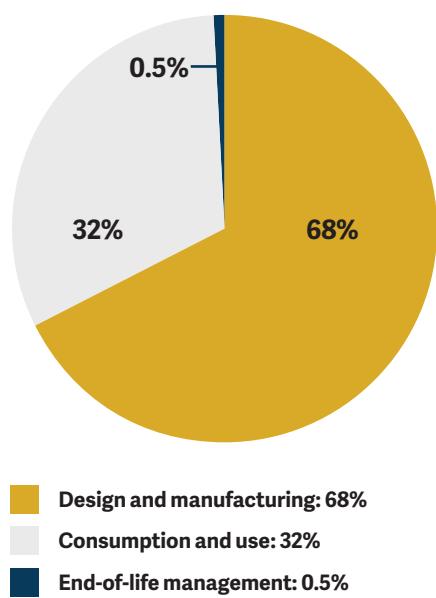


The focus on the end of a product's life provides an incomplete picture of how we're affecting the environment and how we can reduce our impact. In this plan, to align with a new focus on the full life cycle of products and materials, we are assessing our environmental impact in a more comprehensive way: by looking at the greenhouse gas emissions and other environmental and health impacts associated with products and materials throughout their life, from production to disposal.

Through this lens, a different picture emerges. In the Metro region, 99 percent of greenhouse gas emissions related to consumption are generated when we make, consume and use materials and products. End-of-life management, on the other hand, accounts for less than one percent.

GREENHOUSE GAS EMISSIONS FROM PRODUCTS, MATERIALS AND SERVICES

In 2015, the Metro region generated 41 million metric tons of greenhouse gas emissions from the products and materials we made, bought, used and threw away and the services we used.



Note: The figures in this chart do not add up to 100% due to rounding.
Source: Oregon Department of Environmental Quality (2018). 2015 Consumption-Based Greenhouse Gas Emissions Inventory for the Metro Region.

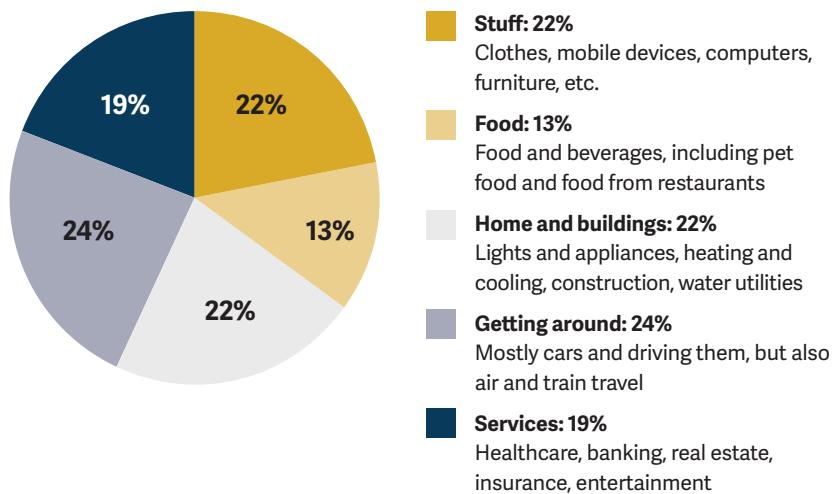
In 2016, 48% of the materials disposed within the Metro region were recovered.

When we produce and consume goods and services, our actions and decisions impact the environment, both locally and globally.

In 2015, the goods and services we consumed in the tri-county area (Clackamas, Multnomah and Washington counties) generated about 41 million metric tons of greenhouse gas emissions. Businesses making and selling products and providing services here in the Metro region generated 29 percent of these emissions. Of the remaining emissions, 48 percent were generated in other parts of the United States and 23 percent in other countries. These emissions contribute to climate change globally and affect everyone on the planet.

The region's emissions come from a variety of goods and services, from food to transportation, legal advice to construction. Services like haircuts involve materials and products that impact the environment, such as computers and hair products. Getting around in cars and other forms of transportation generates emissions, too, as does building houses and commercial structures and providing them with power, heat, cooling, water and other services.

GREENHOUSE GAS EMISSIONS FROM THINGS WE PURCHASE



Source: Oregon Department of Environmental Quality (2018). 2015 Consumption-Based Greenhouse Gas Emissions Inventory for the Metro Region.

Reducing our impact

Environmental benefits result from changes throughout a product's life cycle.

Making a new product or providing a service requires the use of materials and energy. Raw materials must be extracted from the earth and products must be made and then transported to wherever they will be sold and used. Some of the materials used to make products are toxic and can harm people and the environment.

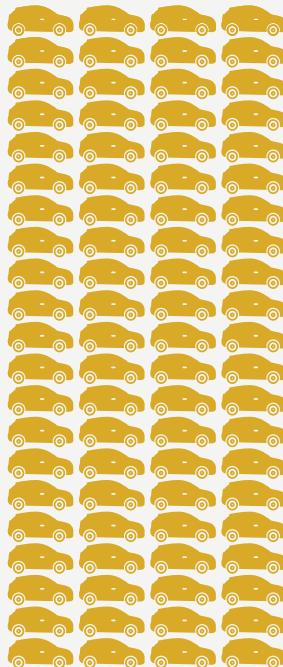
By buying products that have less packaging, fewer toxic materials and an overall lower impact on the environment, we can make a big impact. However, our decisions as consumers are only part of the picture. Manufacturers must also contribute by making changes in product design and in the resources and processes used to make new products.

Reusing and repairing materials and products decreases impacts on the environment by preventing or delaying the purchase of new items.

Recycling and composting also reduce the environmental impacts of buying and using goods and food. By providing companies with materials to make new products, recycling lowers the need to extract and process virgin materials and lowers the energy expended, and the accompanying greenhouse gas emissions, when the products are manufactured.

RECYCLING BENEFITS

In 2016, the Metro region's recycling and composting efforts reduced greenhouse gas emissions by about 1.5 million tons.



A FOCUS ON FOOD

Food and food waste clearly illustrate the environmental and social implications of how we manage materials. Food production and preparation require significant resources, including farmland, clean water and air, labor, energy, fertilizers and pesticides. Yet millions of tons of food are wasted each year. In fact, about 40 percent of the food produced in the United States is never eaten.

In 2016, food made up a big portion of what the Metro region sent to landfills—about 16 percent of all garbage. At the same time, Oregon consistently ranks among the top states in the nation for “food insecurity,” which occurs when people have inconsistent access to safe, nutritious food.

One of the most effective ways to reduce the environmental impact of our food system is to prevent food waste. Strategies to reduce waste include purchasing only what we are likely to eat,

storing food properly and using up everything that we buy.

Even when we plan and prepare food carefully, there will still be surplus food. Food banks, pantries and meal sites that serve communities experiencing hunger can take some donations of edible and nutritious food from places like grocery stores. Metro can support their efforts by helping to ensure that surplus food is supplied safely and efficiently. If surplus food is not suitable for human consumption, it can sometimes be used to feed animals on farms.

When preventing food waste is not possible, other methods can help reduce some of the environmental impacts of food production. When food waste ends up at a landfill, it generates methane—a powerful greenhouse gas that contributes to climate change. Alternatives include composting food waste to create nutrient-rich soil amendments or processing food waste to generate energy.





Economic benefits

Economic impact

The garbage and recycling system creates jobs, supports families, spurs economic activity and strengthens industries. Residents and businesses in the Portland metropolitan region pay about \$287 million a year for garbage and recycling services. This investment pays salaries, purchases goods and services and boosts local businesses.

\$287 MILLION A YEAR

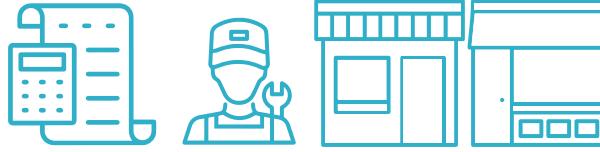


DIRECTLY SUPPORTS

The workers, companies and government agencies that collect garbage and recyclables and transfer and transport garbage to landfills.

The facilities that separate and process materials for recycling and composting.

The staff in cities and counties that provide education and technical assistance to households and businesses on waste prevention, reuse, recycling and composting.



INDIRECTLY SUPPORTS

Local businesses that supply the services and materials the garbage and recycling system needs to operate, such as office paper, accounting services and truck repair.

Local businesses where workers employed by garbage and recycling companies and government agencies spend a portion of their wages.

RESULTING IN



1,900 jobs

\$278 million in local economic activity, including \$91 million in wages and benefits

RESULTING IN AN ADDITIONAL



1,900 jobs

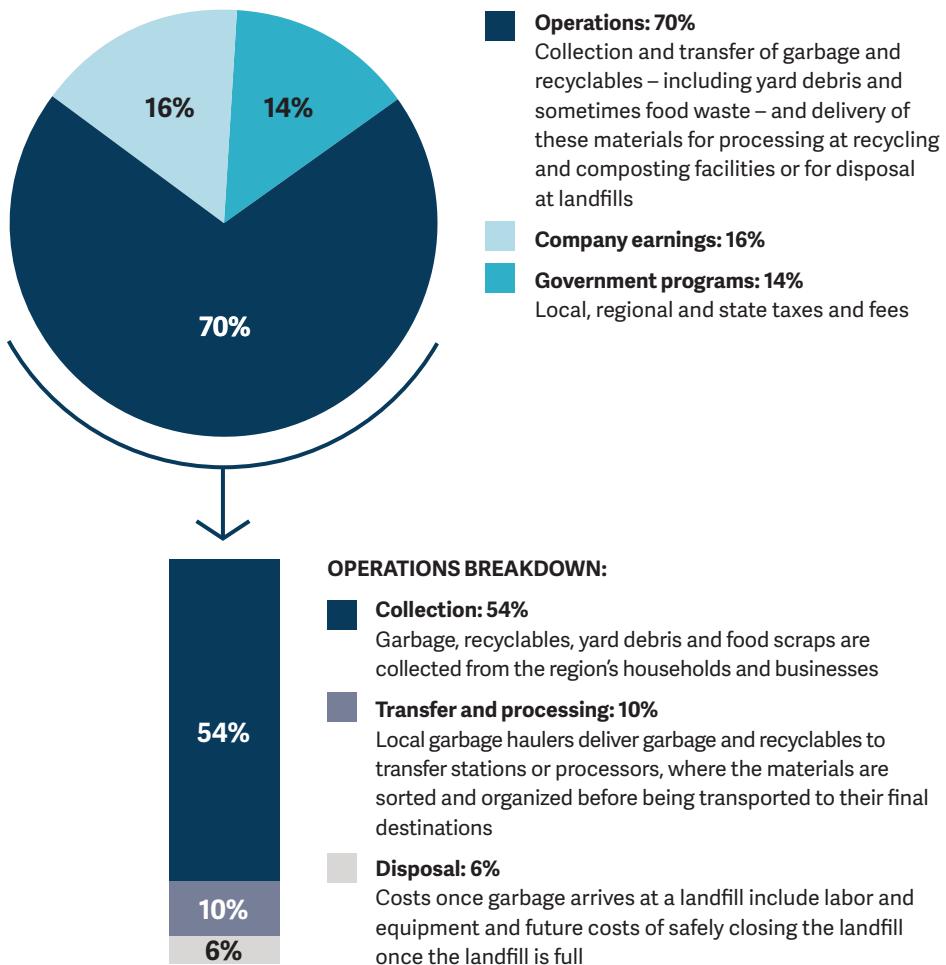
\$258 million in local economic activity, including \$102 million in wages and benefits

System revenue

In general, investments in recycling leverage higher economic benefits than investments in disposal.

Recycling converts waste materials into valuable raw materials, creating additional manufacturing jobs and strengthening manufacturing industries. The money we each pay for garbage and recycling services keeps garbage trucks operating and supports a robust recycling system.

WHERE GARBAGE AND RECYCLING FEES GO



Source: Metro (2018). Solid Waste Economic Analysis.



Currently, the economic benefits of the garbage and recycling system are distributed inequitably, with few high-paying jobs going to people of color, women or others who've historically been left out. Metro is committed to reversing these inequities with actions inspired by the requests of local communities. Learn more in the Shared Prosperity section on page 44.



Legal foundation and policy guidance

Overview

This plan is built on a strong foundation of values and principles, developed in partnership with communities throughout the region.

The plan framework, coupled with the broad authorities of Metro and local governments to manage the solid waste system, allow for significant action over the 12 years the plan will be in effect. It's a living document that will guide us toward a healthier, more resilient and more equitable system.

Legal foundation

The Metro Charter, the Oregon Constitution and Oregon statutes grant Metro broad authority for planning, managing and overseeing the regional solid waste system.

Regional authority

In 1987, the Metro Council designated solid waste as an area and activity appropriate for a functional plan (Metro Ordinance 87-740). With this action, it recognized the complexity of managing a regional waste system that serves two dozen cities, portions of three counties, over a million residents, thousands of businesses and many solid waste service providers. A regional plan provides a unified blueprint to coordinate all parties and to bring the parts of the system together into a well-functioning whole.

Previous waste plans

Metro has adopted three solid waste system plans to date, as shown in Figure 2. The plan is updated about every 10 years to meet the needs of our changing region and align with state and federal guidance.

History of regional waste plans

Metro has adopted three regional solid waste management plans since the Metro Council's 1987 designation of solid waste as an area appropriate for a functional plan. The plans were adopted in 1988, 1995 and 2008.

Policy guidance

A range of local, state and federal policies, plans and strategies provided inspiration as we shaped this plan.

Protecting the environment and human health: The traditional solid waste hierarchy—reduce, reuse, recycle—recognizes that managing municipal solid waste is one part of a broader strategy for reducing the environmental and human health impacts associated with the production, use and end-of-life management of products.

A “life cycle” approach: Since adopting the 2008 Regional Solid Waste Management Plan, Metro and the federal and state governments have adopted new policy guidance that expand the approach for managing materials. Instead of focusing solely on the end of a product’s life, they focus on a product’s full life cycle, from production to disposal. This approach identifies impacts and actions across the life of materials and products as they move through the economy.

Advancing equity: To address the barriers experienced by people of color, the Metro Council adopted the Strategic Plan to Advance Racial Equity, Diversity and Inclusion in June 2016. This plan sets five goals for advancing regional equity:

- Convene and support regional partners to advance racial equity
- Meaningfully engage communities of color
- Hire, train and promote a racially diverse workforce
- Create safe and welcoming services, programs and destinations
- Prioritize resource allocation that advances racial equity

To accomplish these goals, this plan concentrates on eliminating the disparities that people of color experience, especially in areas related to Metro’s policies, programs, services and destinations. This strategic direction allows Metro the opportunity to make a difference in the lives of disadvantaged communities while also improving the region’s quality of life.

DIVERSITY FARM DIVERSE VEGETABLES AND SUSTAINABILITY



POLICY GUIDANCE

The development of the plan's values and principles were informed by a range of plans and guidance documents, including those listed below.

Equity Strategy
Metro's strategic plan to advance racial equity, diversity and inclusion.

Regional System Public Benefits
Metro solid waste system guiding values.

National Materials Management Strategy
Environmental Protection Agency's Sustainable Materials Management Plan.

Oregon 2050 Vision
Oregon state vision and action framework for sustainable materials management.

Oregon Toxics Reduction Strategy
State strategy aimed at keeping toxics out of the environment.

Oregon Environmental Literacy Framework
Plan that ensures students become lifelong stewards of environment and community.

METRO'S SIX DESIRED OUTCOMES

Metro's six desired outcomes for the region:

Vibrant communities

People live and work in vibrant communities where they can choose to walk for pleasure and to meet their everyday needs.

Economic prosperity

Our children and their children benefit from the region's sustained economic competitiveness and prosperity.

Safe and reliable transportation

People have safe and reliable transportation choices that enhance their quality of life.

Environmental leadership

The region is a leader in sustainability and minimizing contributions to climate change.

Clean air and water

Current and future generations enjoy clean air, clean water and healthy ecosystems.

Fairness and equity

The benefits and burdens of growth and change are distributed fairly and equitably.



OREGON 2050 VISION

The 2050 Vision for material management describes a future in which Oregonians live within the limits of their sustainable share of the world's natural resources. In 2050:

Recognizing that Earth's resources are finite, Oregonians live within the limits of our sustainable share of the world's natural resources.

We take into account the full impacts of materials throughout their life cycle.

We use renewable resources at levels that can be sustained in perpetuity while maintaining the resiliency of natural systems.

All Oregonians have access to the knowledge, capabilities, resources and services required to use materials responsibly.



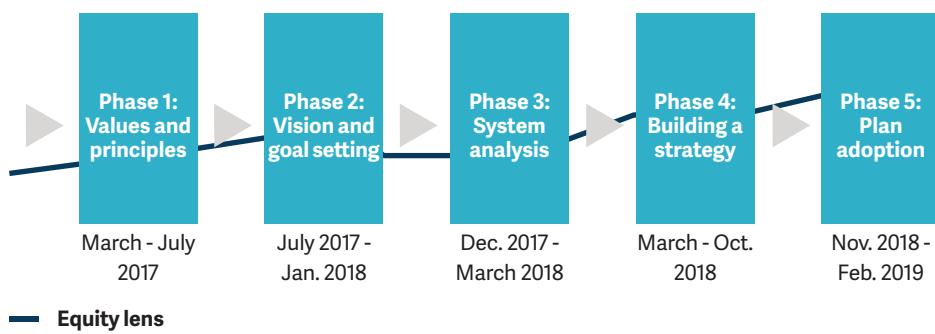
Creating the plan

Planning process

From spring 2017 to fall 2018, Metro collaborated with local communities to create a Regional Waste Plan that reflects the values and priorities of people across the region.

Work to create the draft plan involved many participants – including community groups, local governments, industry and non-profit organizations and Metro. The process occurred in five major phases.

5 PHASES OF PLAN DEVELOPMENT



Phase 1: Values and principles

Developed and committed to a shared set of values and principles.

The first phase created the values and principles that are the foundation of this plan. Existing policy guidance influenced this process—as did public surveys, community discussions and the application of an equity lens.*

In summer 2017, Metro started to work closely with culturally specific, community-based organizations and to start conversations with people Metro had not reached in the past. All were from communities in the three counties that had been negatively impacted by the garbage and recycling system but have had the least influence in shaping it—people of color, new immigrants and refugees, people with limited English proficiency, families on low incomes living close to garbage and recycling facilities, elders, youth and people with disabilities.

During hours of discussions and tours of facilities, people shared their experiences of the system—what worked for them, what didn’t, what mattered most to them and which changes they desired. Metro listened, learned and gathered ideas to shape a plan for the future.

** Applying an equity lens means asking questions or prescribing a process in order to counteract policies and practices that maintain inequity.*

ABOUT THE EQUITY WORK GROUP

From the start, Metro recognized that only an inclusive process would result in a plan that prioritizes equity. Metro formed the Equity Work Group to put equity front and center during the development of the plan and throughout implementation.

The seven members of the work group had extensive expertise and experience working with communities of color and other historically marginalized communities. The work group participated in each phase of the process, working alongside staff in drafting elements of the plan. During the first phase, after reviewing the plan's values, the Equity Work Group developed the plan's principles to guide equity considerations from planning to implementation.

Throughout this process, Metro was intentional about building mutual capacity and developing authentic, lasting partnerships. Metro staff helped work group members expand their knowledge and understanding of the garbage and recycling system. And the work group helped the Metro team become more responsive to community concerns and understand a variety of perspectives.

Equity work group members

Andre Bealer, National Association of Minority Contractors

Emma Brennan, Oregon Tradeswomen, Inc.

Marilou Carrera, referred by Oregon Health Equity Alliance

Juan Carlos Gonzalez, referred by Centro Cultural

Pa Vue, referred by Asian Pacific American Network of Oregon

Rob Nathan, referred by Coalition of Communities of Color

Tommy Jay Larracas, referred by OPAL Environmental Justice of Oregon



Phase 2: Vision and goal setting

Identified a vision and set goals for the future.

Phase 2 developed the plan's vision and goals, setting the priorities for the garbage and recycling system over the next ten years. This involved visualizing future scenarios and considering the tradeoffs associated with different paths forward.

To build on the community discussions held in the first phase, Metro conducted a series of engagements to inform the development of the vision and goals:

- A planning workshop involving more than forty individuals, including Equity Work Group members and Metro and local government staff.
- An online survey, which gathered input and ideas from nearly 4,000 community members to help shape future priorities.
- Three leadership forums co-led by Metro and local community-based organizations at which more than 120 people shared ideas and discussed future priorities for the garbage and recycling system. The forums were hosted by Immigrant and Refugee Community Organization, Rosewood Initiative and Centro Cultural.
- A technical forum where more than 60 stakeholders active in some element of the garbage and recycling system provided input on the draft vision and goals.
- A review of the draft vision and goals by the Equity Work Group, local government solid waste directors, Metro Solid Waste Alternatives Advisory Committee and Metro Policy Advisory Committee.

Phase 3: System analysis

Analyzed the system to identify where the region is today relative to the desired future.

Phase 3 established an understanding of where the region is today relative to the vision for the future. To do this, Metro compiled and summarized existing data on different aspects of the garbage and recycling system. This included developing descriptions of existing programs, policies and infrastructure, current opportunities and challenges facing the system. This information helped develop a framework to measure progress. By revealing how to bridge the current reality with the desired future, it also informed the plan's actions.

FROM COMMUNITY ENGAGEMENT TO IMPACTFUL ACTIONS

To inform the development of the Regional Waste Plan, Metro convened in a series of engagements with communities of color and other historically marginalized communities around greater Portland.

Metro, eight community-based organizations and a cohort of more than 100 community members participated in multiple discussions over more than a year about the future of garbage and recycling. At these events, interpreters facilitated the participation of people who spoke Spanish and Russian.

The actions inspired by these conversations span across the garbage and recycling system, from jobs in garbage to information about recycling.

What Metro heard and learned

- Residents were frustrated with differences in access to, quality of and availability of services.
- Many people wanted to recycle and to protect the environment, but had challenges, like cost, a lack of bins and space (especially to dispose of large items), frequency of collection, inability to compost at apartments and accommodations for age and abilities.

- There was confusion about services and how the system works, and information was lacking for people from diverse cultures and age groups.
- People were concerned about impacts to human health and the environment, such as noise, odors and air and water pollution.
- There were concerns about a lack of diversity in the workforce and opportunities for people of color in the industry.

The organizations

- Center for Diversity & the Environment
Centro Cultural de Washington County
Constructing Hope
Immigrant and Refugee Community Organization
Momentum Alliance
North by Northeast Community Health Center
The Rosewood Initiative
Trash for Peace



Phase 4: Building a strategy

Developed strategies to move us closer to the region's vision.

Phase 4 developed an action plan to close the gap between the current condition of the garbage and recycling system and the vision for the system's future.

To accomplish this, Metro assembled eight technical work groups and partnered with local communities to identify and draft the actions. The work groups were made up of representatives from local governments, garbage and recycling facility operators, reuse organizations, garbage haulers, community organizations and others with a particular interest in the system. More than 60 people participated on the work groups. They focused on:

- Quality service
- Education and information
- Good jobs
- Economic prosperity
- Garbage and recycling operations
- Reduce, reuse and repair
- Healthy products
- Disaster preparedness and resiliency

The work groups, facilitated by Metro staff, met over the course of three months, including a final forum that gathered all the work groups together to review the draft actions for further improvements.

Metro also sought input on the draft actions from the community, specifically people who had participated in earlier phases. More than 100 local residents associated with eight culturally specific community-based organizations reviewed the draft actions to see whether they reflected previous community input and to prioritize the changes they most wanted to see in the system. The small group conversations were conducted simultaneously in Russian, Spanish and English, with Metro staff facilitating and taking notes. Participants focused on the areas that they had identified as most important to them:

- Garbage and recycling operations
- Quality service
- Information and education
- Jobs and economic opportunities

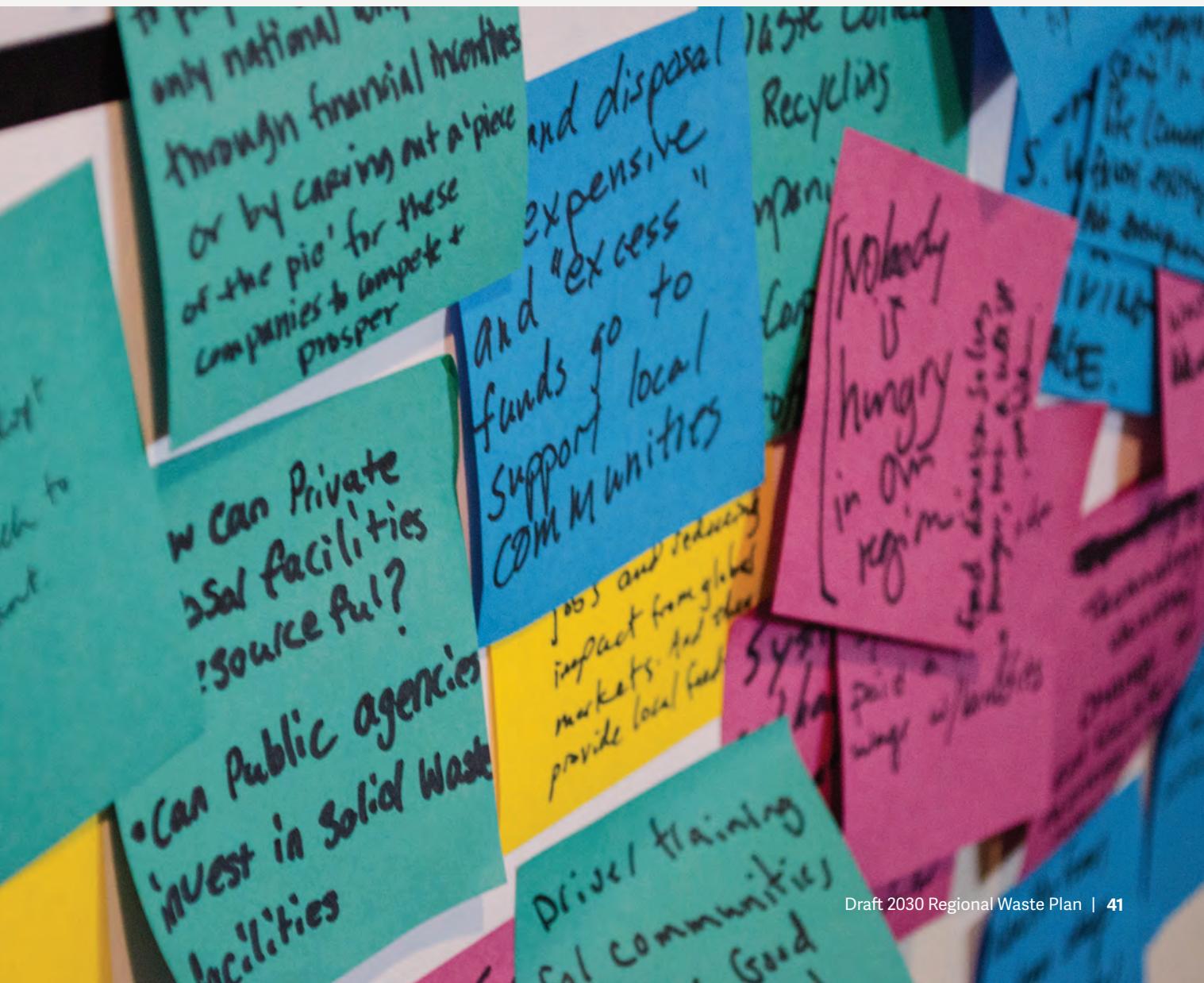
Following the community engagement, Metro staff further refined the draft actions in coordination with the Equity Work Group, Metro Council and local government partners.

ABOUT THE TECHNICAL WORK GROUPS

To develop the actions in this plan, Metro convened eight technical work groups with representatives from local governments, community-based organizations, non-profit organizations, advocacy organizations, haulers, and facility operators.

The work groups met in spring 2018. Work group members reviewed the information produced as part of the system analysis to evaluate where we are today relative to our vision and goals. Then they worked together, sharing their perspectives on the garbage and recycling system to identify actions to achieve our desired future.

Each work group met up to four times, including a final session that brought all of the groups together for a comprehensive look at the goals and actions. Their work was shared at a community gathering with people who had participated in earlier phases of the process. This allowed community members to see whether the actions reflected their input and to prioritize the changes they most want to see.



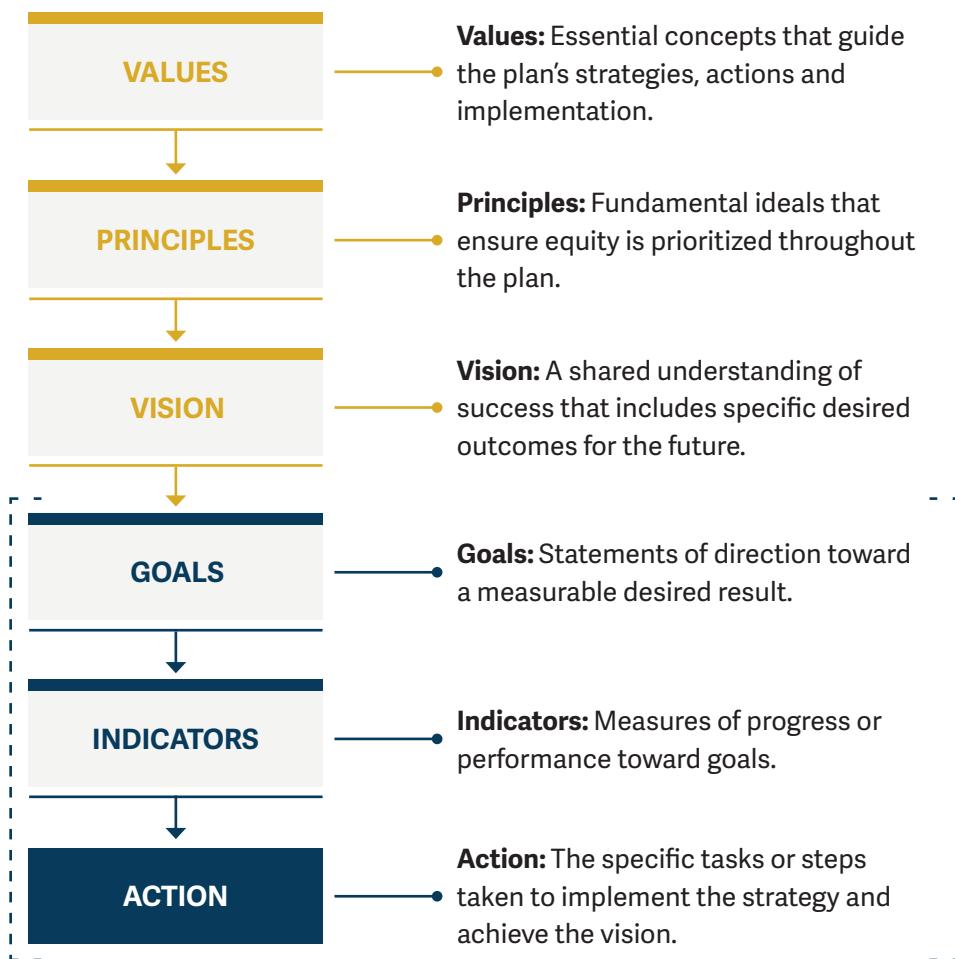


Values, principles and vision

With equity considerations front and center, participants developed values, principles and a vision to serve as the plan's foundation. Existing guidance—including regional, state and federal policies and plans regarding waste management, recycling, toxics and other related environmental programs—also informed these core concepts.

FROM IDEALS TO ACTIONS

The values, principles and vision inspire and inform the concrete actions that Metro and local governments will implement as part of this plan.



Values

The values serve as a basis for the plan's goals and actions and will guide implementation.



PROTECT AND RESTORE THE ENVIRONMENT AND PROMOTE HEALTH FOR ALL

Ensure that current and future generations enjoy clean air, water and land.

Lead efforts to reduce impacts of climate change and minimize release of toxins in the environment.

CONSERVE NATURAL RESOURCES

Reduce the amount of energy, water and raw materials needed to make products.

Manage materials to their highest and best use (reduce, reuse, recycle).

ADVANCE ENVIRONMENTAL LITERACY

Facilitate life-long environmental learning for youth and adults.

Increase knowledge of natural systems, and the human impacts on them, in order to foster civic responsibility and community empowerment.



FOSTER ECONOMIC WELL-BEING

Promote inclusive prosperity and living well for all residents of the region.

Increase access to economic opportunities for all communities.

ENSURE OPERATIONAL RESILIENCE, ADAPTABILITY AND SUSTAINABILITY

Maintain a regional system that is safe and responsive to changing conditions to ensure long-term viability.

Prepare for recovery after natural disasters.

PROVIDE EXCELLENT SERVICE AND EQUITABLE SYSTEM ACCESS

Ensure that high-quality and good-value programs, services and facilities are equitably accessible to all.

Principles

This plan provides Metro and local governments a powerful opportunity to advance racial equity, diversity and inclusion.

The following principles were developed by the Equity Work Group in collaboration with Metro staff. Their purpose is to help address historical and disproportionate impacts of the waste system on marginalized communities and to define how the plan may advance racial equity.

Community restoration

Metro and local governments will act to repair past harms and disproportionate impacts caused by the regional solid waste system. In practice, this means:

- They will acknowledge historical impacts passed from generation to generation within communities.
- They will actively include communities that have been historically marginalized from decision-making processes.
- They will equitably distribute costs and benefits, taking into account historical and system impacts.
- They will value indigenous and cultural knowledge about using resources sustainably.
- They will commit to building a greater awareness of equity among providers of garbage and recycling services.

Community partnerships

Metro and local governments will develop authentic partnerships and community trust to advance the plan's vision. In practice, this means:

- They will prioritize historically marginalized communities within the delivery of programs and services.
- They will expand voice and decision-making opportunities for communities of color.
- They will support resilient community relationships by creating ongoing opportunities for leadership development.

Community investment

Metro and local governments will emphasize resource allocation to communities of color and historically marginalized communities. In practice, this means:

- They will make investment decisions in partnership with communities.
- They will invest in impacted communities and youth through education and financial resources.
- They will eliminate barriers to services and employment.



"I'm excited to see [the 2030 Regional Waste Plan], a project on which I've dedicated a lot of hard work and time, become a real tangible part of the Metro region's operations. There is satisfaction in knowing that our group has had a positive influence on how governments, businesses and communities interact to create positive outcomes for all."

**Andre Bealer,
Regional Waste Plan Equity
Work Group member**

Vision

The 2030 Vision identifies the desired future for the garbage and recycling system and specific outcomes for managing and reducing the impacts of products consumed in the region. The goals and actions are designed to close the gap between today and this desired future.

Economic prosperity

Innovation, investments and partnerships support a thriving garbage, recycling, reuse and repair economy that benefits local communities.

Good jobs

All garbage and recycling industry jobs pay living wages and provide opportunities for career advancement. All occupations in the industry reflect the diversity of our local communities.

Education and information

Everyone has the culturally relevant, age-appropriate information and educational resources needed to make purchasing and disposal decisions that will protect their health and the environment.

Healthy products

Companies and consumers share responsibility for reducing the harmful impacts of products and packaging on public health, climate, air quality, waterways and wildlife throughout the entire life cycle of products.

Reduce, reuse and repair

Reduce, reuse, repair and donation are mainstream practices accessible to all, creating economic opportunity and building community self-reliance.

Quality service

Garbage and recycling services meet the needs of all people and all communities.

Garbage and recycling operations

From trucks to facilities, our garbage and recycling system is safe for workers and the public, minimizes pollution of air, solids and water, and is financially sustainable.

Preparedness and resilience

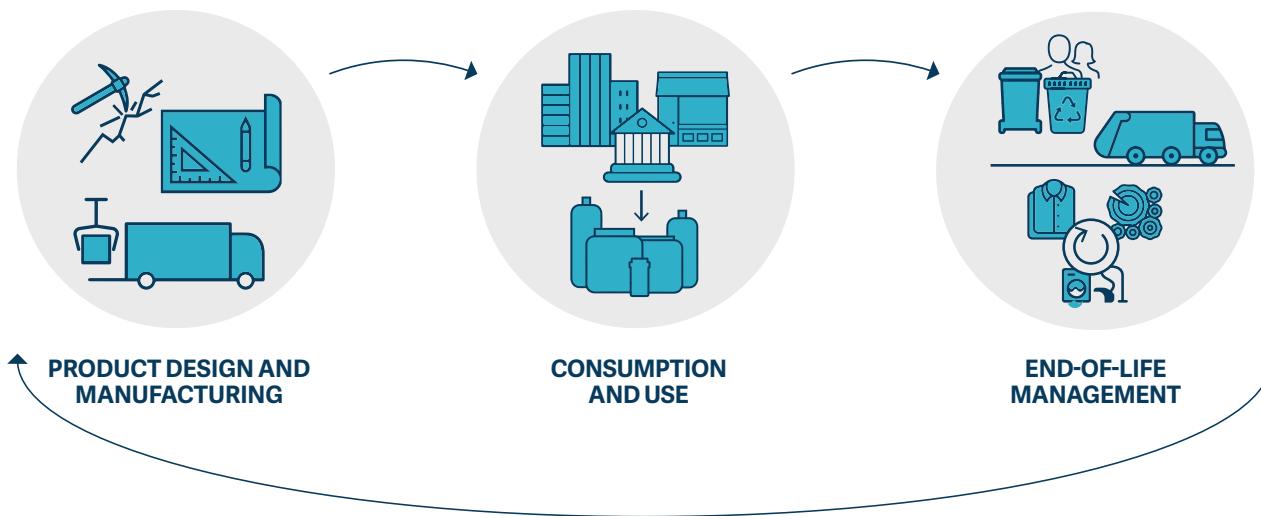
The region's garbage and recycling system is resilient and prepared to recover quickly from disruptions like natural disasters, while minimizing harmful impacts to the most affected communities.



Goals and actions

Overview

The goals of the plan focus on addressing the impacts of materials—from production to disposal—and closing the gap between today's reality and the region's vision for the future. This involves taking action at every stage of the product life cycle and addressing community needs within the garbage and recycling system.



The plan identifies goals and actions in five areas of work:

- Shared prosperity
- Product design and manufacturing
- Product consumption and use
- Product end-of-life management and disposal
- Disaster resilience

The goals in each area identify what the region would like to achieve by 2030. Each goal has an associated set of actions to be undertaken by Metro and local governments. The actions were developed by work groups made up of representatives from Metro, local governments, garbage and recycling facility operators, haulers, topical experts, community organizations, equity work group members and others with a particular interest in the system and shaped by community input.

Navigating the action tables

The action tables define key elements associated with each action, such as which agency is the lead agency implementing the action.

Lead agency

Successful implementation of the actions will require collaboration and coordination among Metro, local governments, community-based organizations and private sector service providers. Many of the actions will be co-led by Metro and local governments in partnership with community. To assist with implementation and accountability, the plan identifies a lead agency, either Metro, cities, counties or a combination, for each action. The lead agency is the primary entity responsible for implementing the action and reporting on progress.



Status

Each action is either new or in progress. New actions are labeled with this icon.

Implementation approach

Metro is responsible for coordinating implementation of the plan and assessing plan performance. Cities, counties and Metro are responsible for leading or participating in implementation of the actions. Actions to “implement” a project or program assume preliminary steps such as planning, budgeting and collaboration and later steps such as monitoring and evaluation.

Metro, in collaboration with local governments, will develop multi-year work plans to prioritize implementation of the actions. These plans will include estimates of the financial and staff resources needed to complete the work.

Several approaches will be used to implement the actions. One or more implementation approaches is identified for each action.

Legislative agendas: State-level public policy priorities identified by Metro and/or local government elected bodies.

Partnership agreements: Agreements between Metro and local governments, and Metro or local governments with non-profit and community-based organizations.

Metro and/or local government code and authorizations: Formal actions taken through code amendments, administrative reviews, licenses, franchises and other instruments.

Regional work groups: Regional work groups convened by Metro to assist in developing programs and activities to achieve the goals and actions of the plan.

Grants: Investments in non-profit and for-profit organizations to achieve the goals and actions of the plan.

Existing programs: Actions may be associated with existing program plans and partnerships implemented by Metro, city, county and state agencies.



Directive actions

The plan includes both directive and non-directive actions.

Directive actions are those that are binding on local governments and typically set forth in Metro Code, Chapter 5.10. Existing and potential directive actions are shaded in the tables on the following pages. New directive actions will be developed in consultation with local governments and go through Metro's legislative approval process.



Advancing equity

Actions with the greatest opportunity to advance racial equity are identified with the "E" icon. The Equity Work Group was primarily responsible for making this designation.



Shared prosperity

GOALS ADDRESSED:

Goal 1: Increase engagement of youth and adults historically underrepresented in garbage and recycling decision-making by enhancing civic engagement and leadership opportunities.

Goal 2: Increase the percentage of garbage and recycling system revenue that benefits local communities and companies owned by people of color and other underrepresented groups.

Goal 3: Ensure that all jobs in the garbage and recycling industry pay living wages and include good benefits.

Goal 4: Increase the diversity of the workforce in all occupations where people of color, women and other historically marginalized communities are underrepresented.

The garbage and recycling system generates significant economic benefits for the Metro region through jobs, service, materials and construction contracts, spending at local businesses and more. But those benefits aren't shared equitably among all people in the region.

This area of work aims to address barriers faced by communities of color and those who have been disproportionately impacted by the garbage and recycling system. Through the goals and actions in this section, Metro and local governments aim to make progress toward a future where all people have equitable access to the benefits of the garbage, recycling, reuse and repair economies.



Goal 1:

Increase engagement of youth and adults historically underrepresented in garbage and recycling decision-making by enhancing civic engagement and leadership opportunities.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH
1.1 Increase representation of historically marginalized community members, including youth, on advisory committees, such as Metro and local government solid waste advisory committees.	Metro Cities Counties	Code and authorizations
1.2 Evaluate and refine a public sector paid internship program to increase engagement of youth and adults in garbage and recycling careers and decision-making, with an emphasis on communities of color and other marginalized communities.	Metro Cities Counties	Existing programs
1.3 Partner with organizations to engage youth in leadership opportunities for social, economic and environmental issues related to garbage and recycling.	Metro Cities Counties	Existing programs

E Highest potential to advance equity  New  Directive action

Goal 2:

Increase the percentage of garbage and recycling system revenue that benefits local communities and companies owned by people of color and other underrepresented groups.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH
2.1 Develop Metro and local government procurement policies to increase the amount of spending on solid waste-related services that goes to locally owned companies, with an emphasis on minority-owned and women-owned businesses.	Metro Cities Counties	Code and authorizations
2.2 Implement strategies, in consultation with community organizations, that can be adopted by local governments to ensure greater racial equity in the ownership and management of collection service providers.	Cities Counties	Code and authorizations
2.3 Utilize grant programs to invest in businesses and non-profit organizations to strengthen regional efforts around reducing waste, making better use of the waste that is produced and helping foster economic opportunities for communities of color and others who have historically been left out of the garbage and recycling system.	Metro	Grants

E Highest potential to advance equity  New  Directive action

Goal 3:

Ensure that all jobs in the garbage and recycling industry pay living wages and include good benefits.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH
3.1 Establish a living wage and benefits standard for the lowest-paid positions in the solid waste industry and update the standard on a regular basis.	Metro Cities Counties	Code and authorizations
3.2 Incorporate “good jobs” provisions regarding wages, benefits, workforce diversity and career pathways into public sector solid waste investments, operations contracts, franchises, licenses and other procurement and regulatory instruments.	Metro Cities Counties	Code and authorizations
3.3 Conduct baseline and regular follow-up studies of wages and benefits in the greater Portland area’s solid waste sector to inform “good jobs” provisions.	Metro	Regional work groups
3.4 Reduce the use of temporary and contract workers in the region’s solid waste industry.	Metro	Regional work groups Code and authorizations
3.5 Evaluate the use of Metro employees to fully operate Metro-owned transfer stations.	Metro	



Highest potential to advance equity



New



Directive action



Goal 4:

Increase the percentage of garbage and recycling system revenue that benefits local communities and companies owned by people of color and other underrepresented groups.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH	
4.1 Implement a workforce development and readiness program for garbage and recycling industry jobs.	Metro	Partnership agreements	
4.2 Develop a career pathways strategy that aims to increase the diversity of workers in all solid waste occupations.	Metro	Partnership agreements	
4.3 Conduct baseline and regular follow-up studies of workforce diversity in the regional garbage and recycling industry, including an assessment of barriers to hiring and retaining people of color, women and other underrepresented groups.	Metro	Regional work groups	
4.4 Work with private garbage and recycling service providers and community-based organizations to design and implement programs that address safety, bullying and harassment in the workplace throughout the solid waste industry.	Metro	Partnership agreements	
4.5 In partnership with community-based organizations, create workforce development programs within the reuse sector that focus on people with barriers to employment.	Metro Cities Counties	Partnership agreements	



Highest potential to advance equity



New



Directive action



Product design and manufacturing

GOALS ADDRESSED:

Goal 5: Reduce the environmental and human health impacts of products and packaging that are made, sold, used or disposed in Oregon.

Today, the design and manufacture of products and materials is driven primarily by market forces, resulting in processes and products that can harm the environment or impact human health.

Through this goal area, we will be working to influence the design and manufacture of products and packaging by advocating for changes in public policy.

The goal of the highly collaborative actions in this new area is for manufacturers to become more responsible for the impacts of their products. There's potential to create healthier products every step of the way, from natural resource extraction to manufacturing processes to decisions about materials and packaging.

The actions focus not only on reducing the amount of waste, but also shifting what's in it. We are working to reduce or eliminate chemicals of concern and highly toxic materials, elevating human health and preventing environmental damage.

Many Oregon, Washington and California public and private organizations are known for leadership in this area. With the Bottle Bill, Oregon E-Waste, Paint Care and Oregon's Toxic Free Kids Act, city, county, Metro and state governments, together with public interest organizations, demonstrated they can collaborate to push forward policy changes to address producer responsibility and make products safer for people and the environment.

Equity initiatives take a leading role, too. By emphasizing equity at the government and community level, we aim to implement reforms that serve all, with a focus on historically marginalized communities, including communities of color.

Goal 5:

Reduce the environmental and human health impacts of products and packaging that are made, sold, used or disposed in Oregon.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH	
5.1 Advocate for legislation that minimizes chemicals of concern in products and packaging and requires the disclosure of product chemical data to consumers.	Metro Cities Counties	Legislative agendas	   
5.2 Assist the Oregon Health Authority in implementing the 2015 Oregon Toxic Free Kids Act, which requires manufacturers of children's products sold in Oregon to report products containing high-priority chemicals of concern.	Metro	Partnership agreements	   
5.3 Partner with the State of Oregon to provide incentives to manufacturers for developing sustainable manufacturing techniques, including green chemistry, for products and packaging sold in Oregon.	Metro	Legislative agendas	   
5.4 Advocate for product stewardship legislation and other policy approaches that can achieve the greatest reduction in environmental and human health impacts from products and packaging made, used or disposed in the region.	Metro Cities Counties	Legislative agendas	   
5.5 Advocate for legislation that would require building products sold and used in Oregon to be free of highly toxic materials.	Metro Cities Counties	Legislative agendas	   
5.6 Advocate for standards for high-impact products, including phase-outs or bans.	Metro Cities Counties	Legislative agendas	   



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WHAT ARE CHEMICALS OF CONCERN?

Through the Toxic-Free Kids Act, Oregon has designated 66 chemicals as “high-priority chemicals of concern for children’s health.” These chemicals are shown to be harmful to children, and manufacturers are required to disclose when certain products marketed toward children contain them. When Metro refers to chemicals of concern in this plan, it is usually in reference to this list. In some instances, we may use the lists of chemicals of concern created by other states, the federal government or another entity.



Product consumption and use

GOALS ADDRESSED:

Goal 6: Reduce product environmental impacts and waste through educational and behavioral practices related to prevention and better purchasing choices.

Goal 7: Reduce product environmental impacts and waste through policies that support prevention practices and better purchasing choices.

As consumers, the decisions we make about what to buy and how to use the things we purchase affect our health and the environment.

While the 2030 Vision identifies a future where everyone has access to information they need to make purchasing decisions that will protect their health and the environment, there are challenges to achieving this vision. Products sold in Oregon are produced around the globe. The prices of products do not reflect the environmental impacts of making them. Information about a product's environmental and health impacts can be difficult to access and understand. Sustainable products are not always affordable or equitably available.

Goals in this area focus on reducing the environmental and health impacts of what we buy. The actions emphasize education and policy efforts to reduce those impacts and support better purchasing choices. Education will prioritize culturally responsive efforts, with programs and services designed and delivered in partnership with community organizations to reach historically marginalized groups. Policy actions in this area aim to provide safer, lower-risk products and reduce the use of single-use items that harm the environment and create problems for the recycling system.

SHARING KNOWLEDGE

Metro and local government education programs reach tens of thousands of people every year with information about how to reduce waste.

In 2016:

- Youth Education programs reached over 45,000 students
- The Recycling Information Center and Find-a-Recycler online tool served 60,000 callers and 107,000 web visitors

WHAT IT MEANS TO BE CULTURALLY RESPONSIVE

Culturally responsive services are designed to be respectful toward and relevant to the beliefs, practices, culture and language of diverse people and communities. Cultural responsiveness requires systems, organizations, professions and individuals to gain new knowledge and cultivate new capacities.



Goal 6:

Reduce product environmental impacts and waste through educational and behavioral practices related to prevention and better purchasing choices.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH	
6.1 Provide culturally responsive and developmentally appropriate school-based education programs about the connections between consumer products, people and nature.	Metro	Existing programs Partnership agreements	  
6.2 Provide culturally responsive community education and assistance about the connections between consumer products, people and nature.	Metro Cities Counties	Existing programs Partnership agreements	  
6.3 Provide and increase accessibility to education and tools to help residents and businesses reduce their use of the single-use products with the greatest negative environmental impacts.	Metro Cities Counties	Existing programs Partnership agreements	  
6.4 Partner with communities of color and others to increase awareness about high-risk chemical products, reduce their use and decrease people's exposure to them.	Metro	Partnership agreements	  
6.5 Assist households and businesses in the adoption of practices that prevent the wasting of food and other high-impact materials.	Metro Cities Counties	Existing programs	  
6.6 Support implementation of Oregon State University's SolvePestProblems.org as a primary tool for education and resources on integrated pest management.	Metro	Existing programs	  



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SINGLE-USE PRODUCTS

Single-use products are used only once before they are thrown away or recycled. These items are things like plastic bags, straws, coffee stirrers, soda and water bottles and most food packaging.



Plastic bags are found in recycling carts across the region but are not recyclable through home programs. Plastic bags jam up sorting machinery at processing facilities, increasing the cost of converting recyclables into new products.

Goal 7:

Reduce product environmental impacts and waste through policies that support prevention practices and better purchasing choices.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH
7.1 Implement procurement policies for Metro and local governments that prioritize the purchase of products and services with low environmental and human health impacts.	Metro Cities Counties	Code and authorizations  
7.2 Implement policies that will reduce the use of single-use products such as single-use plastic bags.	Metro Cities Counties	Code and authorizations  
7.3 Advocate for the reclassification of high-risk nonagricultural pesticides to restricted use status in Oregon.	Metro	Legislative agendas  
7.4 Implement policies and programs that lead to the construction of buildings that use fewer resources, including improvements to Oregon Reach Code and baseline building codes to address material selection preferences and restrictions, incentives for space-efficient homes and removal of barriers to adopting lower-impact materials.	Metro Cities Counties	Existing programs  



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Directive action



Product end-of-life management

GOALS ADDRESSED:

Goal 8: Increase the reuse, repair and donation of materials and consumer products.

Goal 9: Increase knowledge among community members about garbage, recycling and reuse services.

Goal 10: Provide regionally consistent services for garbage, recyclables and other priority materials that meet the needs of all users.

Goal 11: Address and resolve community concerns and service issues.

Goal 12: Manage all garbage and recycling operations to reduce their nuisance, safety and environmental impacts on workers and the public.

Goal 13: Invest in communities that receive garbage and recyclables from the Metro region so that those communities regard solid waste facilities as assets.

Goal 14: Adopt rates for all services that are reasonable, responsive to user economic needs, regionally consistent and well understood.

Goal 15: Improve the systems for recovering recyclables, food scraps and yard debris to make them resilient to changing markets and evolving community needs.

Goal 16: Maintain a system of facilities, from smaller recycling drop-off depots to larger full-service stations, to ensure equitable distribution of and access to services.

Every year, the greater Portland region disposes of well more than 1 million tons of garbage and recovers more than 1 million tons of food scraps, yard trimmings and recyclables.

The system that handles these materials and transports them to their final destinations is vast and complex, encompassing services from garbage trucks to food banks to recycling facilities and landfills, involving governments, private businesses and not-for-profit organizations.

The region has developed a highly effective recovery and disposal system over the last 30 years. But with a growing population, changes in how and what we consume, historical and current impacts of the system on neighborhoods and the dynamic nature of global markets for recyclables, it's time for new thinking and new work.

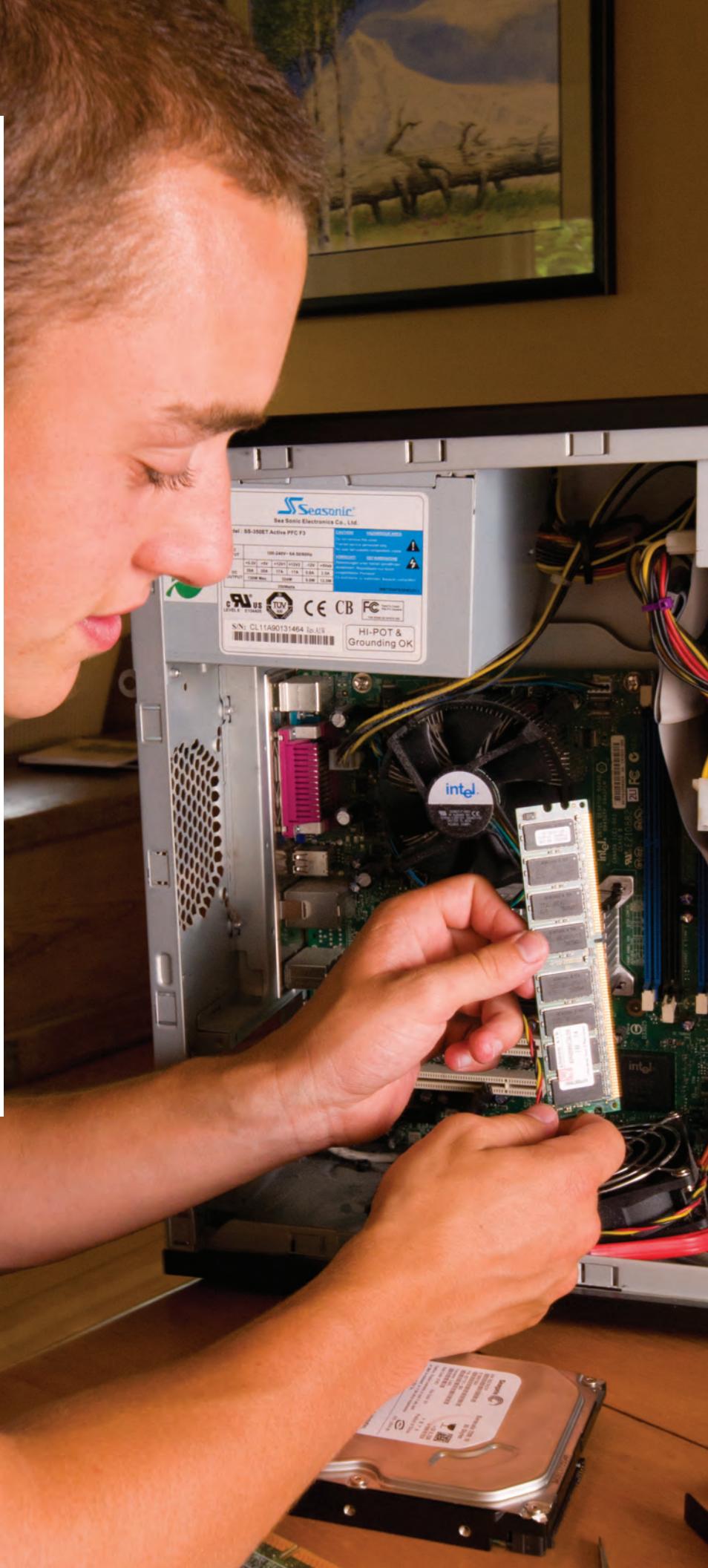
While the ultimate goal is to prevent waste to begin with, the Portland region still needs a system that safely and conveniently manages products at the end of their useful life. The goal is to ensure that the programs and services not only protect human health and the environment, but that they do so in a way that meets the needs of all residents and all communities today and into the future.

EXTENDING THE LIFESPAN OF PRODUCTS AND MATERIALS

Today, the region has a growing network of reuse and repair initiatives, organizations and businesses. They range from salvage and reuse operations for construction site materials to neighborhood repair fairs that help residents fix items rather than discard and replace them.

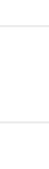
To strengthen and increase this reuse infrastructure, Metro and local governments need to increase investment in these services and advocate to formalize what are now informal and voluntary practices. Actions 8.2-8.6 provide multiple strategies for improving opportunities to reuse, repair and otherwise extend the life of products.

Nearly 20 percent of the region's disposed waste is generated by the constructing, remodeling and demolishing of structures.



Goal 8:

Increase the reuse, repair and donation of materials and consumer products.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH	
8.1 Support efforts to ensure that surplus edible food desired by agencies serving communities experiencing hunger in the region is made available to them.	Metro Cities Counties	Partnership agreements Grants	  
8.2 Implement strategies to increase the salvage of building materials for reuse, without increasing exposure to toxics.	Metro	Partnership agreements Grants	  
8.3 Advocate for research-informed changes to building codes and other regulations to increase use of reused and deconstructed materials.	Metro Cities Counties	Legislative agendas	  
8.4 Expand the collection of reusable items at public and private transfer stations, in partnership with reuse and repair organizations.	Metro	Partnership agreements	  
8.5 Invest in neighborhood-scale reuse and repair services and infrastructure.	Metro Cities Counties	Partnership agreements Grant	  
8.6 Support implementation of Oregon Department of Environmental Quality's Reuse, Repair and Extended Product Lifespan Strategic Plan.	Metro Cities Counties	Partnership agreements	  



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Robust waste reduction education and outreach programs have been in place since formal recycling collection programs began in the region over 30 years ago. Metro and local governments have used a wide variety of methods and materials to help residents and businesses understand and get the best use out of our solid waste and recycling system, yet we have found that many communities are not receiving the information they need—most notably communities of color and residents for whom English is not their primary language. A key focus throughout this plan is to develop strong partnerships with community organizations and utilize non-traditional means for engaging with the region's community members.

Goal 9:

Increase knowledge among community members about garbage, recycling and reuse services.

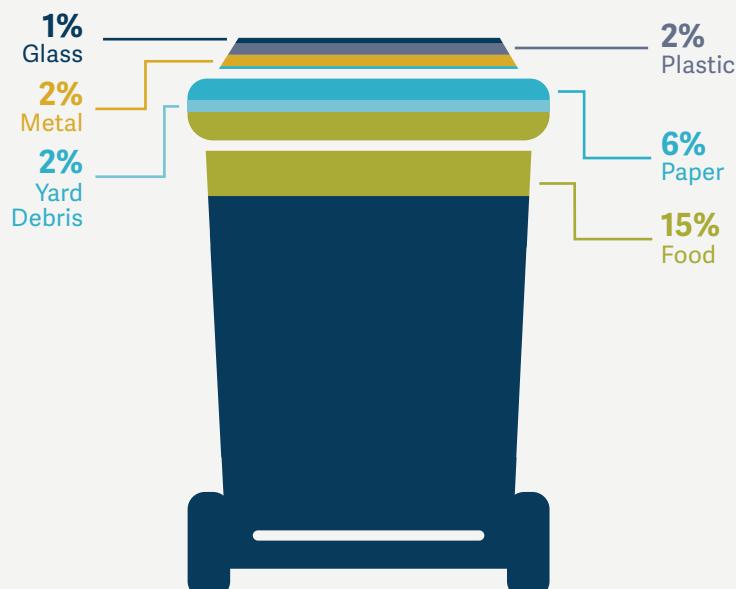
ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH	
9.1 Provide culturally responsive education and assistance for garbage, recycling and reuse services to residents and businesses.	Metro Cities Counties	Regional work groups Existing programs	
9.2 Utilize Metro's Recycling Information Center to serve all residents and businesses in the region as a clearinghouse for prevention, reuse, recycling and disposal information.	Metro	Existing programs	
9.3 Ensure that community education and volunteer development courses, such as Master Recycler, are relevant, accessible and culturally responsive to all communities.	Metro Cities Counties	Partnership agreements	

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WHAT'S STILL IN THE TRASH THAT CAN BE RECYCLED?

Much of what's put in garbage cans in the greater Portland area could be recycled or composted.

Source: Oregon Department of Environmental Quality (2017). 2016/2017 Oregon Solid Waste Characterization and Composition Study.



IMPROVING SERVICE FOR MULTIFAMILY HOUSEHOLDS

It's important that collection services are consistent and reliable for everyone. That's not the case for many of the region's residents who live in apartments, condominiums and other multifamily communities.

Metro conducted a study in 2017 of recycling and garbage services at multifamily properties. The main findings were:

1. There is inadequate access for residents to mixed recycling and glass recycling service at many multifamily sites. There aren't enough collection containers, they aren't conveniently located, and they aren't collected frequently enough.
2. Collection containers are inconsistent in size, color and labeling, and that is confusing to the people who use them.
3. As a result of the conditions above, the recyclables put out for collection are highly contaminated with non-acceptable materials.
4. Bulky waste is inadequately managed.

These findings are reflected in actions 10.2 – 10.6.

More than 50% of people living in rental apartments move every year. This is one reason why it's important to have a simple, intuitive and consistent system for separating and collecting garbage and recyclables.



Goal 10:

Provide regionally consistent services for garbage, recyclables and other priority materials that meet the needs of all users.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH	
10.1 Provide comprehensive collection services and supporting education and assistance for source-separated recyclables, source-separated food scraps and garbage, in compliance with state, regional and local requirements, including the Regional Service Standard, Business Recycling Requirement and Business Food Waste Requirement in Metro Code.	Cities Counties	Code and authorizations	
10.2 Implement minimum service levels or performance standards for all collected materials for multifamily and commercial tenants.	Metro Cities Counties	Code and authorizations	
10.3 Implement regional standards for collection container colors, signage and other related informational materials for single-family, multifamily and commercial services.	Metro Cities Counties	Code and authorizations	
10.4 Provide convenient, accessible and equitable collection of hazardous waste from households and Conditionally Exempt Generators, prioritizing communities with greatest need.	Metro	Existing programs Partnership agreements	
10.5 Provide regularly occurring bulky waste collection service, with particular emphasis on multifamily communities and lower-income households.	Cities Counties	Code and authorizations	
10.6 Establish standards for collection areas for existing and newly constructed multifamily properties to ensure residents have adequate access to garbage, recyclables and food scraps collection containers.	Metro Cities Counties	Code and authorizations	

Goal 10:

Provide regionally consistent services for garbage, recyclables and other priority materials that meet the needs of all users.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH
10.7 Partner with community health organizations to expand options for collection of hypodermic needles and other types of medical waste, prioritizing individuals with the greatest barriers to service.	Metro	Partnership agreements 
10.8 Advocate for statewide legislation or implement regional policies to increase the types of products and packaging for which manufacturers and retailers provide environmentally sound, convenient and accessible take-back programs.	Metro Cities Counties	Legislative agendas 

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BENEFITS AND HISTORY OF CURBSIDE RECYCLING

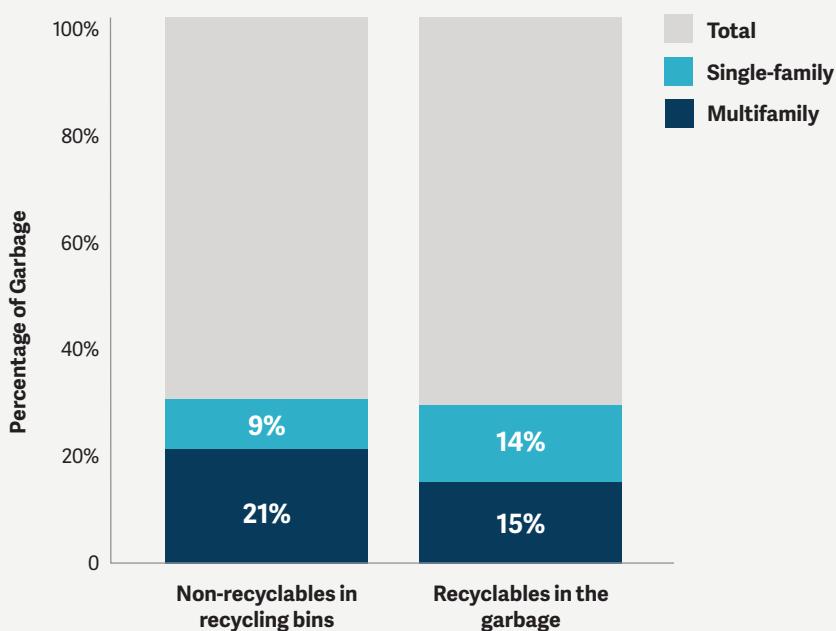
Recycling saves energy, reduces air and water pollution, reduces greenhouse gases and conserves natural resources. Curbside collection of recyclables makes recycling convenient. This service has been a key element of recycling programs in the region since 1983, when the Oregon Opportunity to Recycle Act required communities throughout the state to provide curbside collection. Within the region, weekly recycling collection is the service standard for single-family households. Recycling makes it possible to use materials that would otherwise go to the landfill to make thousands of products. A successful recycling system depends on the quality of material collected at the curb.



KEEPING IT SEPARATED

Many of the materials people put in their recycling bins don't belong there. Known as contamination, these non-recyclables can cause problems for the entire system because contaminated recycling is harder to sell.

Non-recyclables in recycling bins, and recyclables in the garbage, by home type.



Source: Metro (2017). Multifamily Recycling Report.



Approximately 36,000 tons of items that could be recycled at home, including paper, plastic bottles, aluminum cans and glass containers, are disposed in garbage carts each year. Recycling these materials would reduce the same amount of greenhouse gas emissions as taking 22,000 passenger vehicles off the road.

CLEANING UP ILLEGAL DUMPING

Metro's Regional Illegal Dumping (RID) Patrol cleans up items dumped on public lands, sidewalks, alleys and waterways.

In 2017, the RID Patrol collected 440 tons of trash at 3,500 dump sites across Clackamas, Multnomah and Washington counties

Top items collected:

- 1,973 tires
- 994 mattresses
- 555 couches
- 491 shopping carts



Goal 11:

Address and resolve community concerns and service issues.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH	
11.1 Provide cultural competence training to customer service representatives at Metro, local governments and collection service providers.	Metro Cities Counties	Partnership agreements	
11.2 Improve feedback loops between haulers, local governments and Metro to address collection service issues for households and businesses.	Cities Counties	Regional work groups	
11.3 Provide inclement weather notifications to customers in multiple languages and through a variety of media.	Cities Counties Metro	Code and authorizations	
11.4 Provide services to clean up illegal dumps on public property, prioritizing communities with greatest need.	Metro Cities Counties	Existing programs	
11.5 Research the root causes that contribute to illegal dumping and how they can be addressed.	Metro	Regional work groups	
11.6 Implement garbage and recycling collection services for people experiencing homelessness.	Metro Cities Counties	Partnership agreements	



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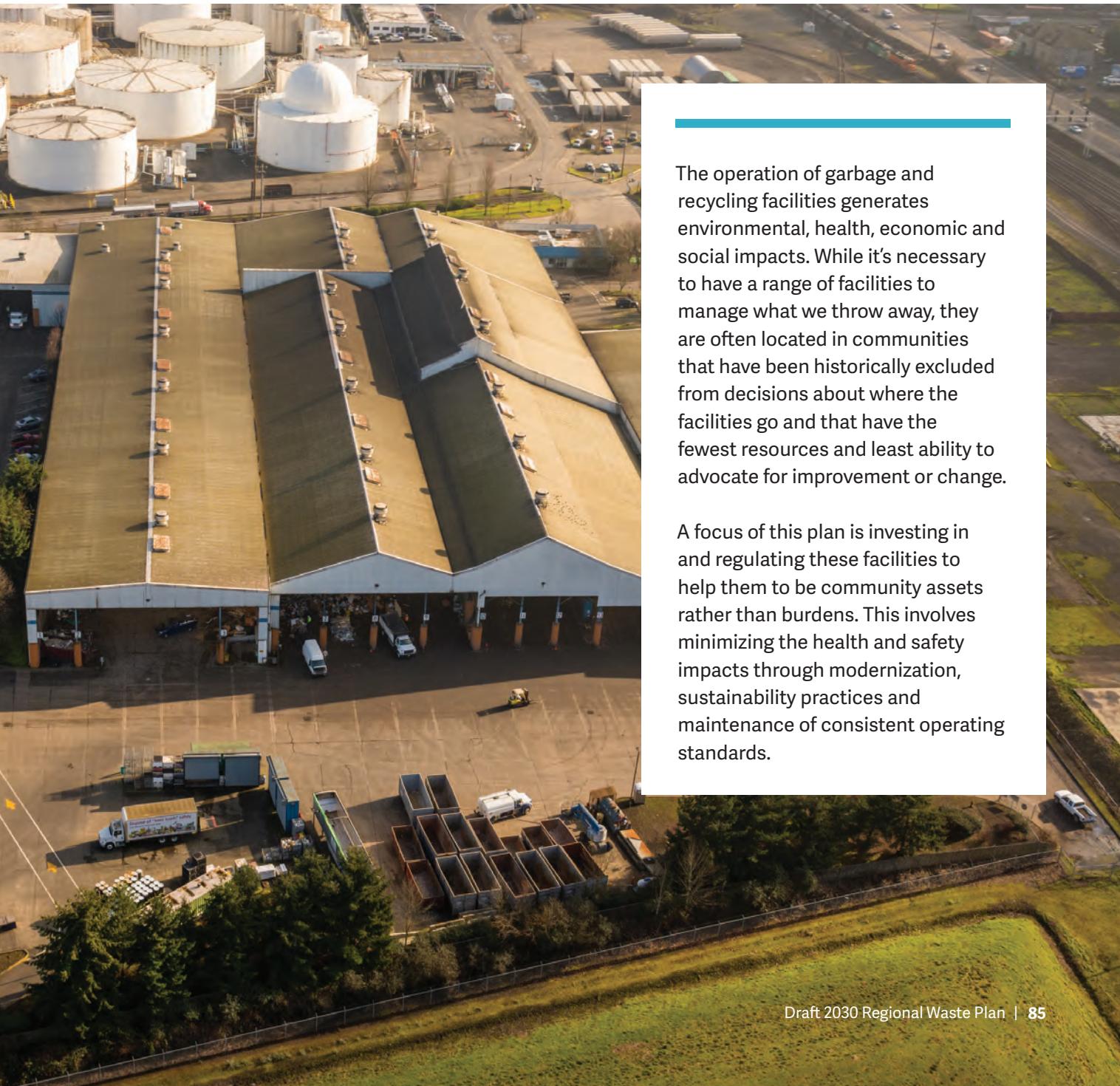
Goal 12:

Manage all garbage and recycling operations to reduce their nuisance, safety and environmental impacts on workers and the public.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH	
12.1 Minimize the health and safety impacts of solid waste operations on employees, customers and neighboring communities, with particular focus on low-income communities and communities of color, and identify methods for repairing past harm.	Metro Cities Counties	Code and authorizations Regional work groups	  
12.2 Implement consistent and enforceable nuisance and safety standards for all solid waste facilities within the system.	Metro	Code and authorizations	  
12.3 Implement environmental and safety standards for all on-road and off-road solid waste fleet vehicles.	Metro Cities Counties	Partnership agreements Code and authorizations	  
12.4 Implement sustainability practices in the operation of public and private solid waste facilities to reduce energy use, utilize renewable energy, reduce equipment emissions, maximize the use of safe alternatives to toxic materials and achieve other environmental objectives.	Metro	Regional work groups Code and authorizations	  
12.5 Regulate collection of solid waste materials by collectors not otherwise regulated by local governments.	Cities Counties	Code and authorizations	  
12.6 Regulate facilities accepting garbage, recycling, food scraps, yard debris and other solid waste generated from the region to advance progress toward achieving this plan's goals.	Metro	Code and authorizations	  

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH
12.7 Require post-collection material recovery for marketable materials that will advance progress toward achieving this plan's goals and targets.	Metro	Code and authorizations 

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COMMUNITY ENHANCEMENT GRANTS

Across the Portland metropolitan area, Metro community enhancement grants give a boost to neighborhoods affected by waste facilities. From 1986 to 2017, these grants invested more than \$5 million in neighborhoods in Forest Grove, Gresham, Portland, Oregon City, Sherwood, Troutdale and Wilsonville. These investments will continue in the coming years.

Grant projects have included:

- Developing environmental education projects for at-risk youth
- Providing low-cost, volunteer based, shopping and delivery service for seniors and people with disabilities
- Removing ivy and restoring habitat in Forest Park
- Installing fire escapes at senior centers
- Producing summer concert programs in local parks
- Planting trees around community parks and main street boulevards in industrial areas



Goal 13:

Invest in communities that receive garbage and recyclables from the Metro region so that those communities regard solid waste facilities as assets.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH
13.1 Expand the host community enhancement program to: <ul style="list-style-type: none">• include all solid-waste-handling facilities that impact neighboring communities• increase funding and• prioritize diversity, equity and inclusion elements in grant funding criteria.	Metro	Code and authorizations  
13.2 Implement annual volunteer projects and collection/recycling events in neighborhoods affected by solid waste facilities.	Metro	Partnership agreements Grants  
13.3 Require each solid waste facility to work toward a good neighbor agreement with its host community.	Metro	Code and authorizations  
13.4 Evaluate Community Benefit Agreements as a potential tool for garbage and recycling facilities to invest in host communities.	Metro	Regional work groups  



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Directive action

WHAT DO GARBAGE AND RECYCLING COLLECTION RATES INCLUDE?

- Collection trucks and drivers
- Reloading of garbage from route trucks to long-haul trucks
- Garbage disposal in landfills
- Recyclables processing
- Recyclables markets
- Yard debris processing
- In some cases, food waste processing
- Government waste reduction and garbage system planning, education and oversight
- Some general government services



Goal 14:

Adopt rates for all services that are reasonable, responsive to user economic needs, regionally consistent and well understood.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH	
14.1 Implement transparent and consistent annual rate-setting processes for all collection service providers.	Cities Counties	Existing programs Code and authorizations	   
14.2 Implement transparent and consistent annual rate-setting processes for all facilities.	Metro	Existing programs Code and authorizations	   
14.3 Establish rates across the region that are consistent for like services.	Metro Cities Counties	Regional work groups Code and authorizations	   
14.4 Implement a low-income rate assistance program for residential collection services.	Cities Counties	Regional work groups Code and authorizations	   
14.5 Evaluate alternative models for collection, processing and transfer services to identify which would deliver the best environmental, financial, efficiency and equity outcomes.	Metro Cities Counties	Regional work groups	   
14.6 Implement strong financial performance reporting standards to provide greater certainty on the financial viability of facilities serving the Metro region.	Metro	Code and authorizations	   
14.7 Require that local governments annually provide information to residents about the components of their garbage and recycling collection rate.	Metro	Partnership agreements	   



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Directive action

Goal 15:

Improve the systems for recovering recyclables, food scraps and yard debris to make them resilient to changing markets and evolving community needs.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH
15.1 Implement regionally consistent contamination reduction efforts to improve material quality, including education, collection equipment changes and customer feedback methods.	Metro Cities Counties	Regional work groups
15.2 Regularly assess the list of curbside recyclables collected in the region relative to end-markets, life cycle environmental benefits, community needs and forecasting of future materials in the waste stream.	Metro Cities Counties	Regional work groups
15.3 Develop public-private partnerships to expand local markets for priority recyclable materials, with an emphasis on minority-owned and other underrepresented business owners.	Metro	Partnership agreements Grants

BUILDING A RESILIENT RECYCLING SYSTEM

Recyclables are commodities that are sold to manufacturers (also known as “markets”) across the United States, North America and the world. These markets fluctuate, and that can have a big impact on recycling collection programs in the Portland area.

A key goal of this plan is to increase the region’s ability to adapt to market fluctuations and to ensure that the materials collected are of the highest quality. This will build resilience in the recycling system.

Strategies include:

- Implementing regionally consistent efforts to keep garbage out of recycling bins
- Assessing what we collect to ensure we’re creating the most environmental benefits and addressing community needs
- Building capacity to process yard debris and food scraps locally
- Investing in facilities that receive and sort recyclables to improve their performance
- Advocating for incentives to strengthen Oregon end-use markets

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
15.4	Fund investments to improve the performance of material recovery facilities through collection rates and/or other mechanisms.	Metro Cities Counties	Existing programs Grants	
15.5	Facilitate the permitting of composting facilities to process mixed residential yard debris and food scraps, while ensuring minimal impacts on neighboring communities.	Metro Cities Counties	Regional work groups Code and authorizations	
15.6	Implement stronger linkages between recycling collection programs and material recovery facilities through processing performance standards, supply agreements, regulatory oversight or other means.	Metro Cities Counties	Code and authorizations	
15.7	Identify and implement changes to recycling collection programs and material recovery facility operations to meet the specifications of a broad range of markets.	Metro Cities Counties	Regional work groups Code and authorizations	
15.8	Advocate for statewide policies or implement regional policies that create a preference, incentive or requirement for use of recycling end-markets in Oregon and the Northwest.	Metro Cities Counties	Legislative agendas	
15.9	Advocate to expand the statewide bottle bill program to include additional containers.	Metro Cities Counties	Legislative agendas	
15.10	Evaluate whether a policy to increase garbage tip fees would further incentivize waste prevention and recovery without harming ratepayers or providing revenue windfalls to transfer station operators.	Metro	Regional work groups	



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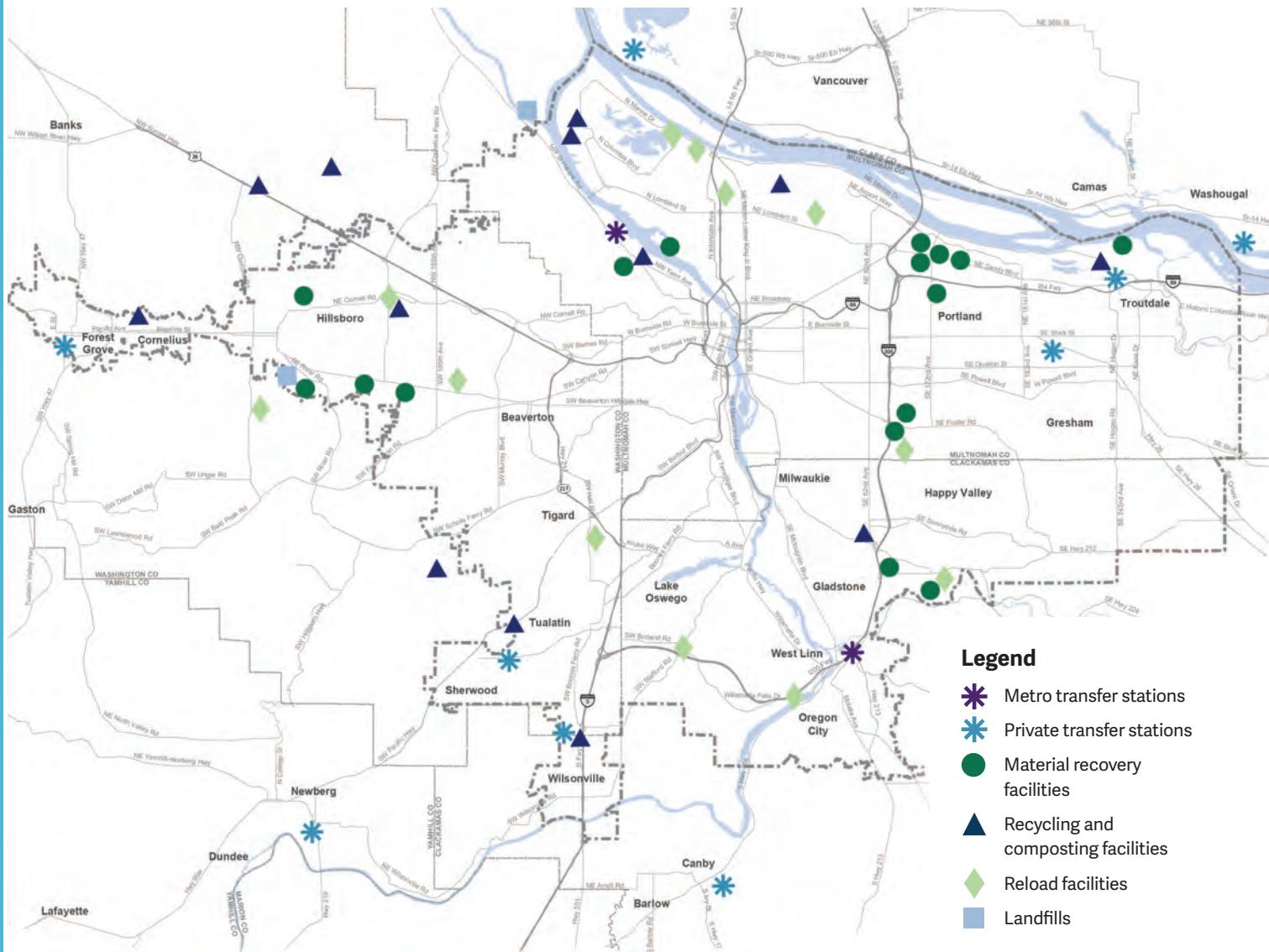
Directive action

REDUCING THE IMPACTS OF NEW FACILITIES

There is inconsistent access to all of the region's garbage and recycling services, in part because facilities were developed to suit the region's needs many years ago. Today, facilities are not always located where they are most needed, nor are they scaled to meet community needs.

This plan emphasizes locating new garbage, recycling, food scraps and household hazardous waste facilities where they'll provide the best

benefit to the public while minimizing environmental and human health impacts to their neighbors. The plan also looks to expand and improve access to services at existing public and private facilities. Changes to existing facilities and planning for new ones should start with early engagement with the most-affected communities.



Goal 16:

Maintain a system of facilities, from smaller recycling drop-off depots to larger full-service stations, to ensure equitable distribution of and access to services.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH	
16.1 Locate garbage transfer stations and allocate material tonnage to them in a way that benefits the public, emphasizing geographic equity, access to service and a reduction in environmental and human health impacts.	Metro	Code and authorizations	
16.2 Locate recycling and food scraps transfer and recovery facilities to best benefit the public relative to geographic equity and access to service, and to reduce environmental and human health impacts.	Metro	Code and authorizations	
16.3 Improve interagency and community collaboration on siting and authorizing proposed solid waste facilities to reduce potential impacts on neighboring communities.	Metro	Regional work groups	
16.4 Maintain public ownership of facilities to ensure that a range of services are accessible to residents at equitable and affordable rates.	Metro	Code and authorizations	
16.5 Evaluate the feasibility of establishing a publicly owned facility in Washington County to accept and transfer garbage, recycling, food scraps, household hazardous waste and other materials.	Metro Cities Counties	Regional work groups	
16.6 Expand and improve access to services provided at Metro South Transfer Station.	Metro	Existing programs	
16.7 Implement the Metro Transfer System Configuration policy.	Metro	Code and authorizations	



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Directive action



Disaster resilience

GOALS ADDRESSED:

Goal 17: Effectively coordinate public and private partners in planning for the impact of disasters on the solid waste system.

Goal 18: Ensure routine garbage and recycling collection, processing, transport and disposal operations can be restored quickly following a system disruption.

Goal 19: Plan disaster debris response operations to expedite the clearance and removal of debris, making the best use of locally-based services and materials and maximizing recovery.

From earthquakes to landslides to fires, the Metro region is vulnerable to disasters, both natural and human-caused. Disasters threaten people's safety, and they also have the potential to generate large amounts of debris: building debris, trees and plants, hazardous waste and other matter.

The region's garbage and recycling system must be resilient and prepared to recover quickly after a disaster, and the recovery process should minimize harmful impacts to local communities. By planning how to manage both disaster debris and regular garbage and recyclables in a manner that protects public health and safety and safeguards the environment, the region will be better prepared to respond to and recover from a major incident.

The Disaster Debris Management Plan adopted by Metro in 2018 is designed to work in collaboration with local partners' disaster debris plans to provide guidance on how to manage and coordinate debris operations and system disruptions. The goals and actions in the 2030 Regional Waste Plan ensure the region will be ready to implement the debris operations before a disaster happens.

The actions focus on:

Coordinating effectively with partners

Preparing to restore routine garbage and recycling services following a disruption

Planning to expedite the removal of debris in a way that makes the best use of local services and maximizes recovery

WHY IS IT IMPORTANT TO PLAN FOR DISASTER DEBRIS?



WITHOUT A PLAN

Debris on streets, in homes

No sorting

Regular garbage system overwhelmed

Clean-up may take years

Threats to health and safety



WITH A PLAN

Process for removing debris

Debris management sites supplement regular system

Clean-up is faster, more efficient

Coordination with local partners



Goal 17:

Effectively coordinate public and private partners in planning for the impact of disasters on the solid waste system.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH	
17.1 Develop a regional solid waste emergency management response and recovery framework in partnership with local governments and community organizations that prioritizes those most vulnerable in a disaster.	Metro Cities Counties	Regional work groups	  
17.2 Conduct periodic exercises to test and practice the implementation of disaster debris plans.	Metro Cities Counties	Regional work groups Partnership agreements	  
17.3 Develop a coordinated preparedness and response messaging program that is accessible and culturally responsive.	Metro Cities Counties	Regional work groups Partnership agreements	  
17.4 Develop a database of existing public and private solid waste infrastructure capabilities that can be integrated with other public databases.	Metro	Partnership agreements	  



Highest potential to advance equity



New



Directive action



Goal 18:

Ensure routine garbage and recycling collection, processing, transport and disposal operations can be restored quickly following a system disruption.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH	
18.1 Implement strategies to maximize access to critical solid waste infrastructure during disruptions.	Metro Cities Counties	Regional work groups Partnership agreements	
18.2 Implement requirements for solid waste system service providers to prepare and maintain emergency operations and continuity of operations plans.	Metro Cities Counties	Regional work groups Code and authorizations	
18.3 Prioritize the use of the current solid waste infrastructure for the processing of normal garbage and recycling, rather than for disaster debris, following a debris-generating incident.	Metro Cities Counties	Partnership agreements	
18.4 Develop disaster resiliency standards for the design and construction of new facilities or when existing facilities are renovated.	Metro	Regional work groups Code and authorizations	
18.5 Develop engineering and financing strategies to facilitate the seismic retrofit of existing public and private solid waste infrastructure.	Metro	Regional work groups	
18.6 Conduct periodic assessments of solid waste system facilities for vulnerabilities to different hazards.	Metro	Regional work groups	



Highest potential to advance equity



New



Directive action



Goal 19:

Plan disaster debris response operations to expedite the clearance and removal of debris, making the best use of locally-based services and materials and maximizing recovery.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH
19.1 Identify and pre-authorize debris management sites throughout the region.	Metro Cities Counties	Partnership agreements
19.2 Develop incentives for debris management contractors to prioritize purchasing services and materials from locally owned companies, with an emphasis on minority-owned and women-owned businesses.	Metro	Partnership agreements
19.3 Develop agreements and contracts with service providers and partner jurisdictions to ensure rapid mobilization of regional and out-of-region resources during emergency response operations.	Metro Cities Counties	Partnership agreements
19.4 Develop strategies for the safe reuse, recycling and disposal of materials following a debris-generating incident.	Metro	Regional work groups Partnership agreements
19.5 Create incentives or requirements for debris management contractors to collect and separate debris materials for reuse and recycling.	Metro Cities Counties	Partnership agreements



Highest potential to advance equity



New



Directive action



Measuring progress

The plan includes a robust measurement framework to evaluate progress toward its vision and goals. This will allow Metro and local governments to demonstrate the positive impacts the plan's activities are having on the region, highlight opportunities for improvement and evaluate which programs and projects are helping the region achieve its desired outcomes.

Plan Indicators

Key indicators

Key indicators communicate the overall trajectory of progress to a broad audience. They draw from the plan's values and demonstrate overall performance. A number of the key indicators are new measures that would require investment to implement.

As of the date of adoption, all of the indicators need additional work to develop baseline data and evaluation methodologies. Metro and local governments will complete this work within the first two years of the plan.

VALUE	KEY INDICATOR	LEAD AGENCY	STATUS
	Greenhouse gas emissions associated with the products and services consumed in the Metro region (Environment and Health value)	Metro	In progress
	Annual tons of waste generated (Resource Conservation value)	Metro	In progress
	Number, geographic location and demographics of youth reached through education programs (Environmental Literacy value)	Metro	In progress
	Share of multifamily communities with adequate collection services (Service Excellence and Equity value)	Metro Cities Counties	Investment needed
	Recycling contamination by sector (Operational Resilience value)	Metro	Investment needed
	Median wage in the waste management industry by race/ethnicity/gender (Economic Well-Being value)	Metro Cities Counties	Investment needed

Goal indicators

Indicators at the goal level are designed to measure the progress of specific programs, policies or investments that are linked to attaining the 2030 Regional Waste Plan's goals. A number of the goal indicators will also inform the key indicators.

GOAL	RECOMMENDED	LEAD AGENCY	STATUS
Goal 1: Increase engagement of youth and adults in garbage and recycling decision-making through civic engagement and leadership opportunities.	Number and demographics of youth and adults participating in solid waste internship or leadership programs	Metro	Investment needed
	Demographics of committee members serving on Metro and local government solid waste advisory boards	Metro Cities Counties	Investment needed
Goal 2: Increase the percentage of garbage and recycling system revenue that benefits local communities and companies owned by people of color and other underrepresented groups.	Share of solid waste spending that goes to locally owned, minority-owned and women-owned businesses and to community organizations.	Metro Cities Counties	Investment needed
Goal 3: Ensure that all jobs in the garbage and recycling industry pay living wages and include good benefits.	Median wage in waste management industry by race/ethnicity, gender and occupation type	Metro Cities Counties	Investment needed
	Share of solid waste workforce that is temporary workers	Metro Cities Counties	Investment needed
Goal 4: Increase the diversity of the workforce in all occupations where people of color, women and other historically marginalized communities are underrepresented.	Share of solid waste work force that is people of color and women	Metro	Investment needed
Goal 5: Reduce the environmental and human health impacts of products and packaging that are made, sold, used or disposed in Oregon.	The number of children's products with chemicals of concern that are sold in the region	Oregon Health Authority	Investment needed
	Share of priority products covered in Oregon by a product stewardship framework	Metro	Investment needed
Goal 6: Reduce product environmental impacts and waste through educational and behavioral practices related to prevention and better purchasing choices.	Number, geographic location and demographics of youth reached through school-based education programs (Key Indicator 3)	Metro	Ready
	Annual tons of waste generated (Key Indicator 2)	Metro Oregon DEQ	Ready

GOAL	RECOMMENDED	LEAD AGENCY	STATUS
Goal 7: Reduce product environmental impacts and waste through policies that support prevention practices and better purchasing choices.	Environmental impacts associated with high-impact products and product categories purchased by Metro and local governments	Metro Cities Counties	Investment needed
Goal 8: Increase the reuse, repair and donation of materials and consumer products.	Growth in sales and/or employment in the reuse sector	Metro	Investment needed
Goal 9: Increase knowledge among community members about garbage, recycling and reuse services.	Metro and local government calls, web hits and community survey responses	Metro Cities Counties	Investment needed
Goal 10: Provide regionally consistent services for garbage, recyclables and other priority materials that meet the needs of all users.	Tons of illegally dumped waste overall and in the most impacted communities	Metro Cities Counties	Ready
	The environmental impacts associated with the recovery rate for the Metro waste shed	Metro Oregon DEQ	Investment needed
Goal 11: Address and resolve community concerns and service issues.	Share of Metro, local government and solid waste service providers that have gone through cultural competency training	Metro Cities Counties	Investment needed
Goal 12: Manage all garbage and recycling operations to reduce their nuisance, safety and environmental impacts on workers and the public.	Tons of key pollutants, including particulates and CO2 emissions, from on-road and off-road solid waste fleet	Metro Cities Counties	Ready
	Number of worker injuries that occur at solid waste facilities	Metro	Ready
Goal 13: Invest in communities that receive garbage and recyclables from the Metro region, so that solid waste facilities are regarded as assets by those communities.	Share of community enhancement grant dollars awarded to projects that benefit marginalized communities	Metro	Investment needed

GOAL	RECOMMENDED	LEAD AGENCY	STATUS
Goal 14: Adopt rates for all services that are reasonable, responsive to user economic needs, regionally consistent and well-understood.	Share of solid waste facilities with rates that fall within 5% of the tip fee charged at publicly owned facilities for each material type (garbage, mixed dry waste, etc.)	Metro	Ready
	Share of jurisdictions that offer a low-income rate assistance program for residential collection services	Metro Cities Counties	Ready
Goal 15: Improve the systems for recovering recyclables, food scraps and yard debris to make them resilient to changing markets and evolving community needs.	Share of the recoverable material, by material type, that is sent to markets in Oregon and the U.S.	Metro	Investment needed
	Contamination rates for in-bound and out-bound recyclables at source-separated Material Recovery Facilities located in the region	Metro	Investment needed
Goal 16: Maintain a system of facilities, from smaller recycling drop-off depots to larger full-service stations, to ensure equitable distribution of, and access to, services.	Geographic proximity: Of cities/county urbanized areas to facilities that accept garbage, recyclables, food scraps and other curbside materials; Of the population, by geographic area, to services for HHW and other prioritized, non-curbside materials	Metro Cities Counties	Ready
Goal 17: Effectively coordinate public and private partners in planning for the impact of disasters on the solid waste system.	Establishment of Metro, County and City plans that delineate jurisdictional roles in managing disaster debris	Metro	Investment needed
Goal 18: Ensure routine garbage and recycling collection, processing, transport and disposal operations can be restored quickly following a system disruption.	Capacity and geographic distribution of solid waste facilities that meet seismic standards	Metro	Investment needed
Goal 19: Plan disaster debris response operations to expedite the clearance and removal of debris, making the best use of locally-based services and materials and maximizing recovery.	Capacity and geographic distribution of pre-authorized debris management sites	Metro	Investment needed

Baseline data and targets

As of the date of adoption of this plan, all of the indicators need additional work to develop baseline and evaluation methodologies. This work will be completed within the first two years of plan implementation, after which Metro, in consultation with local governments and community partners, will establish targets for each indicator.

Progress Reports

On an annual basis, Metro will report on the status of each action and whether it has been implemented. Reporting on the key and goal indicators will occur at least every three years.





Implementation, compliance and amendments

INDEX:

- Overview
- Roles and responsibilities
- Oregon statutory requirements
- Requirements for local governments
- Plan implementation
- Plan oversight

Overview

Responsibility for implementing the 2030 Regional Waste Plan is shared by Metro and city and county governments in the region.

The actions in the plan will be carried out by these agencies in collaboration with the Oregon Department of Environmental Quality, for-profit garbage and recycling companies and non-profit organizations involved in different areas of the system.

This section describes roles and responsibilities, requirements and implementation and compliance approaches included in the 2030 Regional Waste Plan.

Roles and responsibilities

State level

The Oregon Department of Environmental Quality (DEQ) has several roles in the region's garbage and recycling system. Through the 2050 Materials Management Vision and Framework for Action, the DEQ establishes an overall strategy for statewide efforts to reduce the environmental and health impacts from products made, purchased, used and disposed. The DEQ also guides and enforces solid waste statutes, approves local waste reduction plans, provides technical assistance and grants and measures statewide progress toward goals.

Regional level

Metro is responsible for overall solid waste planning and management in the region. As noted above, Metro develops and administers the Regional Waste Plan and shares responsibility with cities and counties for implementing the plan's actions. Metro is also responsible for ensuring that it and local governments meet state waste reduction program requirements. In addition to its programmatic work to reduce the impacts of products and their waste, Metro looks out for the public's interests by regulating privately owned garbage and recycling facilities. It also operates full-service waste transfer stations, provides collection services for household hazardous waste, operates a paint recycling facility and monitors and maintains two closed landfills in the region.

Local level

Cities and counties in the region manage the collection programs that provide recycling, yard debris, food waste and garbage collection services to single-family and multifamily residents and to businesses and institutions. They also provide waste prevention, reuse and recycling education and technical assistance to support the collection programs and help residents and businesses reduce the environmental impacts of the products they buy, use and dispose. These activities must, at minimum, comply with state laws and the Regional Waste Plan. Counties also play a significant role in disaster event planning and response.

Private sector

For-profit businesses and non-profit organizations play significant roles in the region's garbage and recycling system. Hauling companies provide collection services to residents and businesses, primarily through franchises, permits or other instruments from cities and counties. Private companies also own and operate solid waste transfer stations, material sorting facilities for source-separated recyclables and mixed construction waste, operations that convert recyclables into new products, composting and anaerobic digestion facilities and landfills. Non-profit and for-profit organizations provide important reuse and repair services, as well as tools to support waste prevention efforts.

Community-based organizations

Community-based organizations (CBOs) played a critical role in the development of the 2030 Regional Waste Plan by partnering with Metro to engage communities that were historically underrepresented in garbage and recycling system planning and decision-making processes. They will also have important responsibilities in implementation of the plan. Many of the actions identified in Section 8 identify roles for CBOs in development, implementation and evaluation of regional projects and programs in collaboration with Metro and local governments.



Oregon statutory requirements

State law requires Metro, cities and counties to implement a series of waste prevention, reuse and recycling programs under the Opportunity to Recycle Act (Oregon Revised Statutes Chapter 459A and Oregon Administrative Rules Chapter 340-090). The state designates Metro as the compliance reporting agency for the region's three-county area. Local jurisdictions provide data to Metro to assist with this annual responsibility. If a city or county is out of compliance with a state requirement, Metro will work with that jurisdiction to resolve the issue. If it can't be satisfactorily resolved, Metro will ask DEQ to assist in addressing the matter.



Requirements for local governments

The actions included in this plan represent work that will be new for Metro and local governments, as well as activities that were already initiated, but not completed, and ongoing work that has been in place for years. The vast majority of the actions represent guidance to Metro and local governments, rather than requirements. There is a small set of actions, however, that involve existing or potential specific legal requirements on local governments. These requirements are primarily directed at ensuring that comprehensive and consistent recycling and garbage services are provided across the region, together with education, information and technical assistance programs for residents and businesses about waste prevention, reuse and recycling.

New requirements for local governments, or changes to existing requirements, that result from actions in the 2030 Regional Waste Plan will be developed in consultation with local governments and will go through the regular Metro Council legislative process, which includes consultation with advisory committees and opportunities for public comment. New requirements for local governments may be incorporated into Metro Code or Metro administrative procedures. The actions that represent current or new requirements for local governments are included in the tables below and labeled with a directive action icon.

Goal 10:

Provide regionally consistent services for garbage, recyclables and other priority materials that meet the needs of all users.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH
10.1 Provide comprehensive collection services and supporting education and assistance for source-separated recyclables, source-separated food scraps and garbage, in compliance with state, regional and local requirements, including the Regional Service Standard, Business Recycling Requirement and Business Food Waste Requirement in Metro Code.	Cities Counties	Code and authorizations 
10.2 Implement minimum service levels or performance standards for all collected materials for multifamily and commercial tenants.	Metro Cities Counties	Code and authorizations 

Goal 10 (cont.):

Provide regionally consistent services for garbage, recyclables and other priority materials that meet the needs of all users.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH
10.3 Implement regional standards for collection container colors, signage and other related informational materials for single-family, multifamily and commercial services.	Metro Cities Counties	Code and authorizations
10.5 Provide regularly occurring bulky waste collection service, with particular emphasis on multifamily communities and lower-income households.	Cities Counties	Code and authorizations
10.6 Establish standards for collection areas for existing and newly constructed multifamily properties to ensure residents have adequate access to garbage, recyclables and food scraps collection containers.	Metro Cities Counties	Code and authorizations

E Highest potential to advance equity  New  Directive action

Goal 12:

Manage all garbage and recycling operations to reduce their nuisance, safety and environmental impacts on workers and the public.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH
12.3 Implement environmental and safety standards for all on-road and off-road solid waste fleet vehicles.	Metro Cities Counties	Partnership agreements Code and authorizations

E Highest potential to advance equity  New  Directive action

Goal 14:

Adopt rates for all services that are reasonable, responsive to user economic needs, regionally consistent and well understood.

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH
14.7 Require that local governments annually provide information to residents about the components of their garbage and recycling collection rate.	Metro	Partnership agreements 

 Highest potential to advance equity  New  Directive action

The existing requirements for local governments are outlined in Chapter 5.10 of Metro Code¹ and the associated Metro administrative procedures². They are:

Regional Service Standard (Metro Code 5.10.210 to 5.10.240)

Establishes minimum recycling service standards and education and outreach programs that local governments must implement for businesses and for single-family and multifamily households.

Business Recycling Requirement (Metro Code 5.10.310 to 5.10.350)

Requires each local government to adopt an ordinance to require businesses within its jurisdiction to separate recyclable materials such as paper, cardboard, and glass and plastic bottles and jars, and to provide recycling collection containers and educational materials.

Business Food Waste Requirement (Metro Code 5.10.410 to 5.10.470)

Requires local governments to adopt code language to require specified food-generating businesses in their jurisdiction to separate their food waste from garbage.

1. Metro Code, available online at <https://www.oregonmetro.gov/metro-code>.

2. Metro Solid Waste Administrative Procedure No. 510, available online at: https://www.oregonmetro.gov/sites/default/files/2014/05/15/07312013_business_recycling_requirement Regional_service_standard.pdf.

Plan implementation

Metro is responsible for coordinating implementation of the plan and assessing plan performance.

Cities, counties and Metro are responsible for leading or participating in implementation of the actions. Several different approaches, described below, will be used to implement the actions. In the action tables in Section 8, one or more implementation approaches are identified for each action and Metro and/or cities and counties is indicated as the lead.

Legislative agendas: State-level public policy priorities identified by Metro and/or local government elected bodies.

Partnership agreements: Agreements between Metro and local governments, or and between Metro or local governments with non-profit and community-based organizations.

Metro and/or local government code and authorizations: Formal actions taken through code amendments, administrative reviews, licenses, franchises and other instruments.

Regional work groups: Regional work groups convened by Metro to assist in developing programs and activities to achieve the goals and actions of the plan.

Grants: Investments in non-profit and for-profit organizations to achieve the goals and actions of the plan.

Existing programs: Actions may be associated with existing program plans and partnerships implemented by Metro, city, county and state agencies.

Work Plans

Implementation of the actions will be coordinated through the regional and local work plans listed below.

Regional work plans

Metro, in collaboration with local governments, will develop multi-year work plans to prioritize implementation of the plan's actions. These work plans will include estimates of resources needed to complete the work that will inform Metro and local governments in budgeting and resource allocation.

Annual Waste Reduction Program

The Annual Waste Reduction Program is a collaborative effort between local governments and Metro. The Program consists of: (a) annual work plans developed by Metro and local governments; and (b) annual reports submitted by local governments to Metro describing the progress made in implementing the program.

Over the life of this plan, the Annual Waste Reduction Program will serve as the primary means for developing and implementing many of the actions and for meeting state waste reduction requirements. The program will act as an implementation tool for the multi-year regional work plans and be implemented through intergovernmental agreements. The agreements will require compliance with Metro Code and state requirements for local governments in the Opportunity to Recycle Act (ORS 459A). The agreements currently incorporate:

Regional Service Standard

Business Recycling Requirement

Business Food Waste Requirement

Residential Waste Reduction Education

Business and Institutional Waste Reduction Education and Technical Assistance

Recycle at Work Program

Household Hazardous Waste and Toxics Education Programs

Contamination Reduction Education Plan

Work associated with new actions in the 2030 Regional Waste Plan may be incorporated into the Annual Waste Reduction Program intergovernmental agreements.

Compliance

Ensuring compliance with the state and Metro requirements on local governments is accomplished through the Compliance Procedures section in Metro Code 5.10.110 through 5.10.160 and associated administrative rules, and through intergovernmental agreements between local governments and Metro used to implement waste reduction programs.

Amendments

The Regional Waste Plan is written to allow sufficient flexibility for its implementation to allow for adjustments without needing to amend or revise the plan itself. Measurements of regional progress and monitoring and evaluation of goal areas and actions will help determine if significant mid-course corrections are required to achieve the plan's objectives.

In addition to ongoing monitoring, a five-year review will determine whether major revisions are needed. Revisions that necessitate changes to the plan will follow the amendment process outlined in Section 5.10.060 of Metro Code.



Plan oversight

Several formal bodies will oversee implementation of the plan.

Metro Council

Metro's seven-member directly elected council will oversee plan implementation, provide direction on the development of programs and policies, and make final decisions on any plan actions that require Metro legislative action to be enacted. Metro staff will report to Council annually on the implementation of the 2030 Regional Waste Plan actions and every two to three years on progress toward the plan's key measurement indicators.

Metro Policy Advisory Committee

The committee is comprised of members representing cities, counties, special districts and the public, and six non-voting members. Three Metro Councilors also participate as non-voting liaisons. The committee will provide input on development of the programs and policies that implement the plan's actions and advise Metro Council on legislative and administrative actions they will consider related to plan implementation.

Regional Waste Plan Implementation Committee

The committee will be newly formed following adoption of the Regional Waste Plan. Its membership is expected to include representatives of local governments, community organizations, environmental advocacy organizations, system users, topical experts and industry. The committee is expected to provide input on development of the programs and policies that implement the plan's actions and advise the Metro Council and Metro Chief Operating Officer on legislative and administrative actions they will consider related to plan implementation. This committee may charter ad hoc work groups to provide more detailed input into Metro staff's development of changes to Metro code or administrative rules for consideration by the Metro Council or Chief Operating Officer. These task forces may draw members from a broader population than the committee alone.



Appendices

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Appendix 1: Acknowledgments

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Appendix 2: Waste reduction program

A. Introduction

Under Oregon state law (ORS 459.055), any jurisdiction sending more than 75,000 tons of solid waste per year to a permitted disposal site, including landfills in exclusive farm use zones, is required to prepare a waste reduction program for review and approval by the Oregon Department of Environmental Quality (DEQ).

This appendix describes the elements of the 2030 Regional Waste Plan that make up the waste reduction program and demonstrate the region's compliance with specific statutory requirements in ORS 459.055(3) and corresponding administrative rules (OAR 340-091-0070(3)). With over 1 million tons of garbage sent to Oregon landfills, the Metro region is subject to the statutory waste reduction program requirements.

The 2030 Regional Waste Plan is a blueprint to guide investments in the Metro region's solid waste system and reduce the environmental and health impacts of products from manufacturing to disposal. The plan is intended to move the Metro region toward a sustainable materials management approach that identifies and addresses impacts across the full life cycle of materials and products. This shift is based on recent changes in policy guidance at the federal and state levels, including the adoption of the 2050 Vision and Action Framework for Materials Management in Oregon by the Environmental Quality Commission and implemented by DEQ.

The plan also marks another shift in the region's approach to waste management by incorporating actions that will advance progress toward meeting the goals of Metro's *Strategic Plan to Advance Racial Equity, Diversity and Inclusion*. This *Equity Strategy* focuses on eliminating the disparities that people of color experience, especially in those areas related to Metro's policies, programs and services.

B. The regional waste reduction program

The statutorily required waste reduction program for the Metro region consists of the 2030 Regional Waste Plan actions outlined in Table 2 of this appendix and the requirements for local governments outlined in Metro Code Chapter 5.10¹ and the corresponding Metro Solid Waste Administrative Procedure and Performance Standards No. 510.²

The goals and actions in the regional waste reduction program described in this appendix are aimed at reducing the total amount of waste generated by businesses and residents of the Metro region.

The waste reduction program also includes actions to decrease the toxicity of products and materials sold, used and disposed in the greater Portland area.

In 2016, the Metro region generated a total of 2.4 million tons of waste, of which 48 percent was recovered and the rest (1.3 million tons) was sent for disposal. Waste generation in recent years has remained below a peak of 2.7 million tons in 2007. The actions in the 2030 Regional Waste Plan are intended to help the region achieve the statutorily established voluntary goal of 64 percent recovery by 2025.

C. Oregon statutory requirements for local governments

All local jurisdictions in the Metro region are required to comply with the waste reduction provisions set forth in state law (ORS 459A.005 to 459A.010 and OAR 340-090-0030 to 340-090-0050). Metro has been designated by the state as the compliance reporting agency for the region's three-county area. Local jurisdictions provide data to Metro to assist with this annual responsibility.

As part of their annual reporting, local jurisdictions must provide documentation indicating they are fully implementing the general requirements and program elements specified in the Opportunity to Recycle Act (ORS 459A.005 to 459A.008 and OAR 340-090-0030 to 340-090-0042).

As in previous years, Metro will continue to review annual reports for compliance with state law. If a city or county is out of compliance with a state requirement, Metro will work with that jurisdiction to resolve the issue. If it can't be satisfactorily resolved, Metro will ask DEQ to assist in addressing the matter.

Regional Waste Plan requirements for local governments

The actions in the 2030 Regional Waste Plan include work that will be new for Metro and local governments, as well as activities that were already initiated, but not completed, and ongoing work that has been in place for years. The vast majority of the actions represent guidance to Metro and local governments, rather than requirements. There is a set of actions, however, that represents existing or potential specific requirements on cities and counties within Metro's geographic area of authority. These requirements are primarily directed at ensuring that comprehensive and consistent recycling and garbage services are provided across the region, together with education, information and technical assistance programs for residents and businesses about waste prevention, reuse and recycling.

New requirements for local governments, or changes to existing requirements, that result from actions in the 2030 Regional Waste Plan will be developed in consultation with local governments and will go through the regular Metro Council legislative process, which includes consultation with advisory committees and opportunities for public comment. New requirements for local governments may be incorporated into Metro Code or Metro administrative procedures.

1. Metro Code, available online at <https://www.oregonmetro.gov/metro-code>.

2. Metro Solid Waste Administrative Procedure No. 510, available online at https://www.oregonmetro.gov/sites/default/files/2014/05/15/07312013_business_recycling_requirementRegional_service_standard.pdf.

The actions of the 2030 Regional Waste Plan that represent current or new requirements for local governments are labeled with a directive action icon in table, with fuller descriptions immediately below for the existing requirements that are in Metro Code Chapter 5.10:

Regional Service Standard (Metro Code 5.10.210 to 5.10.240): establishes minimum recycling service standards and education and outreach programs that local governments must implement for businesses and for single-family and multifamily households.

Business Recycling Requirement (Metro Code 5.10.310 to 5.10.350): requires each local government to adopt an ordinance to require businesses within its jurisdiction to separate recyclable materials such as paper, cardboard, and glass and plastic bottles and jars, and to provide recycling collection containers and educational materials.

Business Food Waste Requirement (Metro Code 5.10.410 to 5.10.470): requires each local government to adopt code language to require specified food-generating businesses in its jurisdiction to separate their food waste from the garbage.

D. Program implementation and enforcement

Metro is responsible for coordinating implementation of the plan and assessing plan performance. Cities, counties and Metro are responsible for leading or participating in implementation of the actions. Actions provide direction, including to develop, implement or evaluate specific programs or initiatives.

Actions with direction to implement programs or initiatives assume that implementation will require planning, budgeting and evaluating. Several different approaches will be used to implement the actions. These are identified in the action tables in the goals and actions of this plan and described below. Most of these implementation approaches are currently in place and have been operating for many years.

Regional Waste Plan: Implementation Approaches

Legislative agendas	State-level public policy priorities identified by Metro and/or local government elected bodies.
Partnership agreements	Agreements between Metro and local governments, or between Metro or local governments and non-profit or community-based organizations.
Metro and/or local government code and authorizations	Formal actions taken through code amendments, administrative reviews, licenses, franchises and other instruments.
Regional work groups	Regional work groups convened by Metro to assist in developing programs and activities to achieve the goals and actions of the plan.
Grants	Investments in non-profit and for-profit organizations to achieve the goals and actions of the plan.
Existing programs	Actions may be associated with existing program plans and partnerships implemented by Metro, city, county and state agencies.

In addition to implementation mechanisms, each action in the 2030 Regional Waste Plan, including the waste reduction program actions in the Goal and Actions section, is also assigned a lead agency.

Metro, in consultation with local governments, will develop multi-year work plans to guide implementation of the actions. These work plans will include estimated resources needed to complete the work.

Metro will continue to enforce the Regional Waste Plan through Chapter 5.10 of the Metro Code and associated administrative procedures, as well as through intergovernmental agreements (IGAs) with local governments.

Regional Waste Plan requirements for local governments

The Annual Waste Reduction Program is a collaborative effort between local governments and Metro. The Program consists of: (a) annual work plans developed by Metro and local governments; and (b) annual reports submitted by local governments to Metro describing the progress made in implementing the program.

Over the life of this plan, the Annual Waste Reduction Program will serve as the primary means for developing and implementing many of the actions in this plan and for meeting state waste reduction requirements. The program will act as an implementation tool for multi-year regional work plans and be implemented through intergovernmental agreements. The agreements will require compliance with Metro Code and state requirements for local governments in the Opportunity to Recycle Act (ORS 459A), and currently incorporate:

- Regional Service Standard
- Business Recycling Requirement
- Business Food Waste Requirement
- Residential Waste Reduction Education
- Business and Institutional Waste Reduction Education and Technical Assistance
- Recycle at Work Program
- Household Hazardous Waste/Toxics Education Programs
- Contamination Reduction Education Plan

Work associated with new actions in the 2030 Regional Waste Plan may be incorporated into the Annual Waste Reduction Program IGAs.

E. Waste reduction goals and actions

This section outlines the goals and actions in the 2030 Regional Waste Plan that form part of the statutorily-required waste reduction program for the Metro region. The timetable for implementing these actions is 2019 to 2030.

As a whole, the goals and actions in Table A1 are intended to demonstrate compliance with the requirements in ORS 459.055(3) for the waste reduction program to provide for:

- A commitment by Metro and other local governments in the region to reduce the volume of waste that would otherwise be disposed of in a landfill through techniques such as waste prevention, recycling, reuse, composting and energy recovery.
- Energy efficient, cost-effective approaches for waste reduction.
- Strategies that are commensurate with the type and volume of solid waste generated in the Metro region.

The statutory waste reduction program requirements in ORS 459.055(3)(B) also include the requirement to meet or exceed the waste prevention, reuse and recycling requirements in ORS 459.250 (providing a place for collecting source-separated recyclable materials at disposal sites) and ORS 459A.005 to 459A.085 (collectively referred to as the opportunity to recycle statutes).

While most of the opportunity to recycle requirements in ORS 459A are currently met through the existing requirements for local governments in Metro Code described in Section D above, the 2030 Regional Waste Plan also contains other actions that help Metro and other local governments in the region meet or exceed these requirements. These actions are identified in the **Waste prevention, reuse and recycling requirements** column of Table A1. This column lists the specific waste prevention, reuse and recycling statute(s) addressed by the action.

To demonstrate compliance with the waste reduction requirement in OAR 340-091-0070(3)(c), Table A1 also lists the waste streams that would be affected by each waste reduction action in the **Waste stream** column.

To assist with implementation and accountability, a lead agency – either Metro, Cities/Counties or both – is defined for each action in Table A1. The lead agency is the primary entity responsible for implementing the action and reporting on progress. Successful implementation will often require collaboration and coordination between Metro, local governments, community-based organizations and private sector service providers.

F. Measuring and reporting on progress

The 2030 Regional Waste Plan includes a measurement framework in this plan to evaluate progress towards the plan's vision and goals. The measurement framework consists of six key indicators and many goal-level indicators. Five of the key indicators are directly related to the waste reduction program actions:

Key Indicators

Greenhouse gas emissions associated with the products and services consumed in the Metro region

Annual tons of waste generated

Number, geographic location and demographics of youth reached through education programs

Share of multifamily communities with adequate collection services

Recycling contamination by sector

Metro, cities and counties in the region will be responsible for collecting the necessary data for constructing the plan's indicators. To report on progress, Metro will produce an annual report on the implementation status of each action in the plan and a report at least every three years with updates of the key indicators and goals. In addition and in consultation with DEQ, Metro will meet its statutory reporting responsibilities by periodically reporting to the Environmental Quality Commission on the implementation of the waste reduction program.

Table A1

Shared prosperity

Goal one: Increase engagement of youth and adults historically underrepresented in garbage and recycling decision-making through civic engagement and leadership opportunities.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
1.3 Partner with organizations to engage youth in leadership opportunities for social, economic and environmental issues related to garbage and recycling.	Metro Cities Counties	Household waste Food waste Hazardous material	

Goal two: Increase the percentage of garbage and recycling system revenue that benefits local communities and companies owned by people of color and other underrepresented groups.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
2.3 Utilize grant programs to invest in businesses and non-profit organizations to strengthen regional efforts to reduce waste, make better use of the waste that is produced, and help foster economic opportunities for communities of color and others who have historically been left out of the garbage and recycling system.	Metro	Household waste Commercial waste Yard debris Food waste Demolition material Hazardous material	

Product design & manufacturing

Goal five: Reduce the environmental and human health impacts of products and packaging that are made, sold, used or disposed in Oregon.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
5.1 Advocate for legislation that minimizes chemicals of concern in products and packaging and requires the disclosure of product chemical data to consumers.	Metro Cities Counties	Hazardous material	
5.2 Assist the Oregon Health Authority in implementing the 2015 Oregon Toxic Free Kids Act that requires manufacturers of children's products sold in Oregon to report products containing high-priority chemicals of concern.	Metro	Hazardous material	
5.3 Partner with the State of Oregon to provide incentives to manufacturers for developing sustainable manufacturing techniques, including green chemistry, for products and packaging sold in Oregon.	Metro	Household waste Commercial waste Demolition material Hazardous material	

5.4 Advocate for product stewardship legislation and other policy approaches that can achieve the greatest reduction in environmental and human health impacts from products and packaging made, used or disposed in the region.	Metro Cities Counties	Household waste Commercial waste Demolition material Hazardous material
5.5 Advocate for legislation that would require building products sold and used in Oregon to be free of highly toxic materials.	Metro Cities Counties	Demolition material Hazardous material
5.6 Advocate for standards for high-impact products including phase-outs or bans.	Metro Cities Counties	Household waste Commercial waste Demolition material Hazardous material

Product consumption & use

Goal six: Reduce product environmental impacts and waste through educational and behavioral practices related to prevention and better purchasing choices.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
6.1 Provide culturally responsive and developmentally appropriate school-based education programs about the connections between consumer products, people and nature.	Metro	Household waste Hazardous material	ORS 459A.007(2)(d)
6.2 Provide culturally responsive community education and assistance about the connections between consumer products and impacts on people and nature.	Metro	Household waste Hazardous material	ORS 459A.007(2)
6.3 Provide and increase accessibility to education and tools to help residents and businesses reduce their use of the single-use products with the greatest environmental impacts.	Metro Cities Counties	Household waste Commercial waste	ORS 459A.007(2)(a)
6.4 Partner with communities of color and others to increase awareness about high-risk chemical products and reduce their use and exposure.	Metro	Household waste Commercial waste	ORS 459A.007(2)
6.5 Assist households and businesses in the adoption of practices that prevent the wasting of food and other high impact materials.	Metro Cities Counties	Commercial waste Food waste	ORS 459A.007(2)
6.6 Support implementation of Oregon State University's SolvePestProblems.org as a primary tool for education and resources on Integrated Pest Management.	Metro	Hazardous material	

Goal seven: Reduce product environmental impacts and waste through policies that support prevention practices and better purchasing choices.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
7.1 Implement procurement policies for Metro and local governments that prioritize the purchase of products and services with low environmental and human health impacts.	Metro	Household waste Hazardous material	
7.2 Implement policies that will reduce the use of single-use products such as single-use plastic bags.	Metro	Household waste Hazardous material	
7.3 Advocate for the reclassification of high-risk nonagricultural pesticides to restricted use status in Oregon.	Metro Cities Counties	Household waste Commercial waste	
7.4 Implement policies and programs that lead to the construction of less resource-intensive buildings, including improvements to Oregon Reach Code and baseline building codes to address material selection preferences and restrictions, incentives for space-efficient homes and removal of barriers to adopting lower-impact materials.	Metro Cities Counties	Household waste Commercial waste	

Product end-of-life management

Goal eight: Increase the reuse, repair and donation of materials and consumer products.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
8.1 Support efforts to ensure that surplus, nutritionally dense edible food is made available to communities experiencing hunger in the region.	Metro Cities Counties	Commercial waste Food waste	ORS 459A.007(2)(g)
8.2 Implement strategies to increase the salvage of building materials for reuse without increasing exposure to toxics.	Metro	Demolition material	ORS 459A.007(2)(f)
8.3 Advocate for research-informed changes to building codes and other regulations to increase use of reused and deconstructed materials.	Metro Cities Counties	Demolition material	
8.4 Expand the collection of reusable items at public and private transfer stations, in partnership with reuse and repair organizations.	Metro	Household waste Commercial waste	
8.5 Invest in neighborhood-scale reuse and repair services and infrastructure.	Metro Cities Counties	Household waste	ORS 459A.007(2)(e)-(f)
8.6 Support implementation of Oregon Department of Environmental Quality's Reuse, Repair and Extended Product Lifespan Strategic Plan.	Metro Cities Counties	Household waste Commercial waste	ORS 459A.007(2)(e)-(f)

Goal nine: Increase knowledge among community members about garbage, recycling and reuse services.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
9.1 Provide culturally responsive education and assistance for garbage, recycling and reuse services to residents and businesses.	Metro Cities Counties	Household waste Commercial waste Yard debris Demolition material Hazardous material	ORS 459A.005 to 459A.008
9.2 Utilize Metro's Recycling Information Center to serve all residents and businesses in the region as a clearinghouse for prevention, reuse, recycling and disposal information.	Metro	Household waste Commercial waste Yard debris Demolition material Hazardous material	ORS 459A.007(2)(f)
9.3 Ensure that community education and volunteer development courses, such as Master Recycler, are relevant, accessible and culturally responsive to all communities.	Metro Cities Counties	Household waste Hazardous material	

Goal ten: Provide regionally consistent services for garbage, recyclables and other priority materials that meet the needs of all users.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
10.1 Provide comprehensive collection services, and supporting education and assistance, for source-separated recyclables, source-separated food scraps and garbage in compliance with state, regional and local requirements, including the Regional Service Standard, Business Recycling Requirement and Business Food Waste Requirement in Metro Code.	Cities Counties	Household waste Commercial waste Yard debris	ORS 459A.005 to 459A.008
10.2 Implement minimum service levels or performance standards for all collected materials for multifamily and commercial tenants.	Metro Cities Counties	Household waste Commercial waste Yard debris	
10.3 Implement regional standards for collection container colors, signage and other related informational materials for single-family, multifamily and commercial services.	Metro Cities Counties	Household waste Commercial waste Yard debris	
10.4 Provide convenient, accessible and equitable collection of hazardous waste from households and Conditionally Exempt Generators, prioritizing communities with greatest need.	Metro	Hazardous material	
10.5 Provide regularly-occurring bulky waste collection service, with particular emphasis on multifamily communities and lower income households.	Cities Counties	Household waste	
10.6 Establish standards for collection areas for existing and newly constructed multifamily properties to ensure residents have adequate access to garbage, recyclables and food scraps collection containers.	Metro Cities Counties	Household waste	

10.7 Partner with community health organizations to expand options for collection of hypodermic needles and other types of medical waste, prioritizing individuals with the greatest barriers to service.	Metro	Hazardous material
10.8 Advocate for statewide legislation, or implement regional policies, to increase the types of products and packaging for which manufacturers and retailers provide environmentally sound, convenient and accessible take-back programs.	Metro Cities Counties	Household waste Hazardous material

Goal twelve: Manage all garbage and recycling operations to reduce their nuisance, safety and environmental impacts on workers and the public.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
12.4 Implement sustainability practices in the operation of public and private solid waste facilities to reduce energy use, utilize renewable energy, reduce equipment emissions, maximize the use of safe alternatives to toxic materials and achieve other environmental objectives.	Metro	Hazardous material	
12.7 Require post-collection material recovery for marketable materials that will advance progress towards achieving this plan's goals and targets.	Metro	Household waste Commercial waste Yard debris Demolition material	

Goal thirteen: Invest in communities that receive garbage and recyclables from the Metro region, so that solid waste facilities are regarded as assets by those communities.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
13.2 Implement annual volunteer projects and collection/recycling events in neighborhoods affected by solid waste facilities.	Metro	Household waste Yard debris Hazardous waste	

Goal Fourteen: Adopt rates for all services that are reasonable, responsive to user economic needs, regionally consistent and well understood.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
14.5 Evaluate alternative models for collection, processing and transfer services to identify which would deliver the best environmental, financial, efficiency and equity outcomes.	Metro Cities Counties	Household waste Commercial waste Yard debris Food waste Demolition material Hazardous material	

Goal Fifteen: Improve the systems for recovering recyclables, food scraps and yard debris to make them resilient to changing markets and evolving community needs.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
15.1 Implement regionally consistent contamination reduction efforts to improve material quality, including education, collection equipment changes and customer feedback methods.	Metro Cities Counties	Household waste Commercial waste	ORS 459A.005 to 459A.008
15.2 Regularly assess the list of curbside recyclables collected in the region relative to end-markets, life cycle environmental benefits, community needs and forecasting of future materials in the waste stream.	Metro Cities Counties	Household waste Commercial waste	
15.3 Develop public-private partnerships to expand local markets for priority recyclable materials, with an emphasis on minority-owned and other underrepresented business owners.	Metro	Household waste Commercial waste	
15.4 Fund investments to improve the performance of material recovery facilities through collection rates and/or other mechanisms.	Metro Cities Counties	Household waste Commercial waste	
15.5 Facilitate the permitting of composting facilities to process mixed residential yard debris and food scraps, while ensuring minimal impacts on neighboring communities.	Metro Cities Counties	Yard debris Food waste	
15.6 Implement stronger linkages between recycling collection programs and material recovery facilities through processing performance standards, supply agreements, regulatory oversight and/or other means.	Metro Cities Counties	Household waste Commercial waste	
15.7 Identify and implement changes to recycling collection programs and material recovery facility operations to meet the specifications of a broad range of markets.	Metro Cities Counties	Household waste Commercial waste	
15.8 Advocate for statewide policies, or implement regional policies, that create a preference, incentive or requirement for use of recycling end-markets in Oregon and the Northwest.	Metro Cities Counties	Household waste Commercial waste	
15.9 Advocate for expansion of the statewide bottle bill program to include additional containers.	Metro Cities Counties	Household waste Commercial waste	
15.10 Evaluate whether a policy to increase garbage tip fees would further incentivize waste prevention and recovery, without harming ratepayers and providing revenue windfalls to transfer station operators.	Metro	Household waste Commercial waste Yard debris Food waste Demolition material Hazardous material	

Goal sixteen: Maintain a system of facilities, from smaller recycling drop-off depots to larger full-service stations, to ensure equitable distribution of, and access to, services.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
16.2 Locate recycling and food scraps transfer and recovery facilities to best benefit the public relative to geographic equity and access to service, and to reduce environmental and human health impacts.	Metro	Household waste Commercial waste Food waste	
16.5 Evaluate the feasibility of establishing a publicly-owned facility in Washington County to accept and transfer garbage, recycling, food scraps and household hazardous waste and other materials.	Metro Cities Counties	Household waste Commercial waste Food waste Hazardous material	ORS 459.250 ORS 459A.005(1)(a)(A)
16.6 Expand and improve access to services provided at Metro South Transfer Station.	Metro	Household waste Commercial waste Hazardous material	ORS 459.250 ORS 459A.005(1)(a)(A)

Disaster resilience

Goal nineteen: Plan disaster debris response operations to expedite the clearance and removal of debris, making the best use of locally-based services and materials and maximizing recovery.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
19.4 Develop strategies for the safe reuse, recycling and disposal of materials following a debris-generating incident.	Metro	Demolition material Hazardous material Disaster debris	
19.5 Create incentives or requirements for debris management contractors to collect and separate debris materials for reuse and recycling.	Metro	Demolition material Hazardous material Disaster debris	



Appendix 3: Key solid waste laws

There are several state laws that help give perspective and direction to the activities in the 2030 Regional Waste Plan.

The Oregon Bottle Bill

1971 – First bottle bill in the united states.

The Oregon legislature passed the Oregon Bottle Bill in 1971 and it took effect on October 1, 1972. This bottle bill was the first of its kind in the nation. Its purpose was to reduce litter and divert all beer and carbonated beverage containers from the waste stream so that they could be reused or recycled. The bill requires that a refund be paid to any person who returns empty soft drink or beer bottles or cans to a retail store.

2011 – Bottle bill expansion

House Bill 3145 amended the Bottle Bill in 2011 to add all beverages except wine, liquor, dairy or plant-based milk, meal replacement beverages and infant formula to the Bottle Bill beginning Jan. 1, 2018. The bill also allowed for an increase in the refund value from 5 to 10 cents per container.

The Oregon Opportunity to Recycle Act

1983 – First curbside recycling programs in Oregon

The Opportunity to Recycle Act, passed by the Oregon legislature in 1983, was ground-breaking legislation that required:

- Residential on-route (curbside) recycling collection in cities of 4,000 or more people.
- Recycling at solid waste disposal sites.
- Education and promotion programs designed to make all Oregonians aware of opportunities to recycle and the reasons for recycling.

Although Oregon already had an extensive recycling infrastructure, both private and public, before the passage of the act, the system was enhanced through this legislation. The recycling programs called for in the Opportunity to Recycle Act have been implemented throughout the state.

1991 – Setting recovery targets

In 1991, the Oregon legislature took recycling legislation a step further and passed the Oregon Recycling Act. Among other things, the Oregon Recycling Act established a recovery level goal of 50% by the year 2000. The Metro region was required to achieve a recovery level of 40% by 1995.

The Oregon Recycling Act also mandated the development of a statewide solid waste plan by 1994 and the performance of waste composition studies, and required cities with a population greater than 10,000 and the Metro area to implement certain waste reduction practices. Certain materials,

such as whole tires and lead acid batteries, were banned from landfills. The act also specified purchasing preferences by government agencies for materials with high percentages of recycled content and high degrees of reusability/recyclability.

Finally, the act established minimum recycled-content requirements for newsprint, telephone directories, glass containers and rigid plastic containers sold in Oregon.

1997 – 2% Credits for waste prevention

The legislature passed a bill that enabled local governments to obtain credit for more than just their recycling programs. The program allowed 2% credits for wastesheds such as Metro that establish and maintain programs in waste prevention, reuse and backyard composting. DEQ established guidelines and evaluation criteria for wastesheds that allowed them to earn up to 6% total credits toward their recovery goals for qualifying programs.

2001 – New state and wasteshed goals

In 2001, although most of the wastesheds in the state were meeting their individual required recovery goals, DEQ confirmed to the legislature that these accomplishments were nevertheless not going to produce a statewide recovery goal of 50%. The legislature responded with House Bill 3744 (amending ORS 459.010) that set a statewide recovery goal of 45% for 2005 and 50% for 2009 and adjusted individual wasteshed goals. Metro's goal became 62% by 2005 and 64% by 2009 (these rates could include any credits received under the "2% waste prevention credits" program).

The bill set out review procedures regarding the goal:

If a wasteshed does not achieve its 2005 or 2009 waste recovery goal, the wasteshed shall conduct a technical review of existing policies or programs and determine revisions to meet the recovery goal. The department shall, upon the request of the wasteshed, assist in the technical review. The wasteshed may request, and may assist the department in conducting, a technical review to determine whether the wasteshed goal is valid (ORS 450.010(6)(e)).

In addition, House Bill 3744 established statewide waste generation goals:

- By 2005, there will be no annual increase in per capita municipal solid waste generation;
- By 2009, there will be no annual increase in total municipal solid waste generation.

2015 – Updates to local government waste prevention, reuse and recycling programs

In 2015, the legislature passed Senate Bill 263 and made fundamental changes to the Opportunity to Recycle Act (ORS 459A). The bill revised material recovery and waste prevention goals and requirements for Oregon's municipalities and wastesheds.

In particular, the bill:

- Added four new options to the list of recycling programs cities and counties can choose to implement.
- Increased the total number of recycling programs cities and counties in the Metro region must implement.
- Added requirements for certain cities and counties to assess contamination levels in curbside recycling and to make plans and outreach programs to reduce contamination.

- Retired the voluntary waste prevention and reuse programs for wastesheds (the former “2% waste prevention credits” program introduced in 1997).
- Required larger cities and all cities within the Metro boundary to implement new waste prevention and reuse programs, replacing similar programs previously implemented under the 2% waste prevention credits program.
- Expanded recycling opportunities for people living in multifamily housing and for tenants of multi-tenant commercial buildings, effective July 1, 2022.

Senate Bill 263 also updated the statewide and wasteshed waste recovery goals and the state’s waste generation goals. For the Metro region, the waste recovery goal was revised and set to a 64% waste recovery rate by 2025, not including the waste prevention credits under the former “2% waste prevention credits” program. The bill also established that this goal was now voluntary and not enforceable by the Oregon Department of Environmental Quality.

For the state as a whole, the bill established the following goals:

- For waste generation,
 - » No annual increase in total waste generation by 2009
 - » By 2025, a decrease in total waste generation to 15 percent below 2012 levels, and to 40 percent below 2012 levels by 2050 and subsequent years
- For waste recovery,
 - » An overall material recovery rate of 52 percent by 2020 and 55 percent by 2025 and subsequent years
 - » For food waste, a recovery rate of 25 percent by 2020
 - » For plastic waste, a recovery rate of 25 percent by 2020
 - » For carpet waste, a recovery rate of 25 percent by 2025

The bill also mandated the development of alternative waste recovery rates based on energy use and possibly other environmental impact indicators such as greenhouse gas emissions, toxicity and water use. The alternative recovery rates are outcome-based indicators and represent a departure from using weight-based indicators as measures of progress towards meeting the state’s waste recovery goals.

Extended producer responsibility

2007 – Oregon e-cycles electronics program

In 2007, Oregon House Bill 2626 created a producer responsibility system for the management of obsolete electronics where manufacturers either provide collection and recycling for their e-waste or pay for a program that is contracted by the state. The legislation required safe, convenient and environmentally sound recycling of specific electronic devices and, as of January 2010, banned the disposal of such devices.

Since January 2009, the Oregon Department of Environmental Quality has implemented this legislation through the Oregon E-Cycles program. The program currently provides free recycling of computers, monitors, printers, keyboards, mice and TVs through a network of collection sites located throughout the state.

2009 – Paint stewardship program

In 2009, Oregon became the first state in the nation to enact legislation (House Bill 3037) requiring architectural paint manufacturers to implement a program to reduce waste, increase reuse and recycling and safely dispose of remaining unusable paint and other coatings. The program started as a pilot in 2010 and was made permanent by legislation in 2013.

Under the program, retailers of paint products collect a program fee from consumers for each container registered for sale in Oregon. The fee then goes back to manufacturers who pay a stewardship organization, PaintCare, to manage collections and provide outreach and education on how to buy the right amount, reuse and recycle paint and other coatings. PaintCare is a non-profit organization created by the paint industry.

Metro's solid waste obligations and authorizations under state law

In addition to the key solid waste laws described above, Metro has additional obligations and authorizations related to solid waste management for the Metro region. Oregon Revised Statutes (ORS) Chapter 459 covers solid waste management administration roles, disposal sites, hazardous waste management, enforcement and penalties. ORS 459A covers reuse and recycling program requirements in the state. Oregon Administrative Rules (OAR) Chapter 340 sets out implementation standards, reporting requirements, recovery rate goals, recovery rate calculation methods, etc. The following state law chapters and sections specifically pertain to the region's waste and toxicity reduction plans, policies and programs:

ORS 459.055 Prepare and adopt a waste reduction program.	ORS 459.345 Submit report to the Environmental Quality Commission on the implementation of the waste reduction program required by ORS 459.055.	ORS 459A.750 School curriculum and teachers' guide components.
ORS 459.250 Provide recycling collection at transfer stations or at more convenient locations.	ORS 459.413(1) Establish permanent household hazardous waste depots.	OAR Chapter 340, Division 90 Implementation standards & reporting requirements.
ORS 459.335 Authorizes Metro to use solid waste revenues for various solid waste activities, including those directly related to reducing the environmental impact of solid waste.	ORS 459.413(2) Encourage use of household hazardous waste collection services.	ORS 268.317(5)-(7) & 268.318 Solid waste regulatory authority.
ORS 459.340 Implement the waste reduction program required by ORS 459.055.	ORS 459A.005 to 459A.008 Require waste reduction program elements and reporting.	ORS 268.390 Functional planning authority.
		ORS 459.095 Local government compliance with the Metro region's solid waste management plan, the 2030 Regional Waste Plan.

Appendix 4: Glossary of terms

These definitions are provided to assist the reader and should not be construed as policies, goals or practices of the Plan, or as amendments to the Metro Code.

Anaerobic digestion – Anaerobic digestion is the natural process in which microorganisms break down organic materials. In this instance, “organic” means coming from or made of plants or animals. Anaerobic digestion happens in closed spaces where there is no air (or oxygen). The initials “AD” may refer to the process of anaerobic digestion or the built system where anaerobic digestion takes place, also known as a digester.

Bins – In the 2030 Regional Waste Plan the word “bins” is used to refer to all equipment used to collect garbage, mixed recycling and glass recycling at single-family, multifamily and commercial sites.

Bulky waste – Furniture such as sofas, chairs, dressers, televisions, mattresses, appliances and larger pieces of carpet and carpet pad; can include items not mentioned in this list that are too large to fit into bins.

Collection area - A designated area to collect garbage and/or recyclable materials on a multifamily or commercial site; sites may have one or more garbage and recycling collection areas.

Collection service – A service that provides for collection of solid waste or recyclable material, or both. OAR 340-90-010.

Communities of Color – For the purposes of this plan, Communities of Color are Native Americans, African Americans, Asian Americans and Pacific Islanders, Latinos and Hispanics, and immigrants and refugees who do not speak English well, including African immigrants, Slavic and Russian speaking communities, and people from the Middle East. From Metro’s “Strategic plan to advance racial equity, diversity and inclusion” (June 2016).

Community – All individuals who live, work, play or pray in the Portland metropolitan region. From Metro’s “Strategic plan to advance racial equity, diversity and inclusion” (June 2016).

Community Benefit Agreement - A legally binding contract (or set of related contracts), setting forth a range of community benefits regarding a development project and resulting from substantial community involvement. From Julian Gross, “Community Benefits Agreements: Definitions, Values, and Legal Enforceability” Journal of Affordable Housing Vol. 17:1–2 Fall 2007/Winter 2008.

Compost – The controlled biological decomposition of organic material or the product resulting from such a process. OAR 340-90-010.

Conditionally exempt generator (CEG) –

Small businesses that generate small amounts of hazardous waste, as defined by state and federal law.

Consumption – The using of a resource, product or material. In the 2030 Regional Waste Plan, “consumption” typically refers to the stage in the life cycle of a product where it is acquired and used, following production but prior to end-of-life management. However, “consumption” in the context of the consumption-based greenhouse gas emissions inventory has a slightly different meaning, referring to the purchase of goods and services by households and governments, as well as business purchases that are classified as capital or inventory formation (economic final demand).

Consumption-based greenhouse gas emissions inventory – An estimate of the quantity of greenhouse gases contributing to climate change that are associated with consumption (economic final demand). A consumption-based inventory is sometimes contrasted with a territorial inventory. A territorial inventory estimates the emissions that physically originate within a community (e.g., Oregon). In contrast, many of Oregon’s consumption-based emissions occur in other states and countries, in the course of producing goods and services for consumption in Oregon.

Contaminants – Items found in the mixed recycling bin that are not recyclable curbside.

Culturally responsive services – Services that have been adapted to maximize the respect of and relevance to the beliefs, practices, culture and linguistic needs of diverse consumer populations and communities. Cultural responsiveness thus requires knowledge and capacity at different levels of intervention:

systemic, organizational, professional and individual. Adapted from Protocol for Culturally Responsive Organizations 2014, Curry-Stevens, Reyes and the Coalition of Communities of Color).

Culture – A social system of meaning and custom that is developed by a group of people to assure its adaptation and survival. These groups are distinguished by a set of unspoken rules that shape values, beliefs, habits, patterns of thinking, behaviors and styles of communication. Maguire, John, Sally Leiderman, and John Egerton (2000). A Community Builder's Tool Kit – 15 Tools for Creating Healthy, Productive, Interracial/Multicultural Communities. Claremont, CA: The Institute for Democratic Renewal and The Project Change Anti-Racism Initiative.

Curbside collection – Programs where recyclable materials are collected at the curb for single-family units and at onsite depots for multi-family units.

Diversity – The variance or difference amongst people. This variance includes race, ethnicity, gender, age, religion, nationality, language preference, socioeconomic status, disability, sexual orientation, gender identity and others. These differences are tied to a variety of other aspects of diversity such as experience, work styles, life experience, education, beliefs and ideas. Honoring these differences while upholding our value for respect is central to our diversity philosophy. Metro (2012). Diversity Action Plan.

End-of-life – The point at which a product or material is no longer useful to the person possessing it and is either discarded or abandoned.

End-use markets – Outlets for materials such as post-consumer paper, which are manufactured into a finished product or materials such as scrap tires that are incinerated to recover energy.

Equity – Metro's working definition of equity reads: "Our region is stronger when all individuals and communities benefit from quality jobs, living wages, a strong economy, stable and affordable housing, safe and reliable transportation, clean air and water, a healthy environment and sustainable resources that enhance our quality of life."

We share a responsibility as individuals within a community and communities within a region. Our future depends on the success of all, but avoidable inequities in the utilization of resources and opportunities prevent us from realizing our full potential.

Our region's population is growing and changing. Metro is committed with its programs, policies and services to create conditions which allow everyone to participate and enjoy the benefits of making this a great place today and for generations to come." Metro's Equity Strategy Advisory Committee (2014).

Extended Producer Responsibility – A mandatory type of product stewardship that includes, at a minimum, the requirement that the manufacturer's responsibility for its product extends to post-consumer management of that product and its packaging. There are two related features of EPR policy: (1) shifting financial and management responsibility, with government oversight, upstream to the manufacturer and away from the public sector; and (2) providing incentives to manufacturers to incorporate environmental considerations into the design of their products and packaging.

Product Stewardship Institute.

Franchise – The authority given by a local government (including Metro) to operate a solid waste and recycling collection service, disposal site, processing facility, transfer station or resource recovery facility. Often includes the establishment of rates by the local government.

Garbage – A general term for all products and materials discarded and intended for disposal.

Generator – A person who last uses a material and makes it available for disposal or recycling. OAR 340- 90-010.

Good Neighbor Agreement - Negotiated agreements between an industry operator with local communities to alleviate negative environmental and public health impacts associated with industry operations. Adapted from: "Evaluating the use of good neighbor agreements in environmental and community protection," 2004. University of Colorado Law School.

Hauler – The private company that provides collection services.

Historically marginalized – A limited term that refers to groups who have been denied access and/or suffered past institutional discrimination in the United States and, according to the Census and other federal measuring tools, includes African Americans, Asian Americans, Hispanics or Chicanos/ Latinos and Native Americans. This is revealed by an imbalance in the representation of different groups in common pursuits such as education, jobs, housing, etc., resulting in marginalization for some groups and individuals and not for others, relative to the number of individuals who are members of the population involved.

Other groups in the United States have been marginalized and are currently

underrepresented. These groups may include but are not limited to other ethnicities, adult learners, veterans, people with disabilities, lesbian, gay, bisexual and transgender individuals, different religious groups and different economic backgrounds. University of California, Berkeley (2015). Berkeley Diversity – Glossary of Terms.

Household hazardous waste (HHW) or hazardous waste – Any discarded, useless or unwanted chemical materials or products that are or may be hazardous or toxic to the public or the environment and are commonly used in or around households. Residential waste that is ignitable, corrosive, reactive, or toxic. Examples include solvents, pesticides, cleaners, and paints.

Inclusion - Inclusion refers to the degree to which diverse individuals are able to participate fully in the decision-making process within an organization or group. While a truly “inclusive” group is necessarily diverse, a “diverse” group may or may not be “inclusive.” Metro (2012). Diversity Action Plan.

Local governments – For the purposes of this document, a local government is defined as a city or county within the Metro boundary. Metro is also a local government.

Low income – A term typically defined for a person or family based on annual median income and household size. The definition of what a low income is varies across federal and state agencies and the different programs they administer, such as housing and food assistance programs. The 2015 Equity Baseline Report produced for Metro recommends defining low income as having an income at or below 60% of the Portland metropolitan area's median family income. Whenever this standard is not possible to use, the report recommends defining low income as being at or below 200% the federal poverty level, which

is a measure of income issued every year by the U.S. Department of Health and Human Services. From Equity Baseline Workgroup (215), Equity Baseline Report. Part 1: A Framework for Regional Equity.

Low-income populations – People, families, households and neighborhoods with low average incomes. Because of current socioeconomic status patterns, there is overlap between low-income populations and communities of color. However, a focus on low-income individuals/households does not substitute for a racial/ethnic justice focus.

Material recovery facility (MRF) – A solid waste management facility that separates materials for the purposes of recycling from an incoming, source-separated or mixed solid waste stream.

Material recovery or recovery – A type of resource recovery that is limited to manual or mechanical methods of obtaining material from solid waste that still has useful physical or chemical properties and can be reused, recycled, or composted for some purpose. Material recovery includes obtaining material from solid waste that is used in the preparation of fuel, but excludes the extraction of heat content or other forms of energy from the material. Metro Code 5.00.010.

Materials management – An approach to reduce environmental impacts by managing materials through all stages of their life. Materials management identifies impacts and actions across the full cycle of materials and products as they move through the economy—from raw material extraction to product design and manufacture, transport, consumption, use, reuse, recycling and disposal.

Mixed waste – Solid waste containing a variety of recyclable and nonrecyclable material.

Multifamily – Apartment and condominium buildings with five or more units; may also include retirement communities, dormitories, moorages and mobile home parks.

Non-putrescible waste – Commercial, residential or industrial solid waste that does not contain food wastes or other putrescible wastes. Non-putrescible mixed solid waste (also called dry waste) includes only waste that does not require disposal at a municipal solid waste landfill (also referred to as a general purpose landfill), as that term is defined by the Oregon Administrative Rules. This category of waste excludes source-separated recyclables.

Product stewardship – The act of minimizing the health, safety, environmental and social impacts of a product and its packaging throughout all lifecycle stages, while also maximizing economic benefits.

The manufacturer, or producer, of the product has the greatest ability to minimize adverse impacts, but other stakeholders, such as suppliers, retailers and consumers, also play a role. Stewardship can be either voluntary or required by law. Product Stewardship Institute.

Putrescible waste – Solid waste (other than uncontaminated or only slightly contaminated cardboard and paper products) containing organic material that can be rapidly decomposed by microorganisms, and which may give rise to foul-smelling, offensive products during such decomposition or which is capable of attracting or providing food for birds and potential disease vectors such as rodents and flies.

Race – A social construct that artificially divides people into distinct groups based on characteristics such as physical appearance (particularly color), ancestral heritage, cultural

affiliation, cultural history, ethnic classification and the social, economic and political needs of a society at a given period of time. Racial categories subsume ethnic groups. Maurianne Adams, Lee Anne Bell and Pat Griffin, editors. *Teaching for Diversity and Social Justice: A Sourcebook*. New York: Routledge.

Racial equity – When race can no longer be used to predict life outcomes and outcomes for all groups are improved. Adapted from Government Alliance on Race and Equity (2015). *Advancing racial equity and transforming government: A resource guide to put ideas into action*.

Recovery – See material recovery.

Recovery rate – The percent of total solid waste generated that is recovered from the municipal solid waste stream.

Recyclable material – Recyclable material means material that still has or retains useful physical, chemical or biological properties after serving its original purpose(s) or function(s), and that can be reused, recycled, or composted for the same or other purpose(s). Metro Code 5.00.010.

Recycling – Any process by which solid waste materials are transformed into new products in such a manner that the original products may lose their identity. OAR 340-90-010, ORS 459.005.

Reuse – The return of a commodity into the economic stream for use in the same kind of application as before, without change in its identity. OAR 340-90-010, ORS 459.005.

Service level - The volume of garbage, mixed recycling and glass recycling service provided to single-family, multifamily or commercial sites. In some cases, it also includes yard debris and food waste collection services.

Signage - Signage refers to stickers, decals, posters and signs posted on bins or in collection areas that directs users on how, or what, to place in the bins.

Solid waste - All putrescible and non-putrescible wastes, including without limitation garbage, rubbish, refuse, ashes, waste paper and cardboard; discarded or abandoned vehicles or parts thereof; sewage sludge, septic tank and cesspool pumpings or other sludge; commercial, industrial, demolition and construction waste; discarded home and industrial appliances; asphalt, broken concrete and bricks; manure, vegetable or animal solid and semi-solid wastes, dead animals; infectious waste; and other such wastes, including without limitation cleanup materials, commingled recyclable material, petroleum contaminated soil, special waste, source-separated recyclable material, land clearing debris and yard debris. This term does not include: (1) Hazardous wastes; (2) Radioactive wastes; (3) Materials used for fertilizer, soil conditioning, humus restoration or for other productive purposes or which are salvageable for these purposes and are used on land in agricultural operations and the growing or harvesting of crops and the raising of fowls or animals, provided the materials are used at or below agronomic application rates; or (4) Explosives. Metro Code 5.00.010.

Solid waste management – Prevention or reduction of solid waste; management of the storage, collection, transportation, treatment, utilization, processing and final disposal of solid waste; recycling, reuse and material or energy recovery from solid waste; and facilities necessary or convenient to such activities ORS 459.005. Also see “Waste reduction hierarchy.”

Source-separated material – Material that has been kept from being mixed with solid waste by the generator in order to reuse or recycle that material.

Sustainable, sustainability, sustainable practices – Using, developing and protecting resources in a manner that enables people to meet current needs and provides that future generations can also meet future needs, from the joint perspective of environmental, economic and community objectives. ORS 184.421(4).

Waste generator types are defined as follows:

- Commercially-hauled residential waste – generated from single- and multifamily housing units and hauled to disposal facilities in rear, side or front loaders, drop boxes or self-dumping trucks.
- Self-hauled residential waste – generated from single- and multifamily housing units and hauled to disposal facilities in autos, vans, pickup trucks and trailers attached to small vehicles.
- Business waste – generated from retail and wholesale businesses, offices, food and lodging businesses, food stores, education institutions and service-related businesses.
- Industrial waste – generated from manufacturing businesses, the construction and demolition industry (but not loads containing construction waste materials), agriculture and other industrial businesses.
- Construction and demolition waste – generated from residential, business and industrial sources containing mostly bricks, concrete, gypsum wallboard, land clearing debris, roofing and tarpaper, wood, insulation and other building materials.

Waste prevention – Reducing the amount of solid waste generated or resources used, without increasing toxicity, in the design, manufacture, purchase or use of products or packaging. Waste prevention does not include recycling or composting.

Waste reduction – A term used to encompass waste prevention, reuse and recovery; all practices that either prevent the generation of waste or divert it from landfill disposal.

Waste reduction hierarchy – An established state priority for managing solid waste in order to conserve energy and natural resources. The priority methods are as follows: reduce, reuse, recycle, compost, recover (energy), landfill. ORS 459.015.

Waste stream – A term describing the total flow of solid waste from homes, businesses, institutions and manufacturing plants that must be recycled, burned or disposed of in landfills; or any segment thereof, such as the “residential waste stream” or the “recyclable waste stream.”

Wasteshed – Wastesheds are defined in Oregon law and, for the most part, correspond to individual Oregon counties. In the case of the greater Portland area, however, the “Metro wasteshed” includes all of Clackamas, Multnomah and Washington counties.

Yard debris – Vegetative and woody material generated from residential property or from commercial landscaping activities. Includes grass clippings, leaves, hedge trimmings, stumps and similar vegetative waste. OAR 340-90-010.





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CITY OF TROUTDALE



STAFF REPORT

SUBJECT / ISSUE: An Ordinance to Adopt Text Amendments to Chapters 1, 2, 4, and to Establish Chapter 14 of the Troutdale Development Code

MEETING TYPE:

City Council Regular Mtg.

MEETING DATE:

December 11, 2018

STAFF MEMBERS:

Chris Damgen & Ryan Krueger, CFM

DEPARTMENT:

Planning

ACTION REQUIRED:

Ordinance - Adoption

PUBLIC HEARING:

Yes

ADVISORY COMMITTEE/COMMISSION

RECOMMENDATION:

Approval

Comments: Planning Commission (6-0)

STAFF RECOMMENDATION: Approval

EXHIBITS:

- A. All Submittal Materials from 11/27/18 Public Hearing
- B. Memo from Staff from 12/3/18
- C. TDC Chapter 1 “Highlighted” Draft
- D. TDC Chapter 14 “Highlighted” Draft
- E. Potential Amendments in Follow Up to P.C November 14, 2018 Public Hearing
- F. Snapshot of Flood Insurance Rate Map (Panel 217)

SUBJECT / ISSUE RELATES TO:

Council Goals Legislative Other (describe)

ISSUE / COUNCIL DECISION & DISCUSSION POINTS:

- ◆ Updates to the City’s Flood Insurance Rate Map (FIRM) and Flood Insurance Studies (FIS) requires flood management standards to be consistent with federal and state requirements.
- ◆ Review the approval criteria, and revisions presented and receive any testimony provided.
- ◆ Approve text amendment proposal as presented with the inclusion of amendments proposed in Exhibit E

Reviewed and Approved by City Manager:

A blue ink signature of the City Manager's name, which appears to be "R. Krueger".

BACKGROUND:

Please review the Planning Commission Staff Report (Exhibit A) for details.

Update from 11/27/18 Hearing – Staff has prepared items (Exhibits B-F) at the request of City Council. Please review in particular those items. Exhibit A remains the same.

PROS & CONS:

Pros:

- Brings City flood management standards to full compliance with federal, state, and Metro requirements
- More clearly spells out review procedures for permits and procedures for applicants and decision criteria for Staff and/or Planning Commission
- Provides certain breaks on submittal requirements on smaller applications that were previously not in existence with the code
- Development standards as proposed could lead to further discounts of flood insurance policies; not only for residents within special flood hazard areas but also for residents and business in all other areas of the City.

Cons:

- Any amendments to the draft as presented would require re-review by FEMA to ensure compliance
- Previous exceptions from permit requirements have largely been removed at FEMA's insistence, including but not limited to activities for the Sandy Drainage Improvement Company and the Multnomah County Drainage District
- The City is required to approve new standards in a quick fashion and have them be in effect by February 1, 2019 or risk suspension from the National Flood Insurance Program, jeopardizing insurance coverage for citizens and businesses.

Current Year Budget Impacts: Yes (describe) N/A

Future Fiscal Impacts: Yes (describe) N/A

City Attorney Approved: Yes N/A

Community Involvement Process: Yes (describe) N/A
Public Hearing



Exhibit A

12/11/18 Council Mtg. Item #6

CITY OF TROUTDALE

Community Development Department

NOTICE OF APPLICATION & PUBLIC HEARING

PROPOSED TEXT AMENDMENTS TO THE TROUTDALE DEVELOPMENT CODE

Date of Notice: October 9, 2018 | Date of Initial Public Hearing: November 14, 2018

Case File: 75-03 | Applicant: City of Troutdale

The City of Troutdale is hereby notifying all interested parties of a **proposed text amendment** to the Troutdale Development Code (TDC). The text amendments proposed would update floodplain management standards in order to comply with state/federal regulations and guidance. In addition, this action would also formally adopt an updated version of the Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) used in determining where those standards apply. The following chapters and sections of the TDC are proposed to amended:

- Section 1.040 (Definitions)
- Section 2.220 (Expiration of a Decision)
- Section 4.500 (Flood Management Area)
- Chapter 6 (Applications)

Text amendment applications are required to have public hearings and undergo a Type IV legislative procedure, in which the Troutdale Planning Commission may recommend to the Troutdale City Council, which is the decision-making entity. [TDC 2.065] Properties that are partially or fully located in Special Flood Hazard Areas (SFHA) in the current or proposed FIRM have been identified by the City as requiring formal notice in compliance with Oregon Revised Statute (ORS) 227.186 (Measure 56 notification requirements). This is a separate, general purpose notice.

An initial public hearing will be held at 7:00 p.m. on **Wednesday, November 14, 2018** in the Kellogg Room of the Troutdale Police Community Center, located at 234 SW Kendall Court. The public hearing will be conducted by the Troutdale Planning Commission. The Troutdale City Council is tentatively scheduled to hold hearings on this matter at 7 p.m. on Tuesday, November 27 and 7 p.m. on Tuesday, December 11, 2018 in the same location described above.

The location of the hearing is accessible to citizens with disabilities. If you require any other accommodation, please contact the Planning Division at planning@troutdaleoregon.gov or call 503-665-5175 at least one (1) week prior to the hearing.

Please contact Ryan Krueger CFM at planning@troutdaleoregon.gov for any questions or concerns about this matter.

EXHIBIT A

STAFF REPORT

TO: Troutdale Planning Commission

STAFF REPORT DATE: Wednesday, October 24, 2018

STAFF / APPLICANT: Ryan Krueger, CFM; Senior Planner & Floodplain Manager
Chris Damgen, Community Development Director

CASE FILE: **75-03 Text Amendments: Flood Management**

SUBJECT: **Proposed Text Amendments to the Troutdale Development Code**

APPLICABLE CRITERIA: TDC Sections 2.065 and 6.1100

HEARING DATE: Wednesday, November 14, 2018

RECOMMENDATION: Planning Commission to review proposal, open the public hearing, consider proposed testimony and amendments from all parties, and recommend approval of the proposed text amendments with any additional amendments proposed to the City Council.

1. BACKGROUND

The City of Troutdale is required to undergo a comprehensive update to its flood management standards. These standards are in need of update due to the following circumstances:

- The release of new Flood Insurance Rate Maps (FIRM) and Flood Insurance Studies (FIS) for Troutdale by the Federal Emergency Management Agency (FEMA), to go into effect on February 1, 2019. Communities that have updated FIRM and FIS must have flood management regulations that are in compliance with standards in the National Flood Insurance Program (NFIP) at the time of map and study adoption. A FEMA audit of the City's current regulations found areas where code amendments were necessary.
- The State of Oregon's Department of Land Conservation & Development (DLCD) performs "Community Assistance Visits" (CAV) which involve a review of a city's flood management regulations in coordination with both federal and state standards. In 2014, the results of a CAV compelled the City of Troutdale to update its regulations. The City and DLCD agreed to defer the update within six (6) months of an effective date for the adoption of new FIRM and FIS. This direction from DLCD was reaffirmed during the CAV in 2018.
- The City's voluntary participation in the NFIP Community Rating System (CRS).

2. REVIEW TIMELINE

The City was notified of the need to update flood management regulations in 2014 during the CAV performed by DLCD as described above. On August 1, 2018, FEMA and its contractor informed communities in the Sandy River basin that revised FIRM and FIS would be going into effect on February 1, 2019. This effectively started the clock for communities to update their regulations based on federal and state requirements in order to maintain compliance. Consistent with State law, properties directly affected received “Measure 56” notices (**Attachment I**).

3. IMPORTANT TERMINOLOGY

Floodplain management often uses terms or abbreviations that appear interchangeable, but carry distinct differences. Listed below are important terms that are used throughout the Code. Please consult with the definitions in Section 1.040 for the precise definition. **Attachment H** also provides a reference for typical abbreviated terms in floodplain management.

Special Flood Hazard Area (SFHA)

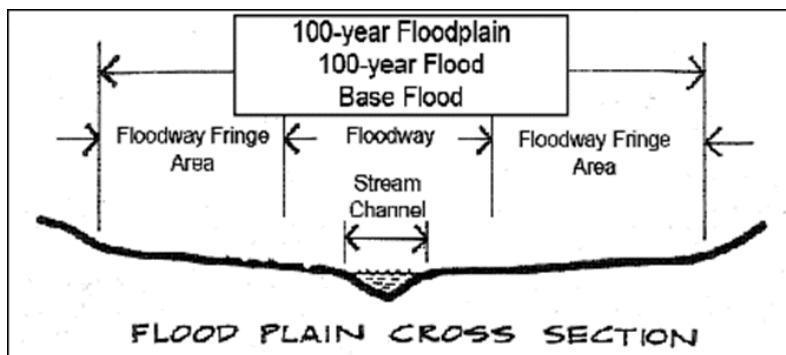
Also known as the “**100-year floodplain**”, these are areas that have an annual one percent (1%) chance of flooded conditions. In Troutdale, these areas are included in what is historically called the “**Flood Management Area**”. Properties and structures that are fully or partially affected by the SFHA are subject to the floodplain standards that are being reviewed.

Flood Zone

This is a term that is often misunderstood and misused. FEMA considers all properties to have flood zones. When most people think of flood zones, they are actually thinking of special flood hazard areas. Staff discourages the use of this term in a broad sense and utilizes it in conjunction with the actual flood zone assigned to a particular location (Flood Zone AE, Flood Zone X, etc.).

Floodway

This is a specific area within the Special Flood Hazard Area that has the greatest risk of regular flooding (see exhibit below). Floodways have more restrictive standards for development due to higher risk. See specifically Section 1.040.42 for the actual regulatory definition. See Sections 14.030, 14.045, and 14.050 for floodway-specific standards.



4. PROPOSED TEXT AMENDMENTS

The proposed text amendments would cover four (4) chapters in the Troutdale Development Code (TDC). This includes the transfer of flood management regulations from Section 4.500 to a new Chapter 14. Chapters 1, 2, and 4 are also amended.

Any required changes to the table of contents or sectional references in other chapters within the TDC would be made upon adoption and are deemed non-substantive. The following is a summary of the proposed amendments:

CHAPTER 1 – INTRODUCTORY PROVISIONS

There is one (1) section amendment proposed for this chapter:

1.040 Vegetation Corridor, Slope District, Water Quality and Flood Management Definitions

The definition section is updated with several new definitions and re-wordings, consistent with requirements and guidance from FEMA and DLCD. Please see **Attachment B** for the “clean” draft version and **Attachment F** for the “red-line” version.

CHAPTER 2 – PROCEDURES FOR DECISION-MAKING

There is one (1) section amendment proposed for this chapter.

2.220 Expiration of a Decision

The primary amendment is the inclusion of “flood development” permit land use decisions, which are to have a 180 day expiration period if no construction is occurring.

The additional amendments are the alphabetizing of the decisions currently listed so they are not listed without a specific sub-section reference. These amendments are non-substantive. Please see **Attachment C** for the “clean” draft version.

CHAPTER 4 – ZONING DISTRICT OVERLAYS

There is one (1) section amendment proposed for this chapter.

4.500 Flood Management Area

This section is proposed to be stricken in its entirety, with all flood management area regulations to be relocated to a new chapter in the TDC (Chapter 14). Section 4.500 would be reserved for a future zoning overlay district if needed. Please see **Attachment D** for the “clean” draft version.

CHAPTER 14 – FLOOD MANAGEMENT

This is a **proposed new chapter** that currently contains standards within Section 4.500. Because of the size of the section, coupled with the issue that the regulations contain not only overlay standards but also permitting and procedural standards, it was determined that a stand-alone chapter would be a more proper location within the Code.

Listed below is a **summary** of each section within the Chapter, along with a description of any major changes. Please also see ***Attachment E*** for the “clean” draft version (showing changes in a new Chapter 14) and ***Attachment G*** for the “red-line” version (showing changes in Section 4.500, the current location of standards).

14.005 Purpose (currently 4.510)

This section expands upon the provisions from the current TDC that flood management standards seek to govern. The purpose statement is generally the same.

14.010 Applicability (currently 4.512)

This section relocates the enumerated items needed for a flood development permit (shown in sub-section B) to another portion of the chapter where it is more logically located.

14.015 Severability (new)

This section is new and refers to the general severability standards in Chapter 17. This was requested by FEMA and DLCD.

14.020 Administration and Interpretation of FIRM Boundaries and Flood Management Area Standards (currently 4.513, [...] and Edge of Bankfull Stage or Two-Year Storm Level)

This section’s title was amended. Sub-section A has minor changes but now specifically calls out powers of determination and permit issuance. Sub-section B is new and effectively outlines the roles of the floodplain manager with enumerated responsibilities. The proposed Sub-section C is currently Sub-section B. The proposed Sub-section D is currently Sub-section C. Sub-section E is new and refers to inspections that can be made.

14.025 Uses within the Floodplain but Outside the Floodway and Outside Wetlands

(currently 4.514)

Sub-section A (Prohibited Uses) remains largely the same, with more specificity given to the prohibition of uncontained, outside storage areas of hazardous materials.

Sub-section B (Permitted Uses) is generally the same with a couple of notes.

- In Item 4, it refers to the City of Portland Plant List as a reference material. The City of Troutdale has no independent reference document for native plantings. In the current standards, a reference to a Metro Native Plant list is shown, but that document is not in existence. The Portland Plant List is the reference most often used in the area in lieu of other reference material and is the preferred standard for the draft.

- Item 13 is new, in that wildfire mitigation projects are now listed. This was a specific recommendation of the City's Hazard Mitigation Plan.

14.030 Uses within the Floodway or within Wetlands (currently 4.515)

Sub-section A (Prohibited Uses) remains largely the same, except greater clarity was given on vegetation removal, fill, or excavation with regards to wildfire mitigation projects and the addition of prohibiting uncontained outside storage areas of hazardous materials.

Sub-section B (Permitted Uses) remains largely the same, except it removes stream habitat restoration and vegetative removal/restoration projects that were currently permitted. Dead/dying trees may be removed.

14.035 Floodplain Development Permit (currently 4.516)

This section has been heavily modified, due mostly to FEMA, DLCD, and Metro requirements but also to eliminate ambiguity. The most basic change is the new title, which now refers to permits as Flood Development Permits (currently Flood Hazard Permits). In addition, the section better outlines submittal requirements and permit type differentiations based on the desired activity.

Sub-sections A and B are new and contain background and applicability information, respectively.

Sub-section C (currently A) list exemptions from permitting requirements. Several currently exempted activities were removed due to FEMA requirements. However, exemptions were maintained for the following activities:

- removal of refuse;
- vegetative removal/restoration work;
- emergency tree removal; placement of fill in residential zones (for certain circumstances);
- installation of certain fencing;
- certain landscape activities;
- preservation of wetlands; and
- certain activities performed by the Sandy Drainage Improvement Company (SDIC).

Sub-section D lists submission requirements for a Floodplain Development Permit. The list of items appears long, however much of the information in most circumstances can be readily obtained with assistance from the City. Ensuring these items are submitted also helps to keep record-keeping in order—an important task in Community Rating System scoring. Flood development permit applications would require the following:

- site plan
- topographic survey
- elevations of lowest floor (for structures)
- hydrology and soils report (for ground disturbance/vegetation removal that exposes soil)
- grading plan (if grading is occurring)

- vegetation report (if vegetation removal or similar impacts occur)
- “no-rise” certification and letter of map change (certain activities in floodway)
- building and structure elevations (if applicable)
- infrastructure exhibit
- floodplain or watercourse alterations (if applicable)
- any other permits issued (or applied for) related to project

Sub-section E is expanded from the current version and better outlines the need for Flood Development Permits, based on the typical decision-making system used elsewhere in the TDC.

A **Type I permit** (Staff decision) is required for construction, repair, and alteration of single-family residential dwellings and manufactured dwellings; emergency bank stabilizations; and wildfire mitigation projects. A **Type II permit** (Staff decision with notification) is required for any Type II site development reviews; new/expanded streets, bridges, railroads, or trestles; permanent bank stabilization or fill; balanced cut-and-fill; fill of wetlands; and similar activities. A **Type III permit** (Planning Commission decision with notification) is required for any uses requiring a Type III review, variances requested within Chapter 14, and proposed alterations of a watercourse.

Sub-section F attaches review criteria for decision-making to Flood Development Permits, similar to that of other procedures in the TDC.

Sub-section G includes mandatory conditions of approval that would be included in every approved Floodplain Development Permit. Item 3 is a mandatory addition from Metro Title 3 of the Functional Plan.

14.040 Development Standards (currently 4.517)

This section remains generally the same, with a few notable provisions that have been altered or added in this proposal. Some of the proposed changes are for Community Rating System bonus credits, which could allow the City to achieve a better score to further reduce flood insurance rates for those who carry flood insurance.

Sub-section G is more specific in maintaining flood storage capacity through the “balanced cut and fill” approach that is typical for developing in special flood hazard areas. Specifically, the following provisions are new:

- Development may not result in any increase in flood levels throughout the special flood hazard area (currently undefined on the extent that no increase situation could occur)
- **Item 5:** New buildings built on fill must have fill that is certified by a professional engineer, and offers protection from erosion and scour.
- Part of **Item 6:** Provides relief for some applications from requirements to submit Letters of Map Change
- **Item 7:** Allows for the City to outsource engineering analysis of flood storage capacity to consultants who have technical aptitude to review plans and advise on action.

Sub-section H (Residential Development) has proposed changes as described below..

- **Item 1:** Elevation Certificates to be required for all residential development (CRS bonus)
- **Item 2.d:** When possible, have two opposing side openings for enclosed areas for flood waters to pass through.
- **Item 3.f:** Flood vent opening placement standards now in place (avoids standing water).
- **Item 4:** Require elevation of non-elevated structures to two (2) feet above base flood elevation (currently one (1) foot above base flood elevation; CRS bonus)

Sub-section I (Manufactured Dwellings) and Sub-section J (Recreational Vehicles) have updated standards as required by FEMA.

Sub-section K (Nonresidential Construction) remains largely the same, though new standards are in place for those structures who utilize floodproofing techniques. Those standards include submitting a maintenance plan (Item 6) and an emergency action plan (Item 7) if required.

Sub-section R (Utilities and Roads) would require roads built in the floodplain to be built at or above base flood elevation for emergency access purposes. (CRS bonus)

Sub-section S requires additional state agency notification for applications with alterations or relocations of watercourses.

Sub-section U (Critical Facilities) contains the following changes of interest:

- The “definition” of critical facilities can be found in Section 1.040. The current version re-articulates the definition, so it is proposed to be removed.
- Critical facilities constructed in special flood hazard areas should have their lowest floor elevated to one foot above the 500-year flood level. (CRS bonus)

Sub-section V (Small Accessory Structures) is a new sub-section designed to provide relief for certain types of accessory structures under certain circumstances.

14.045 Floodways (new)

This section is new and provides clear guidance on approving development activity in the floodway, which is generally discouraged due to the hazards associated with these areas.

14.050 Before Regulatory Floodway (new)

This section is new and prohibits most development activities to occur in areas where a regulatory floodway has not been designated. This situation is likely not to occur in Troutdale but is required to be in the floodplain regulations for the City.

14.055 Flood Management Area Variance Procedures (currently 4.518)

This section has been expanded, primarily at the direction of FEMA and DLCD.

Sub-section A is new and provides guidance on requests to vary from elevation standards based on 11 considerations outlined therein.

Sub-section B allows for relief to be sought for historic structures, with three (3) approval criteria items to be considered.

Sub-section C prohibits variances from being issued within a designated floodway if increased flood levels during the base flood discharge would result.

Sub-section D is the “minimum necessary” clause for most variance applications.

Sub-section E (currently sub-section A) remains the same, with a process for determination now established elsewhere in the Chapter.

Sub-section F (currently sub-section B) remains the same.

Sub-section G (currently sub-section C) allows for conditions to be attached by the decision-making entity.

Sub-section H (currently sub-section D) remains the same but is also expanded to allow for nonresidential buildings in very limited circumstances to seek variances from floodproofing standards.

Sub-section I (currently sub-section E) is mostly the same, with a reference changes.

Sub-section J (currently sub-section F) is mostly the same with an additional code reference in decision criteria 3 and two new decision criteria:

- Item 5: Determination that project cannot be located outside SFHA and that any impacts have been minimized to the extent practicable.
- Item 6: Consistency with other laws and ordinances.

14.060 Prescribed Conditions for the Rehabilitation or Replacement of Pre-Existing Structures (currently 4.519)

This section remains mostly the same, with certain updates to references within the Code.

4. FACTS AND FINDINGS

TDC Section 2.065 specifies that the City Council is the decision-making body for text amendment applications after the Planning Commission forwards a recommendation for their consideration. Planning Commission is charged with making a finding for each applicable criterion point as listed in TDC Section 6.1120. Listed below are draft findings prepared by Staff for Planning Commission to review and amend as needed, upon the conclusion of the public hearing portion of the meeting and prior to a vote for a recommendation.

A. The proposed change to the Development Code does not conflict with applicable Comprehensive Land Use Plan goals or policies.

The Comprehensive Plan policies are in line with the proposed amendment. Goal 5, Policy 9 states that the City should “Notify and coordinate development proposals within natural resource areas with other local, state, and federal agencies”. Goal 7, Policy 1 speaks to “ensure that development in highly hazardous areas will be restricted or prohibited. Development may be allowed in areas of potential hazard if appropriate safeguards are taken in the design and construction to protect affected persons and property. Goal 7, Policy 3 seeks to restrict development within flood hazard areas to those uses which can be adequately floodproofed. The Code amendments are in line with these policies. **The criterion is met.**

B. The proposed change is consistent with the applicable Statewide Planning Goals.

The text amendments proposed are due in part to a State review of the existing regulations and required amendments to be made to come into compliance with Statewide Planning Goals in addition to federal standards. The state has performed a cursory review of the amendments as presented and have no additional comments. **The criterion is met.**

C. The proposed change is consistent with the applicable provisions of Metro Code.

The proposed text amendments are consistent with several Metro Code provisions and would be in conformance with Title 3 (Water Quality and Flood Management) of the Metro Growth Management Functional Plan. Of particular interest, the City was required to more specifically spell out required conditions of approval for flood development permits to ensure conformance with Title 3. **The criterion is met.**

D. Public need is best satisfied by this particular change.

Flood management is an exercise in protecting property and life from hazardous conditions. A primary responsibility of a local government is ensuring the safety of the community at large. The standards provide guidelines for responsible development in areas that are deemed to have flood risk, in order to minimize loss in case of a flood event. Furthermore, some of the regulations financially benefit the city residents, as they count toward a higher score on the Community Rating System, thus reducing insurance costs for all property owners. **The criterion is met.**

E. The change will not adversely affect the health, safety, and welfare of the community.

The existing flood management standards, along with the text amendments proposed are precisely in the spirit of protecting the health, safety, and general welfare of the community. do not weaken already existing standards that would suggest development activities would be more suitable in the flood management areas. The proposed amendments offer certain activities relief mechanisms in the forms of variances or in required submittal items, but in those situations, the applicants must demonstrate no negative impacts that would adversely affect public health, safety, or welfare. **The criterion is met.**

5. STAFF RECOMMENDATIONS

Staff offers the following recommendations for the conduct of the November 14, 2018 public hearing for the proposed amendments to the Troutdale Development Code.

- A. Conduct a public hearing and receive all public testimony relating to the proposal. Consider the public testimony and the facts and findings presented in the staff report and deliberate on policy issues, proposed amendments, and other issues identified by the Commission, Staff, other public entities, or the public.
- B. Recommend **approval** of the proposed text amendment application to the City Council for its consideration for its meeting and subsequent public hearings.

ATTACHMENTS

- A. This Staff Report
- B. TDC Section 1.040 (Definitions) – “Clean” Draft
- C. TDC Section 2.220 (Expiration of Decision) – “Clean” Draft
- D. TDC Section 4.500 (Flood Management Area) – “Clean” Draft
- E. TDC Chapter 14 – “Clean” Draft (formerly Section 4.500)
- F. TDC Section 1.040 (Definitions) – “Red-Line” Draft
- G. TDC Section 4.500 (Flood Management Area) – “Red-Line” Draft (to become Chapter 14)
- H. Common Floodplain Management Terms
- I. Measure 56 Notice & Map

1.040 Vegetation Corridor and Slope District, Water Quality, and Flood Management Definitions.

- .01 **100-Year Flood**. The flood that is equaled or exceeded once in one hundred (100) years on the average; equivalent to the one percent annual chance flood. Also called the Special Flood Hazard Area, Base Flood, and 100-year floodplain.
- .02 **Area of Shallow Flooding**. Means a designated AO, AH, AR/AO, AR/AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a one percent (1%) or greater annual chance of flooding to an average depth of one to three (1 - 3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.
- .03 **Area of Special Flood Hazard**. Means the land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the Flood Hazard Boundary Map (FHBM). After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".
- .04 **Bankfull Stage**. As defined in the Oregon Administrative Rules pertaining to removal/fill permits, the stage or elevation at which water overflows the natural banks of a stream or other waters of the state and begins to inundate upland areas. In the absence of physical evidence, the two-year recurrent flood elevation (storm level) may be used to approximate the bankfull stage. The bankfull stage is the starting point for measuring the width of a vegetation corridor from a protected water feature. In the absence of any data to establish the bankfull stage or two-year storm event, the starting point for measuring the vegetation corridor is determined by the following indicators:
- a. Water marks on fixed objects (vegetation, rocks, buildings, etc.);
 - b. Drift lines (deposited waterborne twigs, litter, etc.); or
 - c. Waterborne sediment deposits on the soil surface or fixed objects (vegetation, rocks, buildings, etc.)
- .05 **Base Flood**. A flood having a one percent (1%) chance of being equaled or exceeded in any given year.
- .06 **Base Flood Elevation**. The water surface elevation during the Base Flood in relation to a specified datum. The Base Flood Elevation (BFE) is depicted on the Flood Insurance Rate Map to the nearest foot and in the Flood Insurance Study to the nearest one-tenth (0.1) foot. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the

Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Manager or designee is authorized through Section 14.020 to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas and the associated Base Flood Elevation as part of reviewing development proposals that affect the 100-year Floodplain. Such information shall be used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps.

- .07 **Basement**. Any area of the building having its floor subgrade (below ground level) on all sides.
- .08 **Below-Grade Crawl Space**. Means an enclosed area below the base flood elevation in which the interior grade is not more than two feet below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed four (4) feet at any point.
- .09 **Breakaway Wall**. Means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.
- .10 **Conservation Easement**. An easement applied to environmentally sensitive lands including, but not limited to, lands identified as hillsides, wetlands, floodplains, and floodways. The field verification shall be done by a licensed surveyor, engineer, hydrologist, or any other licensed specialist in the fields of engineering, hydrology, or botany. A conservation easement prohibits most forms of development and assures that native vegetation will be maintained or enhanced. Conservation easements usually affect privately owned land and are enforceable by the City. Trails and limited public facilities may be permitted under carefully controlled conditions within conservation easements.
- .11 **Construction, Start of**. (For other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the

building.

- .12 **Critical Facility.** A facility that is critical for the health and welfare of the population and is especially important to be located above the Base Flood Elevation following hazard events. The following is the list of Critical Facilities for the purposes of Chapter 14:
- a. Hospitals and other medical facilities having surgery and emergency treatment areas;
 - b. Fire and police stations;
 - c. Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures. These tanks or other structures do not include City water distribution facilities;
 - d. Emergency vehicle shelters and garages;
 - e. Structures and equipment in emergency-preparedness centers;
 - f. Standby power generating equipment for essential facilities;
 - g. Structures and equipment in government communication centers and other facilities required for emergency response; and
 - h. Other facilities as determined by the Floodplain Manager or designee.

Some types of facilities may be critical to a community, but require location within or partially within Special Flood Hazard Areas because of the nature of the facilities.

- .13 **Debris.** Debris includes discarded manmade objects and may include tires, vehicles, litter, scrap metal, construction waste, lumber, plastic, or styrofoam. Debris does not include objects necessary to a use allowed by this Code, or ornamental and recreational structures. Debris does not include existing natural plant materials or natural plant materials which are left after flooding, downed or standing dead trees, or trees which have fallen into protected water features.
- .14 **Department of Environmental Quality (DEQ) Water Quality Standards.** State of Oregon DEQ water quality standards are the numerical criteria or narrative condition needed in order to protect an identified beneficial use.
- .15 **Design Flood Elevation.** The elevation of the 100-year storm as defined in the Federal Emergency Management Agency Flood Insurance Studies or, in areas without Federal Emergency Management Agency floodplains, the elevation of the 25-year storm or the edge of mapped flood-prone soils or similar methodologies.

- .16 **Developer.** The owners of property, their agents or contractors, or their successors and assigns, who have undertaken or are proposing development which is regulated by Sections 4.300, 5.600, 5.700, and Chapter 14 of this Code.
- .17 **Development.** Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. 
- .18 **Digital Flood Insurance Rate Map.** Depicts flood risk and federal flood zones and flood risk information. The Digital Flood Insurance Rate Map (DFIRM) presents the flood risk information in a format suitable for electronic mapping applications.
- .19 **Disturb.** Any manmade changes to the existing physical status of the land which are made in connection with development.
- .20 **Elevated Building.** Means for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.
- .21 **Elevation Certificate.** A form supplied by the Federal Emergency Management Agency (FEMA) and used to document the lowest floor elevation of a building.
- .22 **Emergency.** Any manmade or natural event or circumstance causing or threatening loss of life, injury to person or property, and includes, but is not limited to, fire, explosion, flood, severe weather, drought, earthquake, volcanic activity, spills or releases of oil or hazardous material, contamination, utility or transportation disruptions, and disease.
- .23 **Engineer.** A registered professional engineer licensed by the State of Oregon.
- .24 **Enhancement.** The process of improving upon the natural functions and/or values of an area or feature which has been degraded by human activity. Enhancement activities may or may not return the site to a pre-disturbance condition, but create/recreate processes and features that occur naturally.
- .25 **Erosion.** Erosion is the detachment and movement of soil particles, rock fragments, or other material, organic or inorganic, resulting from actions of water, wind, human, or animal activity.
- .26 **Erosion Hazard Zone.** The area adjacent to a stream or river that is at risk of bank erosion from stream flow or mass wasting, as designated on the communities FIRM. 
- .27 **Erosion Prevention and Sediment Control Plans.** Plan requirements are specified in the City of Troutdale's Construction Standards for Public Works Facilities.
- .28 **Erosion, Visible or Measurable.** Visible or measurable erosion includes, but is not limited to:

- a. Deposits of mud, dirt sediment, or similar material exceeding one-half cubic foot in volume on public or private streets, adjacent property, or onto the storm and surface water system, either by direct deposit, dropping discharge, or as a result of the action of erosion.
 - b. Evidence of concentrated flows of water over bare soils, turbid or sediment laden flows, or evidence of onsite erosion such as rivulets on bare soil slopes where the flow of water is not filtered or captured on the site.
 - c. Earth slides, mudflows, earth sloughing, or other earth movement that leaves the property.
- .29 **Excavation.** Any act by which soil or rock is cut into, dug, quarried, uncovered, removed, displaced, or relocated.
- .30 **Existing Building or Structure.** A structure for which the Start of Construction commenced before February 1, 2019.
- .31 **Federal Emergency Management Agency (FEMA).** The agency with the overall responsibility for administering the National Flood Insurance Program.
- .32 **Fill.** Any material such as, but not limited to, sand, soil, rock, gravel, clay, or mud that is placed on a site for the purposes of development or redevelopment.
- .33 **FIRM.** See Flood Insurance Rate Map.
- .34 **Flood or Flooding.** Means:
- a. A general and temporary condition of partial or complete inundation of normally dry land areas from:
 1. The overflow of inland or tidal waters.
 2. The unusual and rapid accumulation or runoff of surface waters from any source.
 3. Mudsides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
 - b. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high

water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.

- .35 **Flood Insurance Rate Map (FIRM)**. An official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community.
- .36 **Flood Insurance Study (FIS)**. Or flood elevation study means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.
- .37 **Flood Management Area (FLMA)**. All lands contained within the 100-year floodplain and floodway as shown on the Flood Insurance Rate Map, and the area of inundation for the February 1996 flood. In addition, all lands which have documented evidence of flooding.
- .38 **Floodplain**. As shown below in Figure 1 - Floodplain Cross Section, the area adjacent to a stream or river channel that is covered by water when the river or stream overflows its banks.
- .39 **Floodplain Development Permit**. Federally required permit required prior to construction and other development in any Special Flood Hazard Area (100-yr. Floodplain). See Section 14.035 of this Code.
- .40 **Floodplain Functions**. Hydrological and ecological functions including conveyance and temporary storage of floodwater, depositions of sediments outside of the channel, ground water recharge, filtering of pollutants, and reduction of floodwater velocity and erosive forces. Also included, but to a lesser extent in previously urbanized areas, are such functions as nutrient exchange, refuges, and feeding areas for fish.
- .41 **Floodplain, 100-Year**. As shown below in Figure 1 - Floodplain Cross Section, land area adjacent to a river, stream, or other water body that is subject to a one percent or greater chance of flooding in any given year. It consists of land ranging from that which is subject to annual flooding to that which has a one percent (1%) or greater chance of flooding in any given year. The 100-year Floodplain consists of the Floodway and the Floodway Fringe. The 100-year Floodplain is mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRMs) and is the area subject to Base Flood regulations. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Manager or designee is authorized through Section 14.020 to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals

that affect the 100-year Floodplain. Such information shall be used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps and these areas are also subject to Base Flood regulations. See Base Flood.

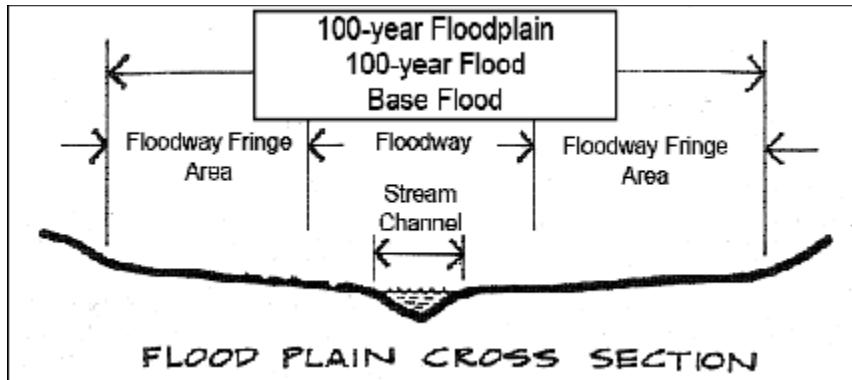


Figure 1 – Floodplain Cross Section

- .42 **Floodway (Regulatory Floodway).** Means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height..
- .43 **Flow-through Design.** Typically a structure that does not displace surface floodwater or hinder or obstruct the movement of surface floodwater.
- .44 **High Hazard Zone.** Lands within the furthest landward extent of the floodway and erosion hazard zone, as designated on the communities FIRM.
- .45 **Highest Adjacent Grade (HAG).** The highest natural elevation of the ground surface prior to construction, adjacent to the proposed walls of a structure. Refer to the Elevation Certificate, FEMA Form 81-31, for more information.
- .46 **Hydrodynamic Load.** Force of water in motion.
- .47 **Hydrostatic Load.** Force of water at rest.
- .48 **Invasive Non-native or Noxious Vegetation.** Plant species that are listed as nuisance plants or prohibited plants on the most recent Portland Plant List as adopted by the City of Portland by ordinance because they are plant species that have been introduced and, due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities.
- .49 **Joint Fill Permit/404 Removal/Fill Permit.** A permit issued jointly by the Oregon Department of State Lands and U.S. Army Corps of Engineers to allow, with conditions and mitigation, the removal or fill of wetlands determined to be of either local or state significance by the Oregon Department of State Lands.

- .50 **Letter of Map Change (LOMC)**. An official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and Flood Insurance Studies. LOMCs are issued in the following categories:
- a. Letter of Map Amendment (LOMA) - A revision based on technical data showing that a property was incorrectly included in a designated Special Flood Hazard Area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property is not located in a Special Flood Hazard Area.
 - b. Letter of Map Revision (LOMR) - A revision based on technical data showing, usually due to manmade changes, alterations to Federal Flood Zones, flood elevations floodplain and floodway delineations, and planimetric features. One common type of LOMR, a LOMR-F, is a determination that a structure has been elevated through the placement of fill above the Base Flood Elevation and is excluded from the Special Flood Hazard Area.
 - c. Conditional Letter of Map Revision (CLOMR) - A formal review and comment by FEMA as to whether a proposed project complies with the minimum National Flood Insurance Program floodplain management criteria. A CLOMR does NOT amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.
- .51 **Lowest Floor**. Means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor. Provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of CFR Sec. 60.3.
- .52 **Manufactured Dwelling**. Means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term “manufactured dwelling” does not include a “recreational vehicle.”
- .53 **Manufactured Dwelling Park or Subdivision**. Means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale
- .54 **Mean Sea Level**. For purposes of the National Flood Insurance Program, the North American Vertical Datum of 1988 or other Datum, to which Base Flood Elevations shown on a community's FIRM are referenced.
- .55 **Mitigation**. The reduction of adverse effects of a proposed project by considering, in this order:
- a. Avoiding the impact altogether by not taking a certain action or parts of an action;

- b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
 - c. Rectifying the impact by repairing, rehabilitating, or restoring the effected environment;
 - d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action by monitoring and taking appropriate measures; and
 - e. Compensating for the impact by replacing or providing comparable substitute water quality resource areas.
- .56 **Mulch.** Application of plant residue, netting, or other suitable materials to the land surface to conserve moisture, hold soil in place, and aid in establishing plant cover.
- .57 **NAVD 88.** The North American Vertical Datum of 1988 (NAVD 88) is the vertical control datum established in 1991 by the minimum-constraint adjustment of the Canadian-Mexican-U.S. leveling observations. This is the data used on FIRMs and in flood insurance studies adopted in 2009.
- .58 **NGVD 29.** “The National Geodetic Vertical Datum of 1929: The name, after May 10, 1973, of (the) Sea Level Datum of 1929.” (Vertical control datum established for vertical control in the United States by the general adjustment of 1929.) This is the datum used on FIRMs and in flood insurance studies prior to 2009.
- .59 **National Flood Insurance Program (NFIP).** A federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for state and community floodplain management regulations that reduce future flood damages.
- .60 **Native Vegetation or Native Plant.** Vegetation listed as a native plant on the most recent Portland Plant List as adopted by the City of Portland by ordinance and any other vegetation native to the Portland metropolitan area provided that it is not listed as a nuisance plant or a prohibited plant on the Portland Plant List.
- .61 **National Wetland Inventory (NWI) Map.** The City is mapped on the Camas and Washougal, Washington-Oregon wetland maps prepared by the U.S. Department of the Interior, Fish and Wildlife Service.
- .62 **New Construction.** A structure for which the Start of Construction commenced after February 1, 2019, and includes subsequent Substantial Improvements to the structure
- .63 **NPDES Permit.** The National Pollutant Discharge Elimination System 1200-C Permit is a State of Oregon Department of Environmental Quality permit that covers federal stormwater regulations as they pertain to construction activities in Oregon. The permit is

- administered by the City.
- .64 **ODFW Construction Standards**. The Oregon Department of Fish and Wildlife construction guidelines for building roads, bridges, and culverts, or any transportation structure within a waterway.
- .65 **One Percent Annual Chance Flood**. The flood that has a one percent (1%) chance of being equaled or exceeded on the average in any given year; equivalent to the 100-year flood.
- .66 **Open Space**. Land that is undeveloped and that is planned to remain so indefinitely. The term encompasses parks, forests, and farmland. It may also refer only to land zoned as being available to the public, including playgrounds, watershed preserves, and parks.
- .67 **Perennial Streams**. All primary and secondary perennial waterways mapped by the U.S. Geological Survey, having year-round flow.
- .68 **Practicable**. Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose.
- .69 **Pre-FIRM Structures**. Buildings that were built before the flood risk was known and identified on the community's FIRM.
- .70 **Protected Water Features, Primary**. Includes:
- a. Title 3 wetlands.
 - b. Rivers, streams (creeks or brooks) and drainages downstream from the point at which one hundred (100) acres or more are drained to that water feature (regardless of whether it carries year-round flow).
 - c. Streams carrying year-round flow.
 - d. Springs which feed streams and wetlands and have perennial (year-round) flow.
 - e. Natural lakes.
- .71 **Protected Water Features, Secondary**. Includes intermittent streams and seeps downstream of the point at which fifty (50) acres are drained and upstream of the point at which one hundred (100) acres are drained to that water feature.
- .72 **Restoration**. The process of returning a disturbed or altered area or feature to a previously existing natural condition. Restoration activities reestablish the structure, function, and/or diversity to that which occurred prior to impacts caused by human activity.
- .73 **Recreational Vehicle (RV)**. A vehicle which is:

- a. Built on a single chassis;
 - b. Four hundred (400) square feet or less when measured at the largest horizontal projection;
 - c. Designed to be self-propelled or permanently towable by a light duty truck; and
 - d. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- .74 **Resource**. A functioning natural system such as a wetland or stream.
- .75 **Riparian**. Those areas associated with streams, lakes, and wetlands where vegetation communities are predominately influenced by their association with water.
- .76 **Routine Repair and Maintenance**. Activities directed at preserving an existing allowed use or facility, or nonconforming use, without expanding the development footprint or site use.
- .77 **Sediment**. Any material that is in suspension, is being transported, or has been moved from its site of origin by water, wind, or gravity as a result of erosion.
- .78 **Site**. The lot, or contiguous lots, under the same ownership that are subject to a development permit or erosion control plan.
- .79 **Slope District**. Slopes of twenty-five percent (25%) or greater throughout the City that have a minimum horizontal distance of fifty (50) feet. Engineered slopes associated with public streets or roads are not included.
- .80 **Special Flood Hazard Area (SFHA)**. The land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM (Flood Hazard Boundary Map). After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term “special flood hazard area” is synonymous in meaning with the phrase “area of special flood hazard”.
- .81 **Statewide Planning Goal 5**. Oregon’s statewide planning goal that addresses open space, scenic and historic areas, and natural resources. The purpose of the goal is to conserve open space and protect natural and scenic resources.
- .82 **Statewide Planning Goal 6**. Oregon’s statewide planning goal that addresses air, water, and land resources quality to “maintain and improve the quality of the air, water, and land resources of the state” as implemented by the Land Conservation and Development

Commission (LCDC).

- .83 **Statewide Planning Goal 7.** Oregon's statewide planning goal that addresses areas subject to natural disasters and hazards to "protect life and property from natural disasters and hazards" as implemented by the Land Conservation and Development Commission.
- .84 **Stockpile.** Onsite storage of any soil, sand, gravel, clay, mud, debris, vegetation, refuse, or any other material, organic or inorganic, in a concentrated state.
- .85 **Stream.** A body of running water moving over the earth's surface in a channel or bed, such as a creek, rivulet, or river, that flows at least part of the year, including perennial and intermittent streams. Streams are dynamic in nature and their structure is maintained through build-up and loss of sediment.
- .86 **Stream Bank, Top of.** See Bankfull Stage.
- .87 **Structure.** Means, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. Structure, for insurance purposes, means:
- a. A building with two or more outside rigid walls and a fully secured roof that is affixed to a permanent site;
 - b. A manufactured dwelling; or
 - c. A travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws.
- For the latter purpose, structure does not mean a recreational vehicle or a park trailer or other similar vehicle, except as described in Section 1.040.87(c), or a gas or liquid storage tank.
- .88 **Substantial Damage.** Damage of any origin sustained by a structure located within the 100-year Floodplain, whereby the cost of restoring the structure to its prior condition would equal or exceed fifty percent (50%) of the structure's market value before the damage occurred.
- .89 **Substantial Improvement.** Means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds forty-nine percent (49%) of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:
- a. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified

- by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or,
- b. Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.
- .90 **Surface Water Management System**. All natural and constructed facilities used to regulate the quantity and quality of surface water, including drainage easements, culverts, storm drains, catch basins, drainage ditches, natural drainageways, stream corridors, rivers, ponds, wetlands, and impoundments.
- .91 **Title 3**. Title 3 is part of the Metro Urban Growth Management Functional Plan pertaining to water quality, flood management, and fish and wildlife conservation, and directly pertains to Statewide Planning Goals 5, Open Spaces, Scenic and Historic Areas, and Natural Resources; 6, Air, Water, and Land Resources Quality; and 7, Areas Subject to Natural Disasters and Hazards.
- .92 **Variance**. Means a grant of relief by a community from the terms of a floodplain management regulation.
- .93 **Vegetation, Approved**. Vegetation which typically does not require irrigation or fertilization because it is adapted to natural soil, water, and climatic conditions. The list of approved vegetation species is based on the most recent Portland Plant List as adopted by the City of Portland by ordinance, and is on file in the Community Development Department.
- .94 **Vegetation Corridor**. The undisturbed area between a development and a protected water feature as designated in Sections 4.316, Width of Vegetation Corridor, and 4.317, Method for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Code, or slopes of twenty-five percent (25%) or greater throughout the City, except engineered slopes associated with public streets or roads.
- .95 **Vegetation, Invasive, Non-Native, or Noxious**. Plant species that have been introduced and due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities, or which are not listed on the most recent Portland Plant List as adopted by the City of Portland by ordinance.
- .96 **Vegetation, Native**. Any vegetation native to the Portland Metropolitan Area or listed on the Portland Plant List as adopted by the City of Portland by ordinance.
- .97 **Water-dependent**. A structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.
- .98 **Water Features**. See Protected Water Features, primary and secondary.
- .99 **Water Quality Facility**. A created or constructed structure or drainageway that is

designed, constructed, and maintained to collect, filter, retain, or detain surface water runoff during and after a storm event for the purpose of stormwater management and water quality improvement. The facility may take on characteristics of a wetland, but it does not become a resource.

- .100 **Watershed**. A geographic unit defined by the flows of rainwater or snowmelt. All land in a watershed drains to a common outlet, such as a stream, lake, or wetland.
- .101 **Water Surface Elevation**. The height, in relation to a specific datum, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.
- .102 **Wetlands**. Areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands are those areas identified and delineated by qualified wetland specialists as set forth in the 1987 Corps of Engineers Wetland Delineation Manual.
 - a. Wetland determinations. The identification of an area as either wetland or non-wetland.
 - b. Wetlands, constructed. Wetlands developed as a water quality or quantity facility, subject to change and maintenance as such. These areas must be clearly defined and/or separated from naturally occurring or created wetlands.
 - c. Wetlands, created. Those wetlands developed in an area previously identified as a non-wetland to replace or mitigate wetland destruction or displacement. A created wetland shall be regulated and managed the same as an existing wetland.
 - d. Wetlands, Title 3. Wetlands of metropolitan concern as shown on the Metro Water Quality and Flood Management Overlay District Map and other wetlands not mapped but determined significant by the Oregon Department of State Lands, consistent with the criteria in Title 3, Section 7.C. of the Metro Urban Growth Management Functional Plan. Title 3 wetlands include created wetlands approved and monitored by the Oregon Department of State Lands and U.S. Army Corps of Engineers. Title 3 wetlands do not include artificially constructed and managed stormwater and water quality treatment facilities.

2.220 Expiration of a Decision.

A. Except as otherwise specifically provided in a specific decision or in this Code, a final decision on a Type I, II or III application made pursuant to this Code shall expire automatically on the following schedule unless the approval is enacted either through construction, establishment of use, or recordation of plat or survey within the specified time period.

1. No expiration date:

- a. Comprehensive Plan Text Amendment (6.100)
- b. Comprehensive Plan Map Amendment (6.200)
- c. Director's Interpretation (Section 6.400)
- d. Text Amendment (Section 6.1100)
- e. Vacation (Section 6.1200)
- f. Zoning Map Amendment (Section 6.1400)

2. Five (5) years from the effective date of decision where phasing of the development is proposed.

- a. Planned Unit Development (Section 6.700)
- b. Preliminary Subdivision (Section 7.030.B)

3. Two (2) years from the effective date of decision:

- a. Alteration to a Historic Landmark (Section 6.515.C.)
- b. Conditional Use (Section 6.300)
- c. Demolition or Relocation of a Historic Landmark (Section 6.515.D.)
- d. Expansion of a Non-Conforming Structure or Development (Section 6.615.C.)
- e. Expansion of a Non-Conforming Use - Major (Section 6.615.B.)
- f. Expansion of a Non-Conforming Use - Minor (Section 6.615.A.)
- g. Historic Landmark Designation (Section 6.515.A.)
- h. Planned Unit Development (Section 6.700), when there is no phasing to the development.
- i. Preliminary Partition (Section 7.030.A)
- j. Property Line Adjustment (Section 7.180)
- k. Removal of a Historic Landmark Designation (Section 6.515.B.)
- l. Site Development Review (Section 6.900)
- m. Variance (Section 6.1300)

4. One (1) year from the effective date of the decision:

- a. Temporary Structure (Section 6.1000)

5. One hundred eighty (180) days from the effective date of the decision:
 - a. Floodplain Development (Section 14.035), if construction has not started.
 6. Any final decision that is not listed herein shall expire within two (2) years from the effective date of the decision.
- B. The effective date of the decision for Type I, Type II, or Type III applications shall be the date that the signed land use order is dated and mailed, unless appealed. If a Type I, Type II, or Type III application is appealed, the effective date of the decision shall be the date of the appellate decision making authority's signed land use order is dated and mailed. The effective date of decision for a Type IV application is thirty (30) days after the Mayor signs the ordinance, unless an emergency is declared in which case the ordinance is effective immediately upon signature of the Mayor.
- C. A decision shall expire according to Section 2.220.A. unless one of the following occurs prior to the date of expiration:
1. An application for an extension is filed pursuant to Section 2.225; or
 2. The development authorized by the decision has commenced as defined herein.
 - a. The use of the subject property has changed as allowed by the approval; or
 - b. In the case of development requiring construction, a construction permit has been issued and substantial construction pursuant thereto has taken place.
 - c. The approval time begins from the effective date of a decision. Appeal of a decision to LUBA does not extend the time.

2.225 Extension of a Decision.

- A. An application to extend the expiration date of a decision made pursuant to this Code may be filed only before the decision expires as provided in Section 2.220.
- B. A land use decision may be extended no more than two (2) times.
- C. Requests for extension of a decision shall be as follows:
 1. The first request for extension shall follow the Type II process.
 2. The second request for extension shall follow the Type III process.
- D. Extension requests shall provide mailed public notice to those parties identified in Section 2.085. In addition, the notice shall be mailed to the parties of record contained in the initial land use decision and any prior extension of time decision.

4.500 FLOOD MANAGEMENT AREA**FLMA**

4.500 Repeal. Ordinance 851 repealed this Section in its entirety and relocated the Flood Management Area standards previously contained in this Section to Chapter 14 of this Code.

Chapter 14 – Flood Management

14.005 **Purpose.** Without establishing any priority, the purpose of this Chapter is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions or degradation of water quality in specific areas by provisions designed to:

- A. Protect human life, health, and property in areas subject to periodic flooding;
- B. Implement the Floodplain requirements of Statewide Planning Goal 7 - which relates to areas subject to natural disasters and hazards;
- C. Through floodplain regulation, contribute to the properly functioning condition of streams and rivers and address, in part, the water quality aspects of Statewide Planning Goal 6;
- D. Implement requirements for the City's participation in the National Flood Insurance Program, and voluntary participation in the Community Rating System;
- E. Implement the actions derived from the Multnomah County Hazard Mitigation Plan to minimize the risk of natural hazards, such as flooding, to people and property;
- F. Ensure continuity of City services, access to City facilities, and minimal prolonged business interruptions during times of flood;
- G. Manage stormwater drainage in a manner that:
 - 1. Maintains the properly functioning conditions of waterways;
 - 2. Provides for the conveyance and temporary storage of floodwater;
 - 3. Reduces floodwater velocity;
 - 4. Facilitates sediment deposition in the floodplain;
 - 5. Provides an opportunity for groundwater recharge; and
 - 6. Promotes other stormwater and floodplain functions.

These provisions are also intended to minimize maintenance costs, eliminate potential hazards before they occur, and protect properties and persons adjacent to drainageways and to other natural hazard areas;

- H. Minimize damage to public facilities and utilities, such as water purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets, and bridges located in floodplains;

- I. Help maintain a stable tax base by providing for sound use and development;
- J. Ensure that potential buyers are notified that property is in an area of special flood hazard;
- K. Compel those who occupy the areas of special flood hazard assume responsibility for their actions;
- L. Maintain and improve water quality;
- M. Minimize erosion and loss of native vegetation;
- N. Maintain wetlands, including swamps, marshes, bogs, and similar areas within the City, because wetlands help to maintain water quality and flood storage capacities;
- O. Avoid any increase in base flood elevations as a result of development;
- P. Minimize expenditure of public money for costly flood control projects;
- Q. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- R. Reduce flood losses and maintain water quality. In order to accomplish its purpose, this Chapter includes methods and provisions to:
 - 1. Require that development that is vulnerable to floods, including buildings, structures, and facilities necessary for the general health, safety and welfare of citizens, be protected against flood damage at the time of initial construction;
 - 2. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;
 - 3. Control filling, grading, dredging and other development which may increase flood damage or erosion;
 - 4. Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or that may increase flood hazards on other lands;
 - 5. Preserve and restore natural floodplains, stream channels, and natural protective barriers which carry and store flood waters, and;
 - 6. Coordinate with and supplement provisions of Oregon Building Codes.
- S. To advance these purposes, where not required, creation of open space tracts is encouraged within areas designated as natural hazards on the Comprehensive Plan and official zoning maps.

14.010 Applicability.

- A. These provisions shall apply to public and private properties in the one percent (1%) annual chance of flood floodplain (100-year floodplain or Special Flood Hazard Area) as mapped by the Federal Insurance Administrator of rivers and local streams within the planning jurisdiction of the City of Troutdale, which includes land in unincorporated Multnomah County within the City's Urban Planning Area.
- B. The areas of special flood hazard identified by the Federal Insurance Administrator in a scientific and engineering report entitled "The Flood Insurance Study for Multnomah County, Oregon and Incorporated Areas of Multnomah County", with accompanying Flood Insurance Rate Maps, are hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study is on file at the Community Development Department located at 2200 SW 18th Way, Troutdale, OR 97060 (storage location subject to change, consult the Floodplain Manager for current file storage location). Metro, a regional metropolitan planning agency representing portions of Clackamas, Multnomah, and Washington Counties, mapped the flood hazard areas from areas inundated by flooding in 1996 on the Title 3 map. The Title 3 maps are adopted for reference only. Not every Special Flood Hazard Area has been mapped by the Federal Insurance Agency through the Flood Insurance Study and Flood Insurance Rate Maps cited above. The Floodplain Administrator or designee is authorized through Sections 14.020 to obtain from applicants the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals that affect the floodplain. Once approved by the Floodplain Administrator or designee, such information shall be incorporated into the Natural Hazards Map and used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps cited above to ensure consistency with the floodplain regulations contained in this Chapter. Contested base flood elevations are to be reviewed under the provisions of Subsection 14.020.D of this Chapter. The City will keep a record of all surveys, delineations, and any Letter of Map Change (LOMC) approved by the Federal Emergency Management Agency, as revisions to the local copy of the Title 3 map. The City will submit this information to Metro for future updates of the Title 3 map.
- C. Warning and Disclaimer of Liability. The degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This Code does not imply that land or uses will be free from flooding or flood damage. This Code shall not create liability on the part of the City, any officer or employee thereof, or the Federal Insurance Administrator, for any damages that result from reliance on this Code or any administrative decision lawfully made hereunder.

14.015 Severability. The standards of this Chapter are subject to the severability standards as described in Section 17.100 of this Code.

14.020 Administration and Interpretation of Flood Insurance Rate Map Boundaries and Flood Management Area Standards.

- A. The Community Development Director shall designate a Floodplain Manager to be the Local Administrator of this Chapter. The Floodplain Manager shall implement the provisions and standards of the National Flood Insurance Program, the standards of this Chapter, and make interpretations, where needed, including determinations regarding the exact location of the boundaries of the Special Flood Hazard Area (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) by granting or denying Floodplain Development Permit applications in accordance with its provisions. In the interpretation and application of this Chapter, all provisions shall be:
 1. Considered as minimum requirements;
 2. Liberally construed in favor of the governing body;
 3. Judged by established historical facts of flooding as known by, or made known to, the governing body;
 4. Deemed neither to limit nor repeal any other powers granted under State statutes; and
 5. Defined in Section 1.040 of this Code.
- B. Duties and Responsibilities of the Floodplain Manager. Duties of the Floodplain Manager shall include, but not be limited to:
 1. Review all Floodplain Development Permits to determine that the permit requirements of this ordinance have been satisfied.
 2. Review all Floodplain Development Permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.
 3. Review all Floodplain Development Permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of this Chapter are met.
 4. When base flood elevation data has not been provided (A Zones) in accordance with Section 14.010 of this Chapter, the Floodplain Manager shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer Section 14.040 of this Chapter.
 5. Where base flood elevation data is provided through the Flood Insurance Study, FIRM, or required as in Section 14.020.C, obtain and record the actual elevation

(in relation to mean sea level) of the lowest floor (including basements and below-grade crawlspaces) of all new or substantially improved structures, and whether or not the structure contains a basement.

6. For all new or substantially improved floodproofed structures where base flood elevation data is provided through the Flood Insurance Study, FIRM, or as required in Section 14.020.C, the administrator shall:
 - a. Verify and record the actual elevation (in relation to mean sea level), and
 - b. Maintain the floodproofing certifications required in Section 14.040 of this Chapter.
7. Maintain for public inspection all records pertaining to the provisions of this ordinance.
8. Notify adjacent communities, the Oregon Department of Land Conservation and Development, and other appropriate state and federal agencies, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administrator.
9. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.
10. Notify FEMA within six (6) months of project completion when an applicant had obtained a Conditional Letter of Map Change from FEMA, or when development altered a watercourse, modified floodplain boundaries, or modified Base Flood Elevations. This notification shall be provided as a Letter of Map Change. The property owner shall be responsible for preparing technical data to support the Letter of Map Change application and paying any processing or application fees to FEMA. The Floodplain Manager shall be under no obligation to sign the Community Acknowledgement Form, which is part of the Conditional Letter of Map Change and Letter of Map Change application, until the applicant demonstrates that the project will or has met the requirements of this Code and all applicable State and Federal laws.
11. Report to FEMA on each development permit issued in the SFHA, including:
 - a. Amount of fill or structural displacement of flood storage, and the amount (in volume and area) of compensatory storage provided;
 - b. Amount of new impervious surface and types and amounts of compensatory mitigation provided;
 - c. The number of trees equal to or greater than six (6) inches in diameter at

- breast height removed, and the types and amounts of compensatory mitigation provided;
- d. The area in which clearing and/or grading occurred;
 - e. For any project that disconnects or reconnects land to the floodplain, the type of project and amount of land disconnected or reconnected; and
 - f. Location of the project and of the corresponding mitigation.
14. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 14.055 of this Chapter.
- C. Use of Other Base Flood Data for Permit Review. When base flood elevation data is not available through the Flood Insurance Study, FIRM, or has not been provided in accordance with Section 14.010 of this Chapter, the City may obtain, review, and utilize any reasonable base flood elevation and floodway data available from a federal, state, or other source, in order to assure that proposed development will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two (2) feet above grade in these zones may result in higher insurance rates.
- D. Contested Boundaries. A person contesting the location of the boundary has the opportunity to submit a Letter of Map Change (LOMC) directly to the Federal Emergency Management Agency to change the Flood Insurance Rate Map mapping of their property. If a land use application is submitted before a LOMC is approved by the Federal Emergency Management Agency, the application will be processed under the standards of this Chapter.
- E. Inspections. The Floodplain Manager shall inspect development that is subject to the permit requirements of this Chapter, including buildings and structures exempt from the Building Code. The floodplain administrator shall inspect Special Flood Hazard Areas to determine if development is being undertaken without the issuance of a permit. Annual inspection logs shall be maintained by the Floodplain Manager.

14.025 Uses within the Floodplain but Outside the Floodway and Outside Wetlands.

- A. Prohibited Uses.
1. Any prohibited use in the underlying zoning district.
 2. Excavation, fill, or vegetation removal without an approved land use permit.

3. Expansion of legal nonconforming uses.
 4. Uncontained, outside storage areas of hazardous materials for hazardous materials as defined by the State of Oregon Department of Environmental Quality.
 5. No new land divisions will be approved for properties exclusively within the floodplain or that propose to create a buildable lot that is exclusively within the floodplain.
- B. Permitted Uses.
1. Any use permitted in the underlying zoning district, subject to the standards for development outlined in Section 14.040 of this Chapter, including stormwater management facilities developed in accordance with the standards of Section 5.700 of this Code.
 2. Open space, trails, walkways, and bike paths as designated by the Troutdale Parks Plan, or as approved with a land use application and constructed in compliance with Section 4.315.D.
 3. Removal of unauthorized fill.
 4. Removal of nuisance or invasive plant species, and/or the restoration of approved plant species on the City of Portland Plant List as defined in Section 1.040 of this Code.
 5. Removal of dead or dying trees that are an imminent danger to public safety as determined by a certified arborist or the equivalent.
 6. Construction of new roadways and utilities necessary to support permitted development within and outside the Flood Management Area, subject to the standards of Section 14.040 of this Chapter and the Construction Standards on file in the Public Works Department or the applicable jurisdiction of the roadway.
 7. New culverts, stream crossings, and transportation projects may be permitted if designed as balanced cut and fill projects, and in compliance with the standards of Section 14.040 of this Chapter. Such projects shall be designed to minimize the area of fill in Flood Management Areas and to minimize erosive velocities. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable.
 8. Excavation and fill required for the construction of detention facilities or structures, and other facilities such as levees specifically designed to reduce or mitigate flood impacts. Levees shall not be used to create vacant buildable land.

9. Temporary bank stabilization or tree and vegetation removal necessitating immediate action during a flood emergency or other emergency to prevent the loss of an existing structure, or to repair a bank damaged during a flood. Following the flood emergency or other emergency, the owner shall submit a Floodplain Development Permit according to Section 14.035.E(1)(b)..
10. Routine repair and maintenance of existing structures (conforming and nonconforming uses), streets, driveways, utilities, culverts, drainageways and levees constructed for flood control, accessory uses, and other existing development on the site (including landscaped yards, decks, patios, boat ramps, etc.).
11. Rehabilitation or replacement of a structure that is damaged or destroyed to any extent, whether it is partially or fully within the Flood Management Area, and in compliance with Section 4.521 of this Chapter. Any structure or use deliberately removed or demolished may not be restored, replaced, or rebuilt, except in compliance with all applicable provisions of this Code, federal, state, and county regulations.
12. Any development that must implement a Federal Aviation Administration (FAA) compliant wildlife hazard management plan on property owned by the Port of Portland or within ten thousand (10,000) feet of an Aircraft Operating Area, as defined by the FAA, and removal of trees that interfere with the landing or takeoff flight path of aircraft at the Troutdale Airport or otherwise interferes with the safe operation of the airport as determined by the Port of Portland. The removal of trees that interfere with the operation of the Troutdale Airport are permitted outright.
13. Wildfire mitigation projects, such as fuels reduction or the creation of defensible space.
14. Removal of refuse as defined in the Troutdale Municipal Code.

14.030 Uses within the Floodway or within Wetlands.

- A. Prohibited Uses within the Floodway or within Wetlands. Unless specifically permitted under this Section, the following uses are prohibited within floodways and wetlands:
 1. Manmade structures.
 2. Vegetation removal, fill, or excavation. Vegetation removal in the floodway in concert with an approved wildfire mitigation project may be permitted subject to review under the standards for development of Section 14.040 of this Chapter.
 3. Private road construction.

4. Alterations and relocations of the watercourses of Arata, Salmon, or Beaver Creeks, the Sandy and Columbia Rivers, or the watercourse of any unnamed perennial or intermittent stream except as provided for in Subsection B(11) of this Section and Section 14.040.O of this Chapter.
 5. Fill of wetlands without both an approved land use application and an approved Joint Fill Permit issued by the Oregon Department of State Lands and the U.S. Army Corps of Engineers.
 6. Uncontained, outside storage areas of hazardous materials for hazardous materials as defined by the State of Oregon Department of Environmental Quality.
 7. Expansion of nonconforming uses.
 8. New installation of manufactured dwellings.
- B. Permitted Uses within the Floodway or within Wetlands. The following uses are permitted subject to review under the standards for development of Section 14.040 of this Chapter:
1. Open space, trails, walkways, and bike paths, as designated by the Troutdale Parks Plan, or as approved with a land use application.
 2. Removal of unauthorized fill.
 3. Removal of dead or dying trees that are an imminent danger to public safety as determined by a certified arborist or the equivalent.
 4. Routine repair and maintenance of existing structures (conforming and nonconforming uses), streets, driveways, utilities, culverts, drainageways and levees constructed for flood control by the Sandy Drainage Improvement Company or its successor, accessory uses, and other existing development on the site (including landscaped yards, decks, patios, boat ramps, and the operation, maintenance, and repair of manmade water control facilities such as irrigation and drainage ditches, constructed ponds or lakes, wastewater facilities, and stormwater quality facilities, and similar development).
 5. Construction, expansion, and/or maintenance of public roadways and public utility facilities necessary to support permitted development. A “No-Rise” Certification for construction or expansion of public roadways and public utilities shall be required consistent with Section 14.040.G(4) for all approved projects.
 6. Balanced excavation and fill required for the construction of detention facilities or structures and other facilities such as levees specifically designed to reduce or mitigate flood impacts. Levees shall not be used to create vacant buildable lands.

7. New culverts, stream crossings, and transportation projects necessary to implement the City, County, or State Transportation System Plans or other development permitted under this Chapter, and as applicable, meets the specifications of the Oregon Department of State Lands, Oregon Department of Fish and Wildlife, and federal regulations.
8. Permanent bank stabilization necessary to preserve an existing structure provided the balanced cut and fill standard is met if the work is in the floodplain or a “No-Rise” certification if the work is within the floodway. Exception: Bank stabilization is not permitted for development on a vacant lot of record.
9. Temporary bank stabilization or tree and vegetation removal necessitating immediate action during a flood emergency or other emergency to prevent the loss of an existing structure, or to repair a bank damaged during a flood. Following the flood emergency or other emergency, the owner shall submit a Floodplain Development Permit according to Section 14.035.E(1)(b).
10. Fill of wetlands when there is no other practicable way to build on the site as established through Section 14.040 of this Chapter, and provided fill of wetlands within the floodplain is balanced with cut elsewhere within the floodplain, and a Fill/Removal Permit is issued from the Oregon Department of State Lands (DSL) and U.S. Army Corps of Engineers (Corps), as applicable. The application to DSL and the Corps may be processed concurrently with a land use application for site and design review, land division, a planned development application, or a conditional use. A joint fill permit may be applied for prior to application for a land use permit. However, if a joint fill permit is approved by the Oregon Department of State Lands and the U.S. Army Corps of Engineers prior to applying for the land use application, fill may not proceed until the final decision for the land use application has been made by the City. Mitigation for fill of wetlands and the location of the mitigation shall be as prescribed by the DSL/Corps permit.
11. New drainageways, levees, or alteration of watercourses to accommodate public projects administered by the Sandy Drainage Improvement Company or its successor, the City, Multnomah County, the state, or a federal agency, provided it is in compliance with Sections 14.035(C), and 14.040(R) and (S) of this Chapter.
12. Any development that must implement a Federal Aviation Administration (FAA) compliant wildlife hazard management plan on property owned by the Port of Portland or within ten thousand (10,000) feet of an Aircraft Operating Area, as defined by the FAA, and removal of trees that interfere with the landing or takeoff flight path of aircraft at the Troutdale Airport or otherwise interferes with the safe operation of the airport as determined by the Port of Portland. The removal of trees that interfere with the operation of the Troutdale Airport are permitted outright.

13. Removal of refuse as defined in the City of Troutdale Municipal Code.

14.035 Floodplain Development Permit

- A. **Background.** To participate in the National Flood Insurance Program (NFIP), a community must adopt and enforce a floodplain management ordinance that regulates development in the floodplain. This floodplain management ordinance is housed primarily in Chapter 14 of this Code, but is in part addressed in other Chapters of this Code. One of the basic Federal requirements for regulating Development in the Floodplain is a requirement for a Floodplain Development Permit (locally, a Floodplain Development Permit) before construction or other development begins within any Special Flood Hazard Area. In this context, the term "development" is defined in Section 1.040. This chapter contains provisions for the federally required Floodplain Development Permit and is consistent with the National Flood Insurance Program (NFIP) regulations. A Floodplain Development Permit is required for development within the Flood Management Area except as noted in Section 14.035.C of this Chapter.
- B. **Applicability.** Unless exempt per Section 14.035.C, below, approval of a Floodplain Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 14.010.B of this Chapter. The permit shall be for all structures including manufactured dwellings, as set forth in the Section 1.040 and for all development including fill and other activities, also as set forth in the Section 1.040.
- C. **Exemptions.** The following activities do not require a Floodplain Development Permit:
 - 1. Removal of invasive, nuisance, or prohibited plant species that exposes the ground, provided a revegetation plan approved or prepared by the City, state, a federal agency, Metro, SOLV, the East Multnomah Soil & Water Conservation District, or other similar organizations as determined by the Floodplain Manager, is carried out to provide shade and habitat, prevent erosion of steep slopes and/or sedimentation into the protected water feature. A copy of the plan shall be provided to the Community Development Department prior to beginning the work.

 - 2. Placement of fill in residential zones, provided it is consistent with other applicable provisions of this Code, and provided the fill is used solely for the purpose of constructing a sandbox, a raised gardening bed, or other similar landscape feature.
 - 3. Installation of three strand, on bendable pole, wire farm type fencing that is constructed consistent with the provisions in Section 14.040 of this Chapter.

4. Landscape maintenance activities consistent with the standards identified in this Section.
 5. Wetlands not subject to flooding as described Section 14.010.B of this Chapter, nor identified as designated habitat covered under the Endangered Species Act, and are not exempt for review under Section 4.300 of this Code.
- D. Submission Requirements. An application for a Floodplain Development Permit within the Flood Management Area shall include the following, and these requirements apply to all applicants for development approval unless otherwise noted below:
1. A site plan showing the proposed development on the site, drawn to a standard scale, and including an illustrated scale for use in reductions. A site plan shall also consist of the following:
 - a. SFHA boundaries, and the base flood elevations based upon the North American Vertical Datum of 1988 (NAVD 88);
 - b. The 1996 flood boundaries established by Metro;
 - c. Floodway boundaries as determined by datum available from the FIRM and Flood Insurance Study;
 - d. The name, location, and dimensions of affected streams or rivers, and the bankfull stage or the two-year storm level.
 - e. The area comprising the vegetation corridor as established by Sections 4.316 and 4.317 of this Code;
 - f. Wetlands that are determined significant by the Oregon Department of State Lands or have the following characteristics. All wetland determinations made prior to development must be reviewed and acknowledged by the Oregon Department of State Lands prior to issuance of City permits. The characteristics shall be determined by a qualified scientist.
 - i. The wetland is fed by surface flows, sheet flows, or precipitation; has evidence of flooding during the growing season; at least sixty percent (60%) of the area is vegetation; and is over one-half acre in size; or, the wetland qualifies as having “intact water quality function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or
 - ii. The wetland is in the Flood Management Area; has evidence of flooding during the growing season; is five (5) acres or more in size; and has a restricted outlet or no outlet; or, the wetland qualifies as

- having “intact hydrologic control function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or
- iii. The wetland, or a portion of the wetland, is within a horizontal distance of less than one-fourth (1/4) mile from a water body which meets the State of Oregon Department of Environmental Quality definition of “water quality limited water body” in OAR Chapter 340, Division 41 (1996).
2. Topographic survey. The survey shall show the floodway and floodplain. The survey shall also show the location of existing and proposed improvements on the site, trees or tree clusters (including those to be removed), existing roads, utilities, and structures, buildings, structures, fencing, walls, landscaping, storage of materials or equipment, drainage facilities, parking areas, and other impervious surface areas. The survey shall be drawn to scale, with two (2) foot contours, and shall note the distance from Top-of-bank to the improvements on the site;
3. Where base flood elevation data is provided through the City’s Flood Insurance Study, or by other means as permitted in this Chapter, the developer shall obtain and record the actual elevation of the lowest floor (including basement) of all new or substantially improved structures, including the placement of a manufactured dwelling, and whether or not the structure contains a basement. This information shall be based upon NAVD 88 and provided on a City Floodplain Development Permit form, and should include the following, as applicable:
- a. For all new or substantially improved, elevated, or floodproofed structures, verify and record the actual elevation.
- b. Where development occurs within Zone A of the Flood Management Area and the Base Flood Elevation (BFE) data is not available either through the Flood Insurance Study or from another authoritative source as authorized in Subsection 14.020(C) of this Chapter, the Floodplain Development Permit shall be reviewed for compliance with FEMA Publication 265 issued July 1995 “Managing Floodplain Development in Approximate Zone A Areas”, adopted herein for reference, and applicable State of Oregon Building Codes.
4. Hydrology and soils report. Where ground disturbance or vegetation removal is proposed that exposes the soil, this report shall be required. This report shall include information on the hydrological activities of the site, the effect of hydrologic conditions on the proposed development, and any hydrological or erosion hazards. This report shall also include characteristics of the soils on the site, suitability for development, its carrying capacity, and erosion or slumping characteristics that might present a hazard to life and property, or adversely affect the function or stability of a public use or facility. This report shall also include information on the nature, distribution, and strength of existing soils; the

adequacy of the site for development purposes; and an assessment of grading procedures required to impose the minimum disturbance to the natural state. The report shall be prepared by a professional engineer registered in Oregon. In Oregon Department of Geology and Mineral Industries (DOGAMI) inventory of landslide hazard areas, on hillsides where grading will lessen stability, or in areas where historic or prehistoric mudflows have occurred, a soils engineer and/or engineering geologist registered in Oregon shall certify the development will not negatively impact public safety, adjacent properties, or water quality.

5. Grading plan. If grading is to occur, a grading plan shall be required that shows existing and finished contours (two-foot contour intervals), drainage, all cut and fill slopes and proposed drainage channels, direction of drainage flow, location of proposed structures and existing structures which may be affected by the proposed grading operations, and water quality facilities .
6. Vegetation report. Where vegetation is to be removed or other impacts to the onsite vegetation is to be expected as a result of development, this report shall be required. This report shall consist of a survey of existing vegetation, whether it is native or introduced, and how it will be altered by the proposed development. Measures for enhancement of the site, including revegetation with approved plant species, will be clearly stated, as well as methods for immediate and long-term stabilization of slopes and control of soil erosion. The vegetation report shall be prepared by a landscape architect, landscape designer, botanist, arborist, or other authority as determined by the Floodplain Manager with specific knowledge of approved plant species, planting and maintenance methods, survival rates, and their ability to control erosion and sedimentation. The contractor for installation and maintenance will be responsible for replacing any approved plant species that do not survive the first two (2) years after planting.
7. A “No-Rise” certification and a Letter of Map Change (LOMC) shall be submitted with the land use application for the following activities within the floodway as mapped by FEMA:
 - a. Permanent bank stabilization that occurs in the floodway.
 - b. Development, alterations, or relocations of the floodway, including any permanent fill within the floodway.
8. Building and structure elevations. For all existing and proposed, relocated, or expanded buildings and structures, elevation in relation to the Highest Adjacent Grade, the North American Vertical Datum 1988 (NAVD88), and the base flood elevation as applicable, of the:
 - a. Lowest enclosed area of all existing and proposed, relocated, or expanded buildings and structures. This includes crawlspaces, basement floors, and attached garages, electrical equipment (except utility meters), heating and

ventilation equipment, plumbing, air conditioning equipment, and/or other service facilities (including ductwork); top of proposed garage slabs; and next highest floor situated above the items herein.

- b. Elevation to which any existing building or structure has been or is proposed to be flood-proofed; and certification by a registered professional engineer that the flood-proofing methods for any nonresidential structure meet the floodproofing criteria in this Chapter.
 - c. The locations and sizes of all flood openings in any proposed buildings and structures.
 9. Infrastructure. Location of all proposed infrastructure necessary to serve the proposed development shall be required when such new development is proposed by the applicant. Such infrastructure includes, but is not limited to, streets, driveways, water, sanitary sewer, and storm drainage.
 10. Floodplain or watercourse alterations. Where floodplain or watercourse alterations are proposed, a description of the extent to which any floodplain or watercourse is proposed to be altered or affected as a result of proposed development shall be required.
 11. All federally-mandated or state-mandated permits issued by other governmental agencies shall be obtained, or obtaining such permits shall be a Condition of Approval to be satisfied prior to issuance of any construction permit. Such permits include but are not limited to Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334, 16 U.S.C. 1531-1544, and State of Oregon Removal-Fill permits, as amended.
- E. Application for Floodplain Development Permit. A Floodplain Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 14.010 of this Chapter. The permit shall be for all structures including manufactured dwellings, as set forth in Section 1.040 and for all development including fill and other activities, also as set forth in Section 1.040. Applications for a Floodplain Development Permit shall be made on forms furnished by the Community Development Department and may include, but not be limited to, plans drawn to scale showing the nature, location, dimensions, elevations of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing.
1. A Type I Floodplain Development Permit is required for the following:
 - a. Construction of a single-family dwelling, including the placement of a manufactured dwelling or repair or alteration of existing single-family dwellings and manufactured dwellings. Single-family dwellings and manufactured dwellings shall be built in compliance with the applicable

development standards in Section 14.040 of this Chapter.

- b. Bank stabilization or tree and vegetation removal necessary to preserve an existing structure during an emergency. During the flood emergency or other emergency the permit is not required; however, as immediately as possible following the emergency a Floodplain Development Permit shall be obtained that documents the bank stabilization and tree and vegetation removal measures taken during the emergency; the schedule and procedure that will be used to remove any temporary fill, including sand bags, and the schedule and procedure to replant tree and vegetation where required according to the standards in Section 4.300. If the stabilization measures will not be removed, a Type II Floodplain Development Permit will be required as well as a “No-Rise” certification and LOMC as applicable. The required Floodplain Development Permit shall also show that the long-term stability of the site is in compliance with all other relevant Development Standards identified in Section 14.040 as applicable.
 - c. Wildfire mitigation projects as identified in this Chapter.
2. A Type II Floodplain Development Permit is required for:
- a. Any use in the underlying zoning district requiring a Type II Site Development review.
 - b. New or expanded streets or bridges.
 - c. New or expanded railroads or trestles.
 - d. Permanent bank stabilization or fill within the floodplain or floodway.
 - e. Balanced cut and fill activity within the floodplain, with a Letter of Map Change, as required in this Code.
 - f. Fill of wetlands. If the wetland is outside of the floodplain and not hydrologically connected, a Floodplain Development Permit is not required, only the Site Development Review.
 - g. Other uses similar in nature to those listed above.
3. A Type III procedure and Floodplain Development Permit shall be processed for uses requiring a Type III review in the underlying zoning district, for all special variances requested from the standards of this Chapter, and for any proposed alteration of a watercourse of any perennial or intermittent streams.

F. Review Criteria - Requests for approval of a Floodplain Development Permit shall be

reviewed by the Floodplain Administrator or designee to ensure:

1. Consistency with the standards from Sections 1.040, Chapter 2, and Section 14.040 of this Code, as applicable;
 2. Consistency with other applicable standards of this Code and all other applicable policies and standards adopted by the City.
- G. Mandatory Conditions of Approval - The following Conditions of Approval are mandatory and shall be imposed on every approved Floodplain Development Permit:
1. Required During Construction Elevation Certificate. For all new construction, development, and substantial improvements, the permit holder shall provide to the Floodplain Administrator or designee an as-built certification of the floor elevation or flood-proofing elevation immediately after the lowest floor or flood-proofing is placed and prior to further vertical construction. Any deficiencies identified by the Floodplain Administrator or designee shall be corrected by the permit holder immediately and prior to work proceeding. Failure to submit certification or failure to make the corrections shall be cause for the Floodplain Administrator or designee or the Building Official to issue a stop-work order for the project.
 2. Required Documentation Prior to Issuance of Certificate of Occupancy
 - a. In addition to the requirements of the Building Codes pertaining to Certificate of Occupancy, prior to the final inspection the owner or authorized agent shall submit the following documentation to the Floodplain Administrator or designee and the documentation shall be prepared and sealed by a registered surveyor or engineer:
 - i. For elevated buildings and structures in Special Flood Hazard Areas, the as-built elevation of the lowest floor, including basement, or where no base flood elevation is available the height above highest adjacent grade of the lowest floor;
 - ii. For buildings and structures that have been floodproofed, the elevation to which the building or structure was floodproofed.
 - b. Failure to submit certification or failure to correct violations shall be cause for the Floodplain Administrator or designee or the Building Official to withhold a Certificate of Occupancy until such deficiencies are corrected.
 3. For applications for partitions and subdivisions, one of the following shall be required:
 - a. Protection of Flood Management Areas with a conservation easement;

- b. Platting Flood Management Areas as common open space; or
- c. Offer of sale or donation of Flood Management Area property to public agencies or private non-profits for preservation where feasible.

14.040 **Development Standards.** The land use application shall establish through the use of narrative, site plans, and professional reports, the following:

- A. Type II or III approval for new development, including additions or alterations to existing structures, except for single family dwellings, in the Flood Management Area may be allowed, provided that:
 1. The applicant shall demonstrate that there is no reasonable nor practical alternative design or method of development that would have a lesser impact on the Flood Management Area than the one proposed.
 2. If there is no reasonable nor practical alternative design or method of development the project shall be designed in compliance with applicable parts of Subsections (B) through (X) of this Section, so that the impacts on the Flood Management Area are limited and the plans shall include restoration, replacement, or rehabilitation of the vegetation within the Flood Management Area.
 3. The applicant shall provide mitigation to ensure that impacts to the functions and values of the vegetation corridor and integrity of the slope will be mitigated or restored to the extent practicable.
- B. A professional engineer registered in Oregon must certify that the development will not result in any increase in flood levels throughout the SFHA during the occurrence of the base flood discharge, and that water quality will not be adversely affected.
- C. As applicable, the development must be authorized by the Oregon Department of State Lands, U.S. Army Corps of Engineers, the Oregon Department of Fish and Wildlife, and the Sandy Drainage Improvement Company. The applicant shall obtain and submit a copy of all required state and federal permits for any proposed development in the Flood Management Area, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1334.
- D. Unless otherwise authorized under the provisions of this Chapter, the development shall comply with the underlying zoning district dimensional standards and the minimum vegetation corridor as established in Sections 4.316 and 4.317 of this Code. The applicant shall submit an exhibit that shows the location and provides a description of all actions to be provided to mitigate the impacts of permitted development as established in Section 4.314 of this Code.

- E. Protect the water quality resource, and Flood Management Area functions and values from uncontained areas of hazardous materials as defined by the State of Oregon Department of Environmental Quality water quality standards.
- F. Limit impervious surface areas in the Flood Management Area.
 - 1. The impervious surface of the development may not exceed thirty percent (30%) of the flood plain area, provided the standards of this Code are met. Exception: Public roads necessary to serve the transportation needs of the City may exceed thirty percent (30%) of the Flood Management Area provided all other applicable standards of this Chapter have been met.
 - 2. Clustering of houses and multiple-family units, zero lot line developments, and/or modifications to setbacks may be approved under the Type II procedure in order to accommodate the density permitted within the underlying zoning district and not exceed the impervious surface limitation of thirty percent (30%) of the Flood Management Area on the site.
 - 3. The Director, or their designee, may grant an administrative variance of up to fifty percent (50%) of any dimensional standard in the underlying zoning district where necessary to avoid development within the Flood Management Area.
- G. Maintain flood storage capacity. The developer is required to offset new fill placed in the floodplain by excavating an additional flood-able area to replace the lost flood storage area, preferably at hydrologically equivalent sites. All development proposals in the SFHA shall provide compensatory mitigation for impacts to flood storage, water infiltration, and riparian vegetation to ensure that new development does not increase flood hazards on other properties. A mitigation plan shall be submitted with the land use application. All required actions derived from that plan shall be completed prior to issuance of a Certificate of Occupancy, a Certificate of Completion for a subdivision, or the final building inspection, as applicable. Balanced cut and fill is required for permitted development in the Flood Management Area. Excavation and fill shall be performed in a manner to maintain or increase flood storage and conveyance capacity and not increase design flood elevations. A professional engineer registered in Oregon must certify that the development will not result in any increase in flood levels throughout the SFHA during the occurrence of the base flood discharge except as described in Section 14.040.G(8), and that water quality will not be adversely affected.
 - 1. All fill placed at or below the design flood elevation in the Flood Management Area shall be balanced with at least an equal volume or amount of soil material removal. The development shall be designed to minimize development within the Flood Management Area and amount of fill necessary. Balanced cut and fill may be used to elevate structures but shall not be used for density transfer. Residential density must be calculated prior to changes to the floodplain as a result of balanced cut and fill.

2. Excavation shall not be counted as compensating for fill if such areas will be filled with water in non-storm winter conditions.
3. The cumulative effect of any proposed development shall not increase the water surface elevation of the base flood except as described in Section 14.040.G(8). Onsite flood storage capacity shall not decrease as a result of development, vegetation removal, or excavation except as described in Section 14.040.G(8).
4. A “No-Rise” certification is required for any fill or permitted development within the floodway pursuant to Section 60.3(d)(3) of the National Flood Insurance Program.
 - a. The “No-Rise” supporting data and a copy of the engineering certification must be submitted to, and reviewed by, the City prior to approval of development, and the data shall be submitted with the Floodplain Development Permit.
 - b. The “No-Rise” certification and supporting technical data must stipulate no impact on the 100-year flood elevations, floodway elevations, or floodway widths at the new cross-sections and at all existing cross-sections anywhere in the model.
 - c. A sample “No-Rise” certification is available in the Community Development Department.

5.

All new buildings built on fill in the regulatory floodplain shall be constructed on fill:

- a. Certified by a professional engineer registered in Oregon as suitably designed and compacted for the development (e.g. fill that meets the criteria of 1803.5.8 and Section 1804.4 of the International Building Code, Section 2.4 of ASCE 24, or their equivalent); and
 - b. Providing protection from erosion and scour.
6. When a project proposes development that will alter a watercourse, modify floodplain boundaries, or modify Base Flood Elevations, the application shall obtain a Conditional Letter of Map Change from FEMA prior to grading and filling the site and then obtain and submit the final Letter of Map Change prior to final inspections, or issuance of a certificate of completion, or issuance of the certificate of occupancy as required under this Section. When a project applicant has demonstrated through the Floodplain Development Permit that, in addition to the standards listed for Section 14.040.G, the following standards have been achieved, a Conditional Letter of Map Change/Letter of Map Change may not be required:

- a. Fill is not proposed in the floodway for the site to be impacted through development;
 - b. The project site is not being elevated to or above the base flood elevation (BFE);
 - c. The project is proposing to remove unsuitable existing material (topsoil) and backfilling with select structural material, not alter the existing (natural grade) elevation of the site;
 - d. The site to be impacted does not have US Fish and Wildlife Service (USFWS) designations for critical habitat for Threatened or Endangered; and
 - e. In areas where a regulatory floodway has not been designated, the new construction, substantial improvements, or other development (including fill) within A or AE Zones on the community's FIRM, has demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood at any point within the community.
7. All proposals that include engineering analysis for maintenance of flood storage capacity are subject to review by a qualified engineer licensed in the State of Oregon. The applicant shall be responsible for the cost of this independent review and will be advised at the time of application of this expectation.
 8. As described in FEMA's "NFIP Guidebook - A Local Administrator's Guide to Floodplain Management and the National Flood Insurance Program, 5th Addition, Appendix E - Policy on Fish Enhancement Structures in the Floodway", projects that are specifically implemented to restore or enhance US Fish and Wildlife Service (USFWS) identified Threatened or Endangered anadromous fish species or habitat where such species have been determined to reside qualify to allow for minimal rises in the 100-year flood levels as a result of implementation. In addition to the Submission Standards identified in Section 14.035.D, applicants for such projects shall also provide statements from Rural Conservation and Development, the Natural Resource Conservation Service, or similarly qualified staff of fisheries, natural resource, or water resources agencies that less than the maximum hydraulic analyses may be allowed. A professional engineer registered in Oregon shall provide a feasibility analysis and certify that the project was designed to keep any rise in 100-year flood levels to as close to zero as practically possible and ensure that no structures would be impacted by a potential rise. Additionally, routine maintenance of any such project would be necessary to sustain conveyance over time. A plan that sets forth how long-term maintenance is to be maintained shall be required with the submittal of the Floodplain Development Permit. An additional mandatory condition of approval, as

recommended by FEMA, shall be attached to such projects that emphasize the dynamics of a river or creek, and, where the Floodplain Manager has deemed necessary, a requirement for further analysis.

- H. Residential Development, including accessory structures as referenced in Section 5.010 of this Code and not constructed in accordance with Section 14.040.V. Note: if more than fifty percent (50%) of the lot being developed is affected by the floodplain, then the minimum density standard of this Code does not apply.
1. Elevate structures. The minimum finished floor elevation, including basement floor, for all new or substantially improved residential structures in the Flood Management Area shall be at least two (2) feet above the base flood elevation, as established by Section 14.010.B in this Chapter, and as demonstrated through the Elevation Certificate submittals as established in this Section. Elevation Certificates shall be required for all residential development as required by the Community Rating System.
 - a. An Elevation Certificate shall be submitted with the construction plans. The Elevation Certificate shall include the elevation of the lowest floor (including basement). The Elevation Certificate shall be certified by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information for construction within specific flood hazard areas.
 - b. A second certified Elevation Certificate shall be submitted to the City of Troutdale prior to pouring the foundation.
 - c. A third certified Elevation Certificate shall be submitted after the structure is completed based upon finished construction.
 - d. The City shall maintain the Elevation Certificates for public inspection.
 2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:
 - a. A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
 - b. The bottom of all openings shall be no higher than one (1) foot above grade.
 - c. Openings may be equipped with screens, louvers, or other devices

provided that they permit the automatic entry and exit of floodwaters.

- d. Where possible, openings will be installed on at least two opposing sides of the enclosed area.
3. Below-grade crawlspaces are allowed only when in compliance with the design requirements of FEMA Technical Bulletin 11-01, “Crawlspac Construction for Buildings Located in Special Flood Hazard Areas.” Buildings that have below-grade crawlspaces will have higher flood insurance premiums than buildings that have the preferred crawlspace construction with an interior elevation at or above the lowest adjacent exterior grade.
 - a. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings:
 - i. Openings that equalize hydrostatic pressures by allowing for the automatic entry and existence of floodwaters is required. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade. See FEMA Technical Bulletin 1-93, Opening in Foundation Walls, for guidance.
 - ii. All portions of the building below the base flood elevation must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE. Ductwork or other utility systems located below the insulation may pull away from their supports. See page 8 of Technical Bulleting 1-93 and FEMA Technical Bulletin 2-93 Flood Resistant Materials Requirements.
 - iii. Any building utility systems within the crawlspace must be elevated above the base flood elevation or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters. For further guidance, see FEMA 348, Protecting Building Utilities from Flood Damage.
 - b. The interior grade of a crawlspace below the base flood elevation must not be more than two (2) feet below the lowest adjacent exterior grade.

- c. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building Code requirements for flood hazard areas. Crawlspaces may not be converted to basements.
 - d. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel, or crushed stone drainage by gravity or mechanical means.
 - e. Crawlspace construction is not permitted in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. For velocities in excess of five (5) feet per second, other foundation types should be used.
 - f. The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest immediate interior or exterior grade.
4. Substantial improvements will require elevation of any non-elevated structure to two (2) feet above the base flood elevation in compliance with this Section and in accordance with Section 1.040. Substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. Substantial improvements include:
 - a. Any repair, reconstruction, or improvement of a structure, the cost of which exceeds forty-nine percent (49%) of the market value of the structure as established by the County appraiser or a licensed professional appraiser.
 - b. Reconstruction or repair of a structure that exceeds forty-nine percent (49%) of the market value of the building before it was damaged.
 - c. Additions to an existing structure when the addition increases the market value of the structure by more than forty-nine percent (49%) or the floor

area by more than twenty percent (20%).

5. Comply with other standards of this Section, as applicable.
- I. Manufactured dwellings within the Special Flood Hazard Area.
1. All manufactured dwellings to be placed or substantially improved on sites that are outside of a manufactured dwelling park or subdivision; in a new manufactured dwelling park or subdivision; in an expansion to an existing manufactured dwelling park or subdivision, or in an existing manufactured dwelling park or subdivision on which a manufactured dwelling has incurred substantial damage shall be elevated on a permanent foundation such that the finished floor of the manufactured dwelling is elevated to a minimum eighteen (18) inches (46 cm) above the base flood elevation and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement.
 2. Manufactured dwellings to be placed or substantially improved on sites in an existing manufactured dwelling park or subdivision within the Special Flood Hazard Area on the community's FIRM that are not subject to the above manufactured dwelling provisions shall be elevated so that either:
 - a. The finished floor of the manufactured dwelling is elevated to a minimum of eighteen (18) inches (46 cm) above the base flood elevation; or
 - b. The manufactured dwelling chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above grade and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement. Anchoring shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).
 3. Manufactured dwellings shall have all electrical crossover connections installed at a minimum of twelve (12) inches above BFE.
 4. Manufactured dwellings supported on solid foundation walls shall be constructed with flood openings that comply with Section 14.040.H(2).
 5. Comply with the other standards of this Section as applicable.
- J. Recreational Vehicles (RV) within the Special Flood Hazard Area, whether in a park or on private property outside of a park, are required to:

1. Be on the site for fewer than one hundred eighty (180) consecutive days, and
 2. Be fully licensed and ready for highway use. Highway use means on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
 3. Meet the permit requirements of Section 14.040.I and the elevation and anchoring requirements for manufactured dwellings.
 4. The RV “pads” shall be paved with asphaltic concrete or comparable, and have a special water quality facility for the collection of the stormwater from the site.
 5. The RV “pads” shall be wide enough to accommodate a trailer parked next to the towing vehicle or be long enough to accommodate both towing vehicle and trailer.
- K. Nonresidential Construction. New construction, development, and substantial improvement of any commercial, industrial, or other nonresidential structure shall have the lowest floor, including basement, elevated to no less than two (2) feet above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:
1. Be dry floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water. A dry floodproofing certificate shall be filed with the City following the form and procedure established by the Federal Emergency Management Agency.
 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy, in accordance with standards established by the Federal Emergency Management Agency and the National Flood Insurance Program.
 3. Be certified by a registered professional engineer or architect that the design and methods of development are in accordance with accepted standards of practice for meeting provisions of National Flood Insurance Program regulations (CFR 60.3(c)(4) and (5)) based on their development and/or review of the structural design, specifications, and plans. Such certifications shall be provided to the City.
 4. Nonresidential structures that are elevated, not dry floodproofed, must meet the same standards for space below the lowest floor as described in Section 14.040.H. If elevated, an Elevation Certificate shall be submitted with the construction plans, prior to pouring the foundation, and after construction.
 5. Applicants dry floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the floodproofed level (e.g., a building floodproofed to the base flood elevation will be rated as one (1) foot below the base flood elevation).

6. Applicants that elect to utilize floodproofing instead of elevation shall supply a comprehensive Maintenance Plan at the time of building plan review for the entire structure to include but not limited to: exterior envelope of structure; all penetrations to the exterior of the structure; all shields, gates, barriers, or components designed to provide floodproofing protection to the structure; all seals or gaskets for shields, gates, barriers, or components; and, the location of all shields, gates, barriers, and components as well as all associated hardware, and any materials or specialized tools necessary to seal the structure.
 7. Applicants may be required by the Floodplain Manager to supply an Emergency Action Plan (EAP) for the installation and sealing of the structure prior to a flooding event that clearly identifies what triggers the EAP and who is responsible for enacting the EAP.
 8. Comply with other standards of this Section as applicable.
- L. Remove temporary fills. Temporary fills permitted during construction or emergency bank stabilization shall be removed if not in compliance with the balanced cut and fill standard of this Code or prior to issuance of a Certificate of Occupancy or release of any bond issued for the development.
- M. Preserve and/or restore the vegetation corridor within the disturbed areas, and retain the existing tree canopy as established in Sections 4.316, Width of Vegetation Corridor, and 4.317, Methods for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Chapter. An enhancement plan for disturbed areas shall be prepared and implemented to stabilize slopes to prevent landslides on slopes and sedimentation of water features. This plan shall provide for the replanting and maintenance of approved plant species designed to achieve pre-disturbance conditions.
- N. Maintain or reduce stream temperatures.
- O. Minimize erosive velocities, nutrient, and pollutant loading into water. Use filtering, infiltration, and natural water purification for stormwater runoff in compliance with the Erosion Control and Water Quality Standards of Section 5.600 of this Code. The applicant's engineering plans shall certify that runoff and sedimentation from the site will comply with the standards of Section 5.600 of this Code.
- P. Anchoring. All new construction, development, and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- Q. Construction Materials and Methods. All new construction, development, and substantial improvements shall use flood-resistant materials in accordance with the requirements of FEMA Technical Bulletin 2-93 "Flood Resistant Materials Requirements" and utilities shall be designed and installed in accordance with FEMA Publication 348 "Protecting Building Utilities from Flood Damage." The following standards are only a summary of

those requirements:

1. All new construction, development, and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
2. All new construction, development, and substantial improvements shall be constructed using methods and practices that minimize flood damage and minimize impacts to natural floodplain functions, including flood storage, water infiltration, and riparian vegetation.
3. Electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
4. No construction materials or methods may be used within the floodplain that would impair or damage water quality or native vegetation.
5. All development shall have adequate drainage provided to reduce exposure to flood damage and maintain water quality.

R. Utilities and Roads.

1. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable, and comply with the Oregon Department of Fish and Wildlife construction standards.
2. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
3. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.
4. Onsite waste disposal systems shall be located to avoid impairment to them, or contamination from them, during flooding consistent with the State of Oregon Department of Environmental Quality.
5. Utility and road placement shall occur outside the floodway unless the utility or road is necessary to serve permitted development, and there is no reasonable alternative. Roads built in the floodplain shall be built at or above the base flood elevation to provide access to emergency vehicles during a flood.
6. Stormwater management and water quality facilities shall comply with the siting and construction standards of Section 5.700 of this Code.



S. For any alterations or relocations of a watercourse the developer shall be required to notify the Oregon Department of State Lands, the Oregon Department of Land Conservation and Development, and adjacent communities that will be impacted by the alteration or relocation. The developer shall be responsible for obtaining and submitting copies of any required project permits required by the Oregon Department of State Lands, U.S. Army Corps of Engineers, Oregon Department of Fish and Wildlife Service, Federal Emergency Management Agency, and other affected agencies, as applicable. The flood carrying capacity of the altered or relocated watercourse shall not be diminished and shall be maintained. Alterations will require a “No-Rise” certification for changes to the floodway, and changes that relocate the floodplain will require a Letter of Map Change (LOMC) from FEMA or may require a revised Flood Insurance Study and Flood Insurance Rate Map for the City. The burden for all engineering studies required to process these forms is the applicant’s, not the City’s.

T. Subdivision Proposals. In addition to compliance with the underlying zoning district standards of this Code and this Chapter, the development of the subdivision shall be subject to the following additional criteria:

1. All subdivision proposals shall be consistent with the need to minimize flood damage.
2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
4. Where the base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least fifty (50) lots or five (5) acres, whichever is less.
5. If more than fifty percent (50%) of the lot being partitioned or subdivided is affected by the floodplain, then the minimum density standard of this Code does not apply.

U. Critical Facilities.

1. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area.
2. Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available.
3. Critical facilities constructed within the SFHA shall have the lowest floor

elevated one foot above the height of the 500-year flood level. Submit Elevation Certificates with the construction plans, prior to pouring the foundation, and upon completion of the structure in accordance with Subsections H(1)(a - c) of this Section.

4. Access to and from the critical facility shall also be protected to the height utilized above.
 5. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.
 6. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.
 7. Comply with the other standards of this Section as applicable.
- V. Small Accessory Structure. Relief from elevation or floodproofing as required in this Section may be granted for small accessory structures that meet the following standards. The applicant shall be advised that this type of allowance will result in higher insurance rates for these structures, as applicable.
1. **Less** than two hundred (200) square feet, less than \$5,000 in valuation, and do not exceed one story;
 2. Not temperature controlled;
 3. Not used for human habitation and are used solely for parking of vehicles or storage of items having low damage potential when submerged;
 4. Not used to store toxic material, oil or gasoline, or any priority persistent pollutant identified by the State of Oregon Department of Environmental Quality unless confined in a tank installed in compliance with this ordinance or stored at least two feet above base flood elevation;
 5. Located and constructed to have low damage potential;
 6. Constructed with materials resistant to flood damage as described in this Section;
 7. Anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood;
 8. Constructed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for complying with this requirement must be certified by a licensed professional engineer or architect or **designed** in compliance with Section 14.040.H(2);

9. Constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.
- 14.045 **Floodways.** Located within areas of special flood hazard established in Section 14.010.B of this Chapter are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:
- A. Except as provided in Section 14.045.C, encroachments, including fill, new construction, development, substantial improvements, and other development are prohibited unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
 - B. If Section 14.040.A is satisfied, all new construction, development, and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 14.040 of this Code.
 - C.  Floodways and other high hazard zones are extremely hazardous areas due to exceptionally high flood and erosion potential. In these areas, the development actions permitted in high hazard zones shall be limited to water-dependent uses; bridges and other location-dependent uses; habitat restoration activities consistent with Sections 14.035.C(2); low-intensity recreation; and bioengineered banks.
- 14.050 **Before Regulatory Floodway.** In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.
- 14.055 **Flood Management Area Variance Procedures.** Variances from dimensional standards of the underlying zoning district or other provisions of this Code not part of this Chapter shall be processed in accordance with Section 6.800 of this Code.
- A. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction, development, and substantial improvements to be erected on a lot of one-half (1/2) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing that the considerations of Section 14.055.A(1 - 11) have been fully reviewed. As the lot size increases the technical justification required for issuing the variance increases.
 1. The danger that materials may be swept onto other lands to the injury of others;

2. The danger to life and property due to flooding or erosion damage;
 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 4. The importance of the services provided by the proposed facility to the community;
 5. The necessity to the facility of a waterfront location, where applicable;
 6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 7. The compatibility of the proposed use with existing and anticipated development;
 8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
 11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- B. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the Statewide Inventory of Historic Properties, without regard to the procedures set forth in this Section.
1.  Is the minimum necessary to preserve the historic character and design of the site, building or structure;
 2. Will not result in the site, building or structure losing its historic designation; and
 3. Demonstrates consistency with all other local, state, or federal laws or ordinances, including documentation of any necessary consultations with state or federal agencies.
- C. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.

- D. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- E. The Director, or their designee, may grant a Type II variance of up to fifty percent (50%) of any dimensional standard in the underlying zoning district where necessary to avoid construction or development within the Flood Management Area. The Director or designee shall make a determination in accordance with the criteria established in Section 14.055.J of this Chapter.
- F. Applications for variances to dimensional standards in excess of that provided in Section 14.055.E shall be a Type III application.
- G. The Planning Commission or Director, or their designee, may attach conditions to the granting of variances as it deems necessary to further the purpose of this Chapter.
- H. As a participant in the National Flood Insurance Program, the City is not authorized to grant a variance from the requirement to elevate or floodproof structures in accordance with state and federal regulations, whichever is most restrictive. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except Section 14.055.A and otherwise complies with Sections 14.040.P - R of this Chapter.
- I. The City cannot grant a variance from the special flood hazard designation assigned by the Federal Insurance Administrator to a site. However, a property owner may request a Letter of Map Change (LOMC) from the Federal Emergency Management Agency.
- J. In reviewing a Type III Variance, the Planning Commission shall consider all technical evaluations, relevant factors, and standards specified in other Sections of this Chapter and other Chapters of this Code, and make affirmative findings, with or without conditions, for each of the following criteria:
 - 1. A showing of good and sufficient cause that the need for the variance is not of the applicant's making and will not result in a use of the site that is not otherwise permitted in the underlying zoning district.
 - 2. A determination that failure to grant the variance would result in exceptional hardship to the applicant and is the minimum necessary to grant relief.
 - 3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in Section 14.055.A(1) – (11) or conflict with existing local, state, or federal laws or ordinances.
 - 4. The safety of access to the property in times of flood for ordinary and emergency

vehicles.

5.  A determination that the development project cannot be located outside the Special Flood Hazard Area and/or high hazard area and that impacts to flood storage, water infiltration, and riparian vegetation have been minimized to the extent practicable.
6.  A demonstration of consistency with all other local, state, or federal laws or ordinances, including documentation of any necessary consultations with state or federal agencies.

14.060 **Prescribed Conditions for the Rehabilitation or Replacement of Pre-Existing Structures.** The replacement of pre-existing structures or development damaged or destroyed accidentally is subject to following standards:

- A. The structure or development was in existence within the Flood Management Area prior to February 1, 2019.
- B. The use is allowed in the underlying zoning district at the time the application is made to rehabilitate or replace the structure.
- C. A Type I Floodplain Development Permit is approved prior to applying for building permits.
- D. The rehabilitation or replacement is rebuilt on the same footprint of the original structure and does not increase the impervious area within the Special Flood Hazard Area.
- E. The rehabilitated or replaced structure is elevated, if residential, or floodproofed or elevated, if non-residential, in accordance with the applicable standards of this Chapter, the definition found Section 1.040, and all additional relevant standards in this Code.

EXHIBIT F

1.040 Vegetation Corridor and Slope District, and, Water Quality, and Flood Management Definitions.

.01 100-Year Flood. The flood that is equaled or exceeded once in one hundred (100) years on the average; equivalent to the one percent annual chance flood. Also called the Special Flood Hazard Area, Base Flood, and 100-year floodplain.

.02 Appeal. A request for a review of the Director's interpretation of any provision of this Code or request for a variance from requirements of Chapter 4.500, Flood Management Area, of this Code.

.02 XX “Area Of Shallow Flooding”. Means a designated AO, AH, AR/AO, AR/AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a one percent (1%) or greater annual chance of flooding to an average depth of one to three (1 - 3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flowmeans a designated AO, or AH Zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.

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.03 XX “Area Of Special Flood Hazard”. Means the land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the Flood Hazard Boundary Map (FHBM). After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard" the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.

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.043 Bankfull Stage. As defined in the Oregon Administrative Rules pertaining to removal/fill permits, the stage or elevation at which water overflows the natural banks of a stream or other waters of the state and begins to inundate upland areas. In the absence of physical evidence, the two-year recurrent flood elevation (storm level) may be used to approximate the bankfull stage. The bankfull stage is the starting point for measuring the width of a vegetation corridor from a protected water feature. In the absence of any data to establish the bankfull stage or two-year storm event, the starting point for measuring the vegetation corridor is determined by the following indicators:

- a. Water marks on fixed objects (vegetation, rocks, buildings, etc.);
- b. Drift lines (deposited waterborne twigs, litter, etc.); or

- c. Waterborne sediment deposits on the soil surface or fixed objects (vegetation, rocks, buildings, etc.)

.045 **Base Flood.** A flood having a one percent (1%) chance of being equaled or exceeded in any given year~~flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the “100 year” flood. Designation on maps always includes the letters A or V.~~

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.06 **Base Flood Elevation.** The water surface elevation during the Base Flood in relation to a specified datum. The Base Flood Elevation (BFE) is depicted on the Flood Insurance Rate Map to the nearest foot and in the Flood Insurance Study to the nearest one-tenth (0.1) foot. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Manager or designee is authorized through Sections ~~4.513–14.020~~ to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas and the associated Base Flood Elevation as part of reviewing development proposals that affect the 100-year Floodplain. Such information shall be used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps.

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.075 **Basement.** Any area of the building having its floored subgrade (below ground level) on all sides.

.08 **Below-Grade Crawl Space.** ~~m~~Means an enclosed area below the base flood elevation in which the interior grade is not more than two feet below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed four (4) feet at any point.

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.106 **Conservation Easement.** An easement applied to environmentally sensitive lands including, but not limited to, lands identified as hillsides, wetlands, floodplains, and floodways. The field verification shall be done by a licensed surveyor, engineer, hydrologist, or any other licensed specialist in the fields of engineering, hydrology, or botany. A conservation easement prohibits most forms of development and assures that native vegetation will be maintained or enhanced. Conservation easements usually affect privately owned land and are enforceable by the City. Trails and limited public facilities may be permitted under carefully controlled conditions within conservation easements.

.1107 **Construction, Start of.** (For other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)), includes substantial improvement, and means the date the building permit was issued, provided the

actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Start of construction includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction on a site, such as the pouring of slab or footings, paving a parking lot, installation of piles, construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; installation of streets and/or walkways; excavation for a basement, footings, piers, or foundation; erection of temporary forms; or installation of accessory buildings on the property, such as garages or sheds not occupied as dwelling units or not part of the main structure.

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12XX “Critical Facility.” A facility that is critical for the health and welfare of the population and is especially important to be located above the Base Flood Elevation following hazard events. The following is the list of Critical Facilities for the purposes of Section 4.500 Chapter 14:

- a. Hospitals and other medical facilities having surgery and emergency treatment areas;
- b. Fire and police stations;
- c. Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures. These tanks or other structures do not include City water distribution facilities;
- d. Emergency vehicle shelters and garages;
- e. Structures and equipment in emergency-preparedness centers;
- f. Standby power generating equipment for essential facilities;

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g. Structures and equipment in government communication centers and other facilities required for emergency response; and

h. Other facilities as determined by the Floodplain Manager or designee.

Some types of facilities may be critical to a community, but require location within or partially within Special Flood Hazard Areas because of the nature of the facilities. means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

.13 .08 Debris. Debris includes discarded manmade objects and may include tires, vehicles, litter, scrap metal, construction waste, lumber, plastic, or styrofoam. Debris does not include objects necessary to a use allowed by this Code, or ornamental and recreational structures. Debris does not include existing natural plant materials or natural plant materials which are left after flooding, downed or standing dead trees, or trees which have fallen into protected water features.

.14 .09 Department of Environmental Quality (DEQ) Water Quality Standards. State of Oregon DEQ water quality standards are the numerical criteria or narrative condition needed in order to protect an identified beneficial use.

.150 Design Flood Elevation. The elevation of the 100-year storm as defined in the Federal Emergency Management Agency Flood Insurance Studies or, in areas without Federal Emergency Management Agency floodplains, the elevation of the 25-year storm or the edge of mapped flood-prone soils or similar methodologies.

.164 Developer. The owners of property, their agents or contractors, or their successors and assigns, who have undertaken or are proposing development which is regulated by Chapters Sections 4.300, Vegetation Corridor and Slope District; 4.500, Flood Management Area; 5.600, Erosion Control and Water Quality Standards; and 5.700, Stormwater Management; and Chapter 14 of this Code.

.172 Development. Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. Any manmade change to improved or unimproved real estate including, but not limited to, construction, installation, or change of a building or structure; land division; storage on the land; tree cutting; drilling; and site alteration such as that due to land surface mining, dredging, grading, paving, excavating, or clearing. Development does not include the following:

a. Stream enhancement or restoration projects approved by any of the following:
Oregon Division of State Lands, Oregon Department of Fish and Wildlife, U.S. Army Corps of Engineers, the City, or Multnomah County.

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- b. Farming practices and farm use, as defined in the Oregon Revised Statutes, which were actively occurring prior to December 1999, and all modifications to existing buildings. Construction of new buildings associated with farm practices and farm uses are subject to the requirements of Section 5.080, Agricultural Use Permitted, and Subsection 5.611(E) of this Code.
- .18 Digital Flood Insurance Rate Map. Depicts flood risk and federal flood zones and flood risk information. The Digital Flood Insurance Rate Map (DFIRM) presents the flood risk information in a format suitable for electronic mapping applications.
- .193 Disturb. Any manmade changes to the existing physical status of the land which are made in connection with development. The following uses are excluded from the definition:
- a. Enhancement or restoration of the Water Quality Resource Area.
- b. Planting native cover identified in the Metro Native Plant List.
- .20 Elevated Building. Means for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.
- .214 Elevation Certificate. A form supplied by the Federal Emergency Management Agency (FEMA) and used to document the lowest floor elevation of a building.
- .225 Emergency. Any manmade or natural event or circumstance causing or threatening loss of life, injury to person or property, and includes, but is not limited to, fire, explosion, flood, severe weather, drought, earthquake, volcanic activity, spills or releases of oil or hazardous material, contamination, utility or transportation disruptions, and disease.
- .2316 Engineer. A registered professional engineer licensed by the State of Oregon.
- .2417 Enhancement. The process of improving upon the natural functions and/or values of an area or feature which has been degraded by human activity. Enhancement activities may or may not return the site to a pre-disturbance condition, but create/recreate processes and features that occur naturally.
- .2518 Erosion. Erosion is the detachment and movement of soil particles, rock fragments, or other material, organic or inorganic, resulting from actions of water, wind, human, or animal activity.
- .26 Erosion Hazard Zone. The area adjacent to a stream or river that is at risk of bank erosion from stream flow or mass wasting, as designated on the communities FIRM.
- .2719 Erosion Prevention and Sediment Control Plans. Plan requirements are specified

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in the City of Troutdale's Construction Standards for Public Works Facilities.

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.280 Erosion, Visible or Measurable. Visible or measurable erosion includes, but is not limited to:

- a. Deposits of mud, dirt sediment, or similar material exceeding one-half cubic foot in volume on public or private streets, adjacent property, or onto the storm and surface water system, either by direct deposit, dropping discharge, or as a result of the action of erosion.
- b. Evidence of concentrated flows of water over bare soils, turbid or sediment laden flows, or evidence of onsite erosion such as rivulets on bare soil slopes where the flow of water is not filtered or captured on the site.
- c. Earth slides, mudflows, earth sloughing, or other earth movement that leaves the property.

.249 Excavation. Any act by which soil or rock is cut into, dug, quarried, uncovered, removed, displaced, or relocated.

.30 Existing Building or Structure. A structure for which the Start of Construction commenced before February 1, 2019.

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.3122 Federal Emergency Management Agency (FEMA). The agency with the overall responsibility for administering the National Flood Insurance Program.
An independent federal agency reporting to the President. FEMA is responsible for coordinating the federal response to floods, earthquakes, hurricanes, and other natural or manmade disasters and providing disaster assistance to states, communities, and individuals. FEMA administers the National Flood Insurance Program (NFIP).

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.3223 Fill. Any material such as, but not limited to, sand, soil, rock, gravel, clay, or mud that is placed on a site for the purposes of development or redevelopment.

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.3324 FIRM. See Flood Insurance Rate Map.

.34 .25 Flood or Flooding. Means:

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a. A general and temporary condition of partial or complete inundation of normally dry land areas from:

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1. The overflow of inland or tidal waters.

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2. The unusual and rapid accumulation or runoff of surface waters from any source.

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3. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
- b. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition. A general and temporary condition of partial or complete inundation of normally dry land areas from:
- a. The overflow of inland or tidal waters; and/or
- b. The unusual and rapid accumulation of runoff of surface waters from any source.
- .3526 **Flood Insurance Rate Map (FIRM).** An official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community. The official map of a community for which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.
- .3627 **Flood Insurance Study (FIS).** Or flood elevation study means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards. A report published by FEMA that provides detailed information on a community's flood hazard areas. The FIS normally includes topographic information, floodplain and floodway data charts, study information, and stream profiles.
- .3728 **Flood Management Area (FLMA).** All lands contained within the 100-year floodplain and floodway as shown on the Flood Insurance Rate Map, and the area of inundation for the February 1996 flood. In addition, all lands which have documented evidence of flooding.
- .3829 **Floodplain.** As shown below in Figure 1 - Floodplain Cross Section, the area adjacent to a stream or river channel that is covered by water when the river or stream overflows its banks. Any land area, such as the lowland and relatively flat areas adjoining inland waters, susceptible to being inundated by water from any source, including land that may be covered temporarily by water as a result of a storm event.
- .39 **Floodplain Development Permit.** Federally required permit required prior to construction and other development in any Special Flood Hazard Area (100-yr. Floodplain). See

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Section 4.516.14.035 of this Code.

.40 **Floodplain Functions.** Hydrological and ecological functions including conveyance and temporary storage of floodwater, depositions of sediments outside of the channel, ground water recharge, filtering of pollutants, and reduction of floodwater velocity and erosive forces. Also included, but to a lesser extent in previously urbanized areas, are such functions as nutrient exchange, refuges, and feeding areas for fish.

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.4130 **Floodplain, 100-Year.** As shown below in Figure 1 - Floodplain Cross Section, land area adjacent to a river, stream, or other water body that is subject to a one percent or greater chance of flooding in any given year. It consists of land ranging from that which is subject to annual flooding to that which has a one percent (1%) or greater chance of flooding in any given year. The 100-year Floodplain consists of the Floodway and the Floodway Fringe. The 100-year Floodplain is mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRMs) and is the area subject to Base Flood regulations. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Manager or designee is authorized through Section 14.020 to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals that affect the 100-year Floodplain. Such information shall be used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps and these areas are also subject to Base Flood regulations. See Base Flood.

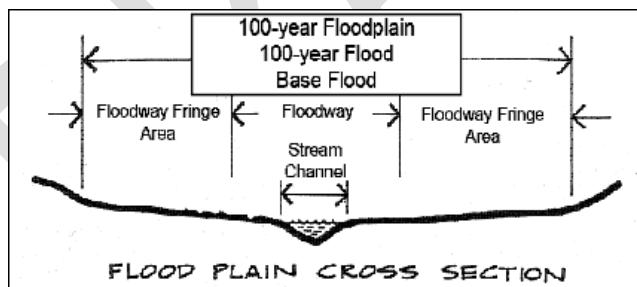


Figure 1 – Floodplain Cross Section See Base Flood.

.4234 **Floodway (Regulatory Floodway).** Means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. The portion of a watercourse required for the passage or conveyance of a given storm event as identified and designated on the Flood Insurance Rate Map as produced by the Federal Emergency Management Agency. The floodway shall include the channel of the watercourse and the adjacent floodplain that must be reserved in an

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unobstructed condition in order to discharge the base flood without increasing the flood levels by more than one (1) foot.

.43 Flow-through Design. Typically a structure that does not displace surface floodwater or hinder or obstruct the movement of surface floodwater.

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.44 High Hazard Zone. Lands within the furthest landward extent of the floodway and erosion hazard zone, as designated on the communities FIRM.

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.45 Highest Adjacent Grade (HAG). The highest natural elevation of the ground surface prior to construction, adjacent to the proposed walls of a structure. Refer to the Elevation Certificate, FEMA Form 81-31, for more information.

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.46 Hydrodynamic Load. Force of water in motion.

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.47 Hydrostatic Load. Force of water at rest.

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.4832 Invasive Non-native or Noxious Vegetation. Plant species that are listed as nuisance plants or prohibited plants on the most recent Portland Plant List as adopted by the City of Portland by ordinance Metro Native Plant List as adopted by Metro Council resolution because they are plant species that have been introduced and, due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities.

.4933 Joint Fill Permit/404 Removal/Fill Permit. A permit issued jointly by the Oregon Division Department of State Lands and U.S. Army Corps of Engineers to allow, with conditions and mitigation, the removal or fill of wetlands determined to be of either local or state significance by the Oregon Division Department of State Lands.

.50 Letter of Map Change (LOMC). An official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and Flood Insurance Studies. LOMCs are issued in the following categories:

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a. Letter of Map Amendment (LOMA) - A revision based on technical data showing that a property was incorrectly included in a designated Special Flood Hazard Area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property is not located in a Special Flood Hazard Area.

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b. Letter of Map Revision (LOMR) - A revision based on technical data showing, usually due to manmade changes, alterations to Federal Flood Zones, flood elevations floodplain and floodway delineations, and planimetric features. One common type of LOMR, a LOMR-F, is a determination that a structure has been elevated through the placement of fill above the Base Flood Elevation and is excluded from the Special Flood Hazard Area.

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c. Conditional Letter of Map Revision (CLOMR) - A formal review and comment

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by FEMA as to whether a proposed project complies with the minimum National Flood Insurance Program floodplain management criteria. A CLOMR does NOT amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.

.5134 Lowest Floor. Means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor. Provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of CFR Sec. 60.3.

The lowest floor of the lowest enclosed area of a building (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage, in an area other than a basement area, is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of the flood hazard regulations.

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.52 Manufactured Dwelling. Means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured dwelling" does not include a "recreational vehicle."

.53 Manufactured Dwelling Park or Subdivision. Means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale

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.54 Mean Sea Level. For purposes of the National Flood Insurance Program, the North American Vertical Datum of 1988 or other Datum, to which Base Flood Elevations shown on a community's FIRM are referenced.

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.55.35 Mitigation. The reduction of adverse effects of a proposed project by considering, in this order:

- a. Avoiding the impact altogether by not taking a certain action or parts of an action;
- b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- c. Rectifying the impact by repairing, rehabilitating, or restoring the effected environment;
- d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action by monitoring and taking appropriate measures; and
- e. Compensating for the impact by replacing or providing comparable substitute water quality resource areas.

.[5636](#) **Mulch.** Application of plant residue, netting, or other suitable materials to the land surface to conserve moisture, hold soil in place, and aid in establishing plant cover.

.[5737](#) **NAVD 88.** The North American Vertical Datum of 1988 (NAVD 88) is the vertical control datum established in 1991 by the minimum-constraint adjustment of the Canadian-Mexican-U.S. leveling observations. This is the data used on FIRMs and in flood insurance studies adopted in 2009.

.[5838](#) **NGVD 29.** “The National Geodetic Vertical Datum of 1929: The name, after May 10, 1973, of (the) Sea Level Datum of 1929.” (Vertical control datum established for vertical control in the United States by the general adjustment of 1929.) This is the datum used on FIRMs and in flood insurance studies prior to 2009.

.[5939](#) **National Flood Insurance Program (NFIP).** A federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for state and community floodplain management regulations that reduce future flood damages.

.[6040](#) **Native Vegetation or Native Plant.** Vegetation listed as a native plant on the [most recent Metro NativePortland](#) Plant List [as adopted by the City of Portland by ordinance as adopted by Metro Council resolution](#) and any other vegetation native to the Portland metropolitan area provided that it is not listed as a nuisance plant or a prohibited plant on the [Metro NativePortland](#) Plant List.

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.[6141](#) **National Wetland Inventory (NWI) Map.** The City is mapped on the Camas and Washougal, Washington-Oregon wetland maps prepared by the U.S. Department of the Interior, Fish and Wildlife Service.

.[62](#) **New Construction.** [A structure for which the Start of Construction commenced after February 1, 2019, and includes subsequent Substantial Improvements to the structure](#)

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Commented [RK3]: Consistent with CAV NFIP Compliance letter #3 from DLCD dated 2/13/18.

.[6342](#) **NPDES Permit.** The National Pollutant Discharge Elimination System 1200-C Permit is a State of Oregon, Department of Environmental Quality permit that covers federal stormwater regulations as they pertain to construction activities in Oregon. The permit is administered by the City.

.[6443](#) **ODFW Construction Standards.** The Oregon Department of Fish and Wildlife construction guidelines for building roads, bridges, and culverts, or any transportation structure within a waterway.

.[6544](#) **One Percent Annual Chance Flood.** The flood that has a one percent [\(1%\)](#) chance of being equaled or exceeded on the average in any given year; equivalent to the 100-year flood.

.[6645](#) **Open Space.** Land that is undeveloped and that is planned to remain so

indefinitely. The term encompasses parks, forests, and farmland. It may also refer only to land zoned as being available to the public, including playgrounds, watershed preserves, and parks.

.6746 **Perennial Streams.** All primary and secondary perennial waterways mapped by the U.S. Geological Survey, having year-round flow.

.6847 **Practicable.** Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose.

.6948 **Pre-FIRM Structures.** Buildings that were built before the flood risk was known and identified on the community's FIRM.

.7049 **Protected Water Features, Primary.** Includes:

- a. Title 3 wetlands.
- b. Rivers, streams (creeks or brooks) and drainages downstream from the point at which one hundred (100) acres or more are drained to that water feature (regardless of whether it carries year-round flow).
- c. Streams carrying year-round flow.
- d. Springs which feed streams and wetlands and have perennial (year-round) flow.
- e. Natural lakes.

.7150 **Protected Water Features, Secondary.** Includes intermittent streams and seeps downstream of the point at which fifty (50) acres are drained and upstream of the point at which one hundred (100) acres are drained to that water feature.

.7542 **Restoration.** The process of returning a disturbed or altered area or feature to a previously existing natural condition. Restoration activities reestablish the structure, function, and/or diversity to that which occurred prior to impacts caused by human activity.

.73 **Recreational Vehicle (RV).** A vehicle which is:

- a. Built on a single chassis;
- b. Four hundred (400) square feet or less when measured at the largest horizontal projection;
- c. Designed to be self-propelled or permanently towable by a light duty truck; and
- d. Designed primarily not for use as a permanent dwelling but as temporary living

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quarters for recreational, camping, travel, or seasonal use.

.7452 **Resource.** A functioning natural system such as a wetland or stream.

.7553 **Riparian.** Those areas associated with streams, lakes, and wetlands where vegetation communities are predominately influenced by their association with water.

.7654 **Routine Repair and Maintenance.** Activities directed at preserving an existing allowed use or facility, or nonconforming use, without expanding the development footprint or site use.

.7755 **Sediment.** Any material that is in suspension, is being transported, or has been moved from its site of origin by water, wind, or gravity as a result of erosion.

.7856 **Site.** The lot, or contiguous lots, under the same ownership that are subject to a development permit or erosion control plan.

.7957 **Slope District.** Slopes of twenty-five percent (25%) or greater throughout the City that have a minimum horizontal distance of fifty (50) feet. Engineered slopes associated with public streets or roads are not included.

.8058 **Special Flood Hazard Area (SFHA).** The land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM (Flood Hazard Boundary Map). After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard". The term used by the National Flood Insurance Program for areas inundated by 100 year flood. The SFHA is mapped on the flood insurance rate maps (FIRM). The SFHA is the area where floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies.

.8159 **Statewide Planning Goal 5.** Oregon's statewide planning goal that addresses open space, scenic and historic areas, and natural resources. The purpose of the goal is to conserve open space and protect natural and scenic resources.

.8260 **Statewide Planning Goal 6.** Oregon's statewide planning goal that addresses air, water, and land resources quality to "maintain and improve the quality of the air, water, and land

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resources of the state” as implemented by the Land Conservation and Development Commission (LCDC).

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.8361 **Statewide Planning Goal 7.** Oregon’s statewide planning goal that addresses areas subject to natural disasters and hazards to “protect life and property from natural disasters and hazards” as implemented by the Land Conservation and Development Commission.

.8462 **Stockpile.** Onsite storage of any soil, sand, gravel, clay, mud, debris, vegetation, refuse, or any other material, organic or inorganic, in a concentrated state.

.8563 **Stream.** A body of running water moving over the earth’s surface in a channel or bed, such as a creek, rivulet, or river, that flows at least part of the year, including perennial and intermittent streams. Streams are dynamic in nature and their structure is maintained through build-up and loss of sediment.

.8664 **Stream Bank, Top of.** See Bankfull Stage.

.87 65 **Structure.** Means, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. **Structure, for insurance purposes, means:**

a. A building with two or more outside rigid walls and a fully secured roof that is affixed to a permanent site;

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b. A manufactured dwelling; or

c. A travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws.

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For the latter purpose, structure does not mean a recreational vehicle or a park trailer or other similar vehicle, except as described in Section 1.040.87(c), or a gas or liquid storage tank. A building or other improvement that is built, constructed, or installed.

.88 **Substantial Damage.** Damage of any origin sustained by a structure located within the 100-year Floodplain, whereby the cost of restoring the structure to its prior condition would equal or exceed fifty percent (50%) of the structure's market value before the damage occurred.

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.89 **Substantial Improvement.** Means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds forty-nine percent (49%) of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:

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- a. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or,
- b. Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

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.66 Substantial Improvement:

- a. There are three occasions when work on an existing building is considered a substantial improvement.
 1. Any improvement of a structure, the cost of which exceeds fifty percent (50%) of the current market value of the existing structure.
 2. Reconstruction or repair of a building, that exceeds fifty percent (50%) of the market value of the structure before it was damaged.
 3. Additions to an existing structure when the addition increases the current market value of a structure by more than fifty percent (50%) or the floor area by more than twenty percent (20%).
 4. Unless other evidence is provided to the satisfaction of the Director, “market value” shall be based on the latest market, not assessed, value of the structure as determined by Multnomah County.
- b. The term does not include:
 1. Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety Code specifications which are solely necessary to assure safe living conditions; or
 2. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

.9067 Surface Water Management System. All natural and constructed facilities used to regulate the quantity and quality of surface water, including drainage easements, culverts, storm drains, catch basins, drainage ditches, natural drainageways, stream corridors, rivers, ponds, wetlands, and impoundments.

.9168 Title 3. Title 3 is part of the Metro Urban Growth Management Functional Plan pertaining to water quality, flood management, and fish and wildlife conservation, and directly pertains to Statewide Planning Goals 5, Open Spaces, Scenic and Historic Areas, and Natural Resources; 6, Air, Water, and Land Resources Quality; and 7, Areas Subject to Natural Disasters and Hazards.

.92 Variance. Means a grant of relief by a community from the terms of a floodplain management regulation.

.9369 Vegetation, Approved. Vegetation which typically does not require irrigation or fertilization because it is adapted to natural soil, water, and climatic conditions. The list of approved vegetation species is based on the most recent Portland Plant List as adopted by the City of Portland by ordinance Metro Native Plant List, and is on file in the Community Development Department.

.9470 Vegetation Corridor. The undisturbed area between a development and a protected water feature as designated in Sections 4.316, Width of Vegetation Corridor, and 4.317, Method for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Code, or slopes of twenty-five percent (25%) or greater throughout the City, except engineered slopes associated with public streets or roads.

.9571 Vegetation, Invasive, Non-Native, or Noxious. Plant species that have been introduced and due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities, or which are not listed on the most recent Portland Plant List as adopted by the City of Portland by ordinance Metro Native Plant List.

.9672 Vegetation, Native. Any vegetation native to the Portland Metropolitan Area or listed on the Portland Plant List as adopted by the City of Portland by ordinance Metro Native Plant List.

.9773 Water-dependent. A structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.
A use which can be carried out only on, in or adjacent to water because it requires access to the water for waterborne transportation or recreation. Water dependent also includes development which by its nature can be built only on, in, or over water. Bridges supported by piers or pillars as opposed to fill are water-dependent development.

.9874 Water Features. See Protected Water Features, primary and secondary.

.9975 Water Quality Facility. A created or constructed structure or drainageway that is designed, constructed, and maintained to collect, filter, retain, or detain surface water runoff during and after a storm event for the purpose of stormwater management and water quality improvement. The facility may take on characteristics of a wetland, but it does not become a resource.

.10076 Watershed. A geographic unit defined by the flows of rainwater or snowmelt. All land in a watershed drains to a common outlet, such as a stream, lake, or wetland.

.101 Water Surface Elevation. The height, in relation to a specific datum, of floods of various

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magnitudes and frequencies in the floodplains of coastal or riverine areas.

.10277 **Wetlands.** Areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands are those areas identified and delineated by qualified wetland specialists as set forth in the 1987 Corps of Engineers Wetland Delineation Manual.

- a. Wetland determinations. The identification of an area as either wetland or non-wetland.
- b. Wetlands, constructed. Wetlands developed as a water quality or quantity facility, subject to change and maintenance as such. These areas must be clearly defined and/or separated from naturally occurring or created wetlands.
- c. Wetlands, created. Those wetlands developed in an area previously identified as a non-wetland to replace or mitigate wetland destruction or displacement. A created wetland shall be regulated and managed the same as an existing wetland.
- d. Wetlands, Title 3. Wetlands of metropolitan concern as shown on the Metro Water Quality and Flood Management Overlay District Map and other wetlands not mapped but determined significant by the Oregon Department of State Lands, consistent with the criteria in Title 3, Section 7.C. of the Metro Urban Growth Management Functional Plan. Title 3 wetlands include created wetlands approved and monitored by the Oregon Department of State Lands and U.S. Army Corps of Engineers. Title 3 wetlands do not include artificially constructed and managed stormwater and water quality treatment facilities.

EXHIBIT G

NOTE: Red-Line Version shows existing Section 4.500. The "clean" version (Attachment E) shows section carried over to the proposed Chapter 14

4.500 FLOOD MANAGEMENT AREA

FLMA

- 4.510 **Purpose.** Without establishing any priority, ~~T~~he purpose of this Chapter is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions or degradation of water quality in specific areas by provisions designed to:

- A. Protect human life, health, and property in areas subject to periodic flooding~~Protect human life and health;~~
- B. Minimize expenditure of public money and costly flood control projects~~Implement the Floodplain requirements of Statewide Planning Goal 7 - which relates to areas subject to natural disasters and hazards;~~
- C. Through floodplain regulation, contribute to the properly functioning condition of streams and rivers and address, in part, the water quality aspects of Statewide Planning Goal 6;
- D. Implement requirements for the City's participation in the National Flood Insurance Program, including the Community Rating System;

~~Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;~~

- E. Implement the actions derived from the Multnomah County Hazard Mitigation Plan to minimize the risk of natural hazards, such as flooding, to people and property;

~~F. Ensure continuity of City services, access to City facilities, and Minimize minimal prolonged business interruptions during times of flood;~~

~~G. Manage stormwater drainage in a manner that:~~

- 1. Maintains the properly functioning conditions of waterways;
- 2. Provides for the conveyance and temporary storage of floodwater;
- 3. Reduces floodwater velocity;
- 4. Facilitates sediment deposition in the floodplain;
- 5. Provides an opportunity for groundwater recharge; and
- 6. Promotes other stormwater and floodplain functions.

These provisions are also intended to minimize maintenance costs, eliminate potential

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hazards before they occur, and protect properties and persons adjacent to drainageways and to other natural hazard areas;

- H. Minimize damage to public facilities and utilities, such as water purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets, and bridges located in floodplains~~Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone, and sewer lines; streets; and bridges located in areas of special flood hazard;~~
- I. Help maintain a stable tax base by providing for the sound use and development of ~~areas of special flood hazard so as to minimize future flood blight areas~~flood-prone areas;
- J. Ensure that potential buyers are notified that property is in an area of special flood hazard;
- K. Ensure that~~Compel~~ those who occupy the areas of special flood hazard assume responsibility for their actions;
- L. Maintain and improve water quality;
- M. Minimize erosion and loss of native vegetation;
- N. Maintain wetlands, including swamps, marshes, bogs, and similar areas within the City, because wetlands help to maintain water quality and flood storage capacities; ~~and~~
- O. Avoid any increase in base flood elevations as a result of development;
- P. Minimize expenditure of public money for costly flood control projects~~Comply with Statewide Planning Goal 7 Areas Subject to Natural Disasters and Hazards.~~

Q. ~~-~~Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public~~;~~

R. 4.511 — Methods of Reducing Flood Losses and Maintaining Water Quality.
In order to accomplish its purpose, this chapter includes methods and provisions to:
This Chapter includes methods and provisions for:

- 1. Require that development that is vulnerable to floods, including buildings, structures, and facilities necessary for the general health, safety and welfare of citizens, be protected against flood damage at the time of initial construction;
- 2. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;

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3. Control filling, grading, dredging and other development which may increase flood damage or erosion;
 4. Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or that may increase flood hazards on other lands;
 5. Preserve and restore natural floodplains, stream channels, and natural protective barriers which carry and store flood waters, and;
 6. Coordinate with and supplement provisions of Oregon Building Codes. A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion, flood heights, or velocities.
- B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
- C. Controlling the alteration of natural, floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters.
- D. Controlling filling, grading, dredging, and other development which may increase flood damage.
- E. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or may increase flood hazards in other areas.
- F. Maintaining and reintroducing approved vegetation which minimizes erosion and helps to maintain and improve water quality.
- G. Coordinating and supplementing the provisions of the state Building Code.
- S. To advance these purposes, where not required, creation of open space tracts is encouraged within areas designated as natural hazards on the Comprehensive Plan and official zoning maps.

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4.511 Methods of Reducing Flood Losses and Maintaining Water Quality. This Chapter includes methods and provisions for:

- A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion, flood heights, or velocities.
- B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
- C. Controlling the alteration of natural, floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters.
- D. Controlling filling, grading, dredging, and other development which may increase flood damage.
- E. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or may increase flood hazards in other areas.
- F. Maintaining and reintroducing approved vegetation which minimizes erosion and helps to maintain and improve water quality.
- G. Coordinating and supplementing the provisions of the state Building Code.

4.51112 Applicability.

- A. These provisions shall apply to public and private properties in the 1% annual chance of flood floodplain (100-yr. floodplain or Special Flood Hazard Area) as mapped by the Federal Insurance Administration of rivers and local streams within the planning jurisdiction of the City of Troutdale. This Chapter shall apply to all development of land within the Flood Management Area (FLMA) and wetlands within the planning jurisdiction of the City, which includes land in unincorporated Multnomah County within the City's Urban Planning Area.
- B. The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for Multnomah County, Oregon and Incorporated Areas of Multnomah County", with accompanying Flood Insurance Rate Maps, are hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study is on file at the Community Development Department located at 2200 SW 18th Way, Troutdale, OR 97060. The Flood Management Area development standards apply to the 100 year floodplain as mapped by the Department of Homeland Security, Federal Emergency Management Agency (FEMA) on the county wide Flood Insurance Rate Map (FIRM) covering the cities of Fairview, Gresham, Troutdale and Wood Village, and the unincorporated areas of Multnomah County and titled: "FIRM Flood Insurance Rate Map, Multnomah County, Oregon and Incorporated Areas, Map Number 41051C," effective December 18, 2009, areas of

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flooding in 1996 as mapped by Metro, and wetlands. The FIRM is supported by county-wide Flood Insurance Study Number 41051CV000A, effective December 18, 2009, entitled “Flood Insurance Study, Multnomah County, Oregon and Incorporated Areas,” published by FEMA, covering the cities of Fairview, Gresham, Troutdale, and Wood Village, and the unincorporated areas of Multnomah County in effect at the time of submission. Metro, a regional metropolitan planning agency representing portions of Clackamas, Multnomah, and Washington Counties, mapped the flood hazard areas from areas the Flood Insurance Rate Map and areas inundated by flooding in 1996 on the Title 3 map. The Title 3 maps, the Flood Insurance Study, and the Flood Insurance Rate Map are adopted for reference only. Not every Special Flood Hazard Area has been mapped by the Federal Insurance Agency through the Flood Insurance Study and Flood Insurance Rate Maps cited above. The Floodplain Administrator or designee is authorized through Sections 4.513 to obtain from applicants the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals that affect the floodplain. Once approved by the Floodplain Administrator or designee, such information shall be incorporated into the Natural Hazards Map and used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps cited above to ensure consistency with the floodplain regulations contained in this Chapter. The applicant for development within this area shall be responsible for precisely establishing base flood elevations and delineating the boundaries of the Flood Management Area based upon site specific field surveys and delineations certified by a licensed engineer or surveyor. Contested base flood elevations are to be reviewed under the provisions of Subsection 4.513.~~FDG~~ of this Chapter. The City will keep a record of all surveys, delineations, and any Letter of Map Amendments Change (LOM~~CA~~) approved by the Federal Emergency Management Agency, as revisions to the local copy of the Title 3 map. The City will submit this information to Metro for future updates of the Title 3 map. A field survey shall consist of the following:

1. 100 year floodplain boundaries, and the base flood elevation based upon the North American Vertical Datum of 1988 (NAVD 88).
2. The 1996 flood boundaries established by Metro.
3. Floodway boundaries as determined by datum available from the FIRM and Flood Insurance Study.
4. The name, location, and dimensions of affected streams or rivers, and the bankfull stage or the two year storm level.
5. The area comprising the vegetation corridor as established by Sections 4.316, Width of Vegetation Corridor, and 4.317, Method for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Code.
6. Wetlands that are determined significant by the Oregon Division of State Lands or have the following characteristics. All wetland determinations made prior to development must

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~~be reviewed and acknowledged by the Oregon Division of State Lands prior to issuance of City permits. The characteristics shall be determined by a qualified scientist.~~

- a. ~~The wetland is fed by surface flows, sheet flows, or precipitation; has evidence of flooding during the growing season; at least sixty percent (60%) of the area is vegetation; and is over one-half acre in size; or, the wetland qualifies as having “intact water quality function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or~~
 - b. ~~The wetland is in the Flood Management Area; has evidence of flooding during the growing season; is five (5) acres or more in size; and has a restricted outlet or no outlet; or, the wetland qualifies as having “intact hydrologic control function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or~~
 - c. ~~The wetland, or a portion of the wetland, is within a horizontal distance of less than one-fourth mile from a water body which meets the Department of Environmental Quality definition of “water quality limited water body” in OAR Chapter 340, Division 41 (1996).~~
- C. Warning and Disclaimer of Liability. The degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This Code does not imply that land or uses will be free from flooding or flood damage. This Code shall not create liability on the part of the City, any officer or employee thereof, or the Federal Insurance Administration, for any damages that result from reliance on this Code or any administrative decision lawfully made hereunder.

4.512 Severability. ~~The standards of this Chapter are subject to the severability standards as described in Section 17.100 of this Code.~~

4.513 Administration and Interpretation of Flood Insurance Rate Map Boundaries and Flood Management Area Standards, and Edge of Bankfull Stage or Two-Year Storm Level.

- A. ~~The Community Development Director shall designate a Floodplain Manager to be the Local Administrator of this Chapter. The Community Development Director, Floodplain Manager, or designee, is the Local Administrator and shall implement the provisions and standards of the National Flood Insurance Program, the standards of this Chapter, and make interpretations, where needed, as to including determinations regarding the exact location of the boundaries of the Special Flood Hazard Area floodplain (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) by granting or denying Floodplain Development Permit applications in accordance with its provisions.~~ In the interpretation and application of this Chapter, all provisions shall be:

1. Considered as minimum requirements;

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2. Liberally construed in favor of the governing body:
 23. Judged by established historical facts of flooding as known by, or made known to, the governing body;
 43. Deemed neither to limit nor repeal any other powers granted under Sstate statutes; and
 54. Defined in Section 1.040, Vegetation Corridor and Slope District, and Water Quality and Flood Management Definitions, of this Code.
- B. Duties and Responsibilities of the Floodplain Manager. Duties of the Floodplain Manager shall include, but not be limited to:
1. Review all Floodplain Development Permits to determine that the permit requirements of this ordinance have been satisfied.
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 2. Review all Floodplain Development Permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.
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 3. Review all Floodplain Development Permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of this Chapter are met.
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 4. When base flood elevation data has not been provided (A Zones) in accordance with Section 4.511, the Floodplain Manager shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer Sections 4.517.
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 5. Where base flood elevation data is provided through the Flood Insurance Study, FIRM, or required as in Section 4.513.C, obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basements and below-grade crawlspaces) of all new or substantially improved structures, and whether or not the structure contains a basement.
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 6. For all new or substantially improved floodproofed structures where base flood elevation data is provided through the Flood Insurance Study, FIRM, or as required in Section 4.513.C, the administrator shall:
 - a. Verify and record the actual elevation (in relation to mean sea level), and
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 - b. Maintain the floodproofing certifications required in Section 4.517.
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 7. Maintain for public inspection all records pertaining to the provisions of this

- ordinance.
8. Notify adjacent communities, the Oregon Department of Land Conservation and Development, and other appropriate state and federal agencies, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration. ← **Formatted:** Indent: Left: 1", Tab stops: 1.65", Left
9. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.
10. Notify FEMA within six months of project completion when an applicant had obtained a Conditional Letter of Map Change from FEMA, or when development altered a watercourse, modified floodplain boundaries, or modified Base Flood Elevations. This notification shall be provided as a Letter of Map Change. The property owner shall be responsible for preparing technical data to support the Letter of Map Change application and paying any processing or application fees to FEMA. The Floodplain Administrator shall be under no obligation to sign the Community Acknowledgement Form, which is part of the Conditional Letter of Map Change and Letter of Map Change application, until the applicant demonstrates that the project will or has met the requirements of this code and all applicable State and Federal laws. ← **Formatted:** Indent: Left: 1", Tab stops: 1.65", Left
11. Report to FEMA on each development permit issued in the SFHA, including:
- a. Amount of fill or structural displacement of flood storage, and the amount (in volume and area) of compensatory storage provided; ← **Formatted:** Indent: Left: 1.5", Tab stops: 1.65", Left
 - b. Amount of new impervious surface and types and amounts of compensatory mitigation provided;
 - c. The number of trees equal to or greater than six (6) inches in diameter at breast height removed, and the types and amounts of compensatory mitigation provided;
 - d. The area in which clearing and/or grading occurred; ← **Formatted:** Indent: Left: 1", First line: 0.5", Tab stops: 1.65", Left
 - e. For any project that disconnects or reconnects land to the floodplain, the type of project and amount of land disconnected or reconnected; and ← **Formatted:** Indent: Left: 1.5", Tab stops: 1.65", Left
 - f. Location of the project and of the corresponding mitigation. ← **Commented [RK1]:** Consistent with BiOp
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12. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 4.520. ← **Formatted:** Not Highlight
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CB. Use of Other Base Flood Data [for Permit Review](#). When base flood elevation data is not available through the Flood Insurance Study, FIRM, or has not been provided in accordance with Section 4.5112, Applicability, of this Chapter, the City may obtain, review, and utilize any reasonable base flood elevation and floodway data available from the developer or property owner, or a federal, state, or other source, in order to assure that proposed development will be reasonably safe from flooding, manage development within the Flood Management Area.T The test of reasonableness shall be based upon historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate the lowest floor at least two (2) feet above grade in these zones may result in higher insurance rates.The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two (2) feet above grade in these zones may result in higher insurance rates.

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CD. Contested Boundaries. A person contesting the location of the boundary has the opportunity to submit a Letter of Map [Amendment Change \(LOMC\)](#) directly to the Federal Emergency Management Agency to change the Flood Insurance Rate Map mapping of their property. If a land use application is submitted before a [Letter of Map Amendment LOMC](#) is approved by the Federal Emergency Management Agency, the application will be processed under the standards of this Chapter.

E. [Inspections. The Floodplain Manager shall inspect development that is subject to the permit requirements of this Chapter, including buildings and structures exempt from the Building Code. The floodplain administrator shall inspect Special Flood Hazard Areas to determine if development is being undertaken without the issuance of a permit. Annual inspection logs shall be maintained by the Floodplain Manager.](#)

4.514 Uses Within the Floodplain but Outside the Floodway- and Outside Wetlands.

A. Prohibited Uses.

1. Any prohibited use in the underlying zoning district.
2. Excavation, fill, or vegetation removal without an approved land use permit.
3. Expansion of legal nonconforming uses.
4. Uncontained, outside Outside storage areas of hazardous materials for hazardous materials as defined by the Department of Environmental Quality.
5. No new land divisions will be approved for properties exclusively within the floodplain or that propose to create a buildable lot that is exclusively within the floodplain.

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1. Any use permitted in the underlying zoning district, subject to the standards for development outlined in Section 4.517, Development Standards, of this Chapter, including stormwater management facilities developed in accordance with the standards of Chapter 5.700, Stormwater Management, of this Code.
2. Open space, trails, walkways, and bike paths as designated by the Troutdale Parks Plan, or as approved with a land use application and constructed in compliance with SubsSection 4.315.D.D of this Code.
3. Removal of ~~refuse and~~ unauthorized fill.
4. Removal of nuisance or invasive plant species, and/or the restoration of approved plant species on the Metro NativeCity of Portland Plant List as defined in Section 1.040kept on file at the Community Development Department of this Code.
5. Removal of dead or dying trees that are an imminent danger to public safety as determined by a certified arborist or the equivalent.
6. Construction of new roadways and utilities necessary to support permitted development within and outside the Flood Management Area, subject to the standards of Section 4.517, Development Standards, of this Chapter and the Ceonstruction Standards on file in the Public Works Department or the applicable jurisdiction of the roadway.
7. New culverts, stream crossings, and transportation projects may be permitted if designed as balanced cut and fill projects, or designed to not significantly raise the design flood elevation, and in compliance with the standards of Section 4.517, Development Standards, of this Chapter. Such projects shall be designed to minimize the area of fill in Flood Management Areas and to minimize erosive velocities. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable.
8. Excavation and fill required for the construction of detention facilities or structures, and other facilities such as levees specifically designed to reduce or mitigate flood impacts. Levees shall not be used to create vacant buildable land.
9. Emergency temporary bank stabilization necessitating immediate action during a flood event to prevent the loss of an existing structure, or to repair a bank damaged during a natural flooding event.
10. Routine repair and maintenance of existing structures (conforming and nonconforming uses), streets, driveways, utilities, culverts, drainageways and levees constructed for flood control, accessory uses, and other existing

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development on the site (including landscaped yards, decks, patios, boat ramps, etc.).

11. Rehabilitation or replacement of a structure that is damaged or destroyed to any extent, whether it is partially or fully within the Flood Management Area, and in compliance with Section 4.52149, Prescribed Conditions for the Rehabilitation or Replacement of Pre-Existing Structures, of this Chapter. Any structure or use deliberately removed or demolished may not be restored, replaced, or rebuilt, except in compliance with all applicable provisions of this e-Development Code, federal, state, and county regulations.
12. Any development that must implement a Federal Aviation Administration (FAA) compliant wildlife hazard management plan on property owned by the Port of Portland or within ten thousand (10,000) feet of an Aircraft Operating Area, as defined by the FAA, and removal of trees that interfere with the landing or takeoff flight path of aircraft at the Troutdale Airport or otherwise interferes with the safe operation of the airport as determined by the Port of Portland. The removal of trees that interfere with the operation of the Troutdale Airport are permitted outright.
13. Wildfire mitigation projects, such as fuels reduction or the creation of defensible space.

4.515 Uses within the Floodway or within Wetlands.

- A. Prohibited Uses within the Floodway or within Wetlands. Unless specifically permitted under this Section, the following uses are prohibited within floodways and wetlands:
 1. Manmade structures.
 2. Vegetation removal, fill, or excavation. Vegetation removal in the floodway in concert with an approved wildfire mitigation project may be permitted subject to review under the standards for development of Section 4.517.
 3. Private road construction.
 4. Alterations and relocations of the watercourses of Arata, Salmon, or Beaver Creeks, the Sandy and Columbia Rivers, or the watercourse of any unnamed perennial or intermittent stream except as provided for in Subsection B(B)(112) of this Section and Section 4.517.(O.) of this Chapter.
 5. Fill of wetlands without both an approved land use application and an approved Joint Fill Permit issued by the Oregon DivisionOregon Department of State Lands and the U.S. Army Corps of Engineers.
 6. Uncontained, outside storage areas of hazardous materials for hazardous materials

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as defined by the Department of Environmental Quality~~Storage of uncontaminated hazardous materials as defined by the Department of Environmental Quality.~~

7. Expansion of nonconforming uses.
 8. New installation of manufactured dwellings.
- B. Permitted Uses within the Floodway or within Wetlands. The following uses are permitted subject to review under the standards for development of Section 4.517, Development Standards, of this Chapter:
1. Open space, trails, walkways, and bike paths, as designated by the Troutdale Parks Plan, or as approved with a land use application.
 2. Removal of ~~refuse and~~ unauthorized fill.
 3. ~~Projects for stream habitat restoration, removal of nuisance or invasive plant species, and/or the restoration of approved plant species from the Metro Native Plant List subject to the approval of a removal/revegetation plan prepared by a licensed landscape architect, landscape designer, botanist, or arborist with specific knowledge of native plant species, planting and maintenance methods, survival rates, and their ability to control erosion and sedimentation in compliance with Chapter 5.600, Erosion Control and Water Quality Standards, of this Code. A copy of the Metro plant list is available from the Planning Division.~~
 43. Removal of dead or dying trees that are an imminent danger to public safety as determined by a certified arborist or the equivalent.
 54. Routine repair and maintenance of existing structures (conforming and nonconforming uses), streets, driveways, utilities, culverts, drainageways and levees constructed for flood control by the Sandy Drainage Improvement Company or its successor, accessory uses, and other existing development on the site (including landscaped yards, decks, patios, boat ramps, and the operation, maintenance, and repair of manmade water control facilities such as irrigation and

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drainage ditches, constructed ponds or lakes, wastewater facilities, and stormwater quality facilities, and similar development.

56. Construction, expansion, and/or maintenance of public roadways and public utility facilities necessary to support permitted development. A “No-Rise” Certification for construction or expansion of public roadways and public utilities shall be required consistent with Section 4.517.G(4) for all approved projects.
67. Balanced excavation and fill required for the construction of detention facilities or structures and other facilities such as levees specifically designed to reduce or mitigate flood impacts. Levees shall not be used to create vacant buildable lands.
87. New culverts, stream crossings, and transportation projects necessary to implement the City, County, or State Transportation System Plans or other development permitted under this Chapter, and as applicable, meets the specifications of the Oregon Department of State Lands, Oregon Department of Fish and Wildlife, and federal regulations.
89. Permanent bank stabilization necessary to preserve an existing structure provided the balanced cut and fill standard is met if the work is in the floodplain or a “No-Rise” certification if the work is within the floodway. Exception: Bank stabilization is not permitted for development on a vacant lot of record.
940. Emergency temporary bank stabilization necessitating immediate action during a flood event to prevent the loss of an existing structure. Following the flood event, the owner shall submit a plan to the City that outlines removal of the temporary bank stabilization or shall apply for a permit for permanent bank stabilization.
1044. Fill of wetlands when there is no other practicable way to build on the site as established through SSubsection 4.517 of this Chapter, and provided fill of wetlands within the floodplain is balanced with cut elsewhere within the floodplain, and a Fill/Removal Permit is issued from the Oregon Department of State Lands (DSL) and U.S. Army Corps of Engineers (Corps), as applicable. The application to DSL and the Corps may be processed concurrently with a land use application for site and design review, land division, a planned development application, or a conditional use. A joint fill permit may be applied for prior to application for a land use permit. However, if a joint fill permit is approved by the Oregon DivisionOregon Department of State Lands and the U.S. Army Corps of Engineers prior to applying for the land use application, fill may not proceed until the final decision for the land use application has been made by the City. Mitigation for fill of wetlands and the location of the mitigation shall be as prescribed by the DSL/Corps permit.
112. New drainageways, levees, or alteration of watercourses to accommodate public projects administered by the Sandy Drainage Improvement Company or its successor, the City, Multnomah County, the state, or a federal agency, provided it

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is in compliance with Subsections Sections 4.516(CA) and 4.517(R) and (S) of this Chapter.

123. Any development that must implement a Federal Aviation Administration (FAA) compliant wildlife hazard management plan on property owned by the Port of Portland or within ten thousand (10,000) feet of an Aircraft Operating Area, as defined by the FAA, and removal of trees that interfere with the landing or takeoff flight path of aircraft at the Troutdale Airport or otherwise interferes with the safe operation of the airport as determined by the Port of Portland. The removal of trees that interfere with the operation of the Troutdale Airport are permitted outright.

4.516 Permit Required Floodplain Development Permit

A. Background. To participate in the National Flood Insurance Program (NFIP), a community must adopt and enforce a floodplain management ordinance that regulates development in the floodplain. This floodplain management ordinance is housed primarily in Chapter 4.500 - Flood Management Area (FLMA), but is in part addressed in other Chapters of this Code. One of the basic Federal requirements for regulating Development in the Floodplain is a requirement for a Floodplain Development Permit (locally, a Floodplain Development Permit) before construction or other development begins within any Special Flood Hazard Area. In this context, the term "development" is defined in Section 1.040. This chapter contains provisions for the federally required Floodplain Development Permit and is consistent with the National Flood Insurance Program (NFIP) regulations. A Flood Hazard Permit/Floodplain Development Permit is required for development within the Flood Management Area except as noted: in Section 4.516.C.

B. Applicability. Unless exempt per Section 4.516.C, below, approval of a Floodplain Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 4.511.B. The permit shall be for all structures including manufactured dwellings, as set forth in the Section 1.040 and for all development including fill and other activities, also as set forth in the Section 1.040.

C.A. Exemptions. The following activities do not require a Flood Hazard Permit/Floodplain Development Permit:

1. Routine repair of public streets and public utilities that occurs entirely within the right of way.
2. Routine repair of railroads that occurs entirely within the railroad right of way.
3. Flood management activities conducted by the Sandy Drainage Improvement Company (SDIC). Routine operations, repair, maintenance, reconfiguration, rehabilitation, or replacement of existing drainage and flood control facilities, and

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existing related facilities, including any structures, pump stations, water control structures, culverts, irrigation systems, roadways, utilities, accessory uses (such as off load facilities that facilitate water-based maintenance), erosion control projects, levees, soil and bank stabilization projects, dredging and ditch clearing within the hydraulic cross section in existing storm water conveyance drainageways, or other water quality and flood storage projects applicable to existing facilities and required to be undertaken pursuant to ORS Chapters 547 or 554 or Titles 33 or 44 of the Code of Federal Regulations, provided that:

- a. These activities are conducted by the Sandy Drainage Improvement Company or its successor or designee; and
- b. The activities are consistent with all other applicable local, state, and federal laws and regulations; and
- c. The activities do not encroach closer to a surface stream or river, wetland, or other body of open water than existing operations and development; and
- d. Disturbed areas are replanted with vegetation and no bare soils remain after project completion; the planting of native vegetation and removal of invasive non-native or noxious vegetation is encouraged; invasive non-native or noxious vegetation shall not be planted; and
- e. The SDIC or its successor submits an annual report to all local permitting agencies in which the district operates, describing the projects the district completed in the previous year and how those projects complied with all applicable federal and state laws and requirements.

41. The removal of refuse.

25. Removal of invasive, nuisance, or prohibited plant species that exposes the ground, provided a revegetation plan approved or prepared by the City, state, a federal agency, Metro, SOLV, the West East Multnomah Soil & Water Conservation District, or other similar organizations as determined by the Floodplain Manager, is carried out to provide shade and habitat, prevent erosion of steep slopes and/or sedimentation into the protected water feature. A copy of the plan shall be provided to the Planning DivisionCommunity Development Department prior to beginning the work.

36. Emergency tree removal or emergency hazard mitigation during emergency declaration for an imminent natural hazard event. In the event that a tree or other vegetation poses an immediate danger to life or property, removal is allowed without a tree removal permit. Following the emergency, the owner shall provide the tree species, diameter, and approximate location on the property to the Planning Division submit documentation that all applicable standards of this Chapter have been met.

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7. Development within an area of the site that has been excluded from the Special Flood Hazard Area through a Letter of Map Amendment (LOMA) or it is very clear on the plan view that the area is outside of the Special Flood Hazard area and above the base flood elevation.
8. Continued use and maintenance of existing gardens or other landscaped areas, orchards or agricultural fields provided no fill is added to the floodplain.
9. Operation, maintenance, and repair of manmade water control facilities such as irrigation and drainage ditches, constructed ponds or lakes, wastewater facilities, and stormwater quality facilities. An expansion of these facilities will require a Type II Flood Hazard Permit⁴. Placement of fill in residential zones, provided it is consistent with other applicable provisions of this Code, and provided the fill is used solely for the purpose of constructing a sandbox, a raised gardening bed, or other similar landscape feature.
5. Installation of three strand, on bendable pole, wire farm type fencing that is constructed consistent with the provisions in Section 4.517.
6. Landscape maintenance activities consistent with the standards identified in this Section.
7. Wetlands not subject to flooding as described Section 4.511.B, nor identified as designated habitat covered under the Endangered Species Act, and are not exempt for review under Section 4.300 of this Code.
8. Flood management activities conducted by the Sandy Drainage Improvement Company (SDIC). Routine operations, repair, maintenance, reconfiguration, rehabilitation, or replacement of existing drainage and flood control facilities, and existing related facilities, including any structures, pump stations, water control structures, culverts, irrigation systems, roadways, utilities, accessory uses (such as off-load facilities that facilitate water-based maintenance), erosion control projects, levees, soil and bank stabilization projects, dredging and ditch clearing within the hydraulic cross-section in existing storm water conveyance drainageways, or other water quality and flood storage projects applicable to existing facilities and required to be undertaken pursuant to ORS Chapters 547 or 554 or Titles 33 or 44 of the Code of Federal Regulations, provided that:
 - a. These activities are conducted by the Sandy Drainage Improvement Company or its successor or designee; and
 - b. The activities are consistent with all other applicable local, state, and federal laws and regulations; and

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- c. The activities do not encroach closer to a surface stream or river, wetland, or other body of open water than existing operations and development; and
- d. Disturbed areas are replanted with vegetation and no bare soils remain after project completion; the planting of native vegetation and removal of invasive non-native or noxious vegetation is encouraged; invasive non-native or noxious vegetation shall not be planted; and
- e. The SDIC or its successor submits an annual report to all local permitting agencies in which the district operates, describing the projects the district completed in the previous year and how those projects complied with all applicable federal and state laws and requirements.

D. Submission Requirements. An application for a Floodplain Development Permit within the Flood Management Area shall include the following, and these requirements apply to all applicants for development approval unless otherwise noted below:

- 1. A site plan showing the proposed development on the site, drawn to a standard scale, and including an illustrated scale for use in reductions. A site plan shall also consist of the following:
 - a. SFHA boundaries, and the base flood elevations based upon the North American Vertical Datum of 1988 (NAVD 88);
 - b. The 1996 flood boundaries established by Metro;
 - c. Floodway boundaries as determined by datum available from the FIRM and Flood Insurance Study;
 - d. The name, location, and dimensions of affected streams or rivers, and the bankfull stage or the two-year storm level;
 - e. The area comprising the vegetation corridor as established by Sections 4.316, Width of Vegetation Corridor, and 4.317, Method for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Code;
 - f. Wetlands that are determined significant by the Oregon Department of State Lands or have the following characteristics. All wetland determinations made prior to development must be reviewed and acknowledged by the Oregon Department of State Lands prior to issuance of City permits. The characteristics shall be determined by a qualified scientist.
 - i. The wetland is fed by surface flows, sheet flows, or precipitation; has evidence of flooding during the growing season; at least sixty

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percent (60%) of the area is vegetation; and is over one-half acre in size; or, the wetland qualifies as having “intact water quality function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or

- ii. The wetland is in the Flood Management Area; has evidence of flooding during the growing season; is five (5) acres or more in size; and has a restricted outlet or no outlet; or, the wetland qualifies as having “intact hydrologic control function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or
- iii. The wetland, or a portion of the wetland, is within a horizontal distance of less than one-fourth mile from a water body which meets the Department of Environmental Quality definition of “water quality limited water body” in OAR Chapter 340, Division 41 (1996).

2.4. Topographic survey. Where development, excavation, or vegetation removal is proposed within the Flood Management Area, an on the ground topographical survey shall be prepared for the entire site. The survey shall show The survey shall show the floodway and floodplain trees or tree clusters, existing roads, utilities, and structures with two (2) foot contours. The survey maps shall be provided by the property owner or applicant for development approval. The survey shall also show the location of existing and proposed improvements on the site, trees or tree clusters (including those to be removed), existing roads, utilities, and structures, buildings, structures, fencing, walls, landscaping, storage of materials or equipment, drainage facilities, parking areas, and other impervious surface areas. The survey shall be drawn to scale, with two (2) foot contours, and shall note the distance from Top-of-bank to the improvements on the site;

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23. Where base flood elevation data is provided through the City's Flood Insurance Study, or by other means as permitted in this Chapter, the developer shall obtain and record the actual elevation of the lowest floor (including basement) of all new or substantially improved structures, including the placement of a manufactured dwelling, and whether or not the structure contains a basement. This information shall be based upon NAVD 88 and provided on a City Floodplain Development Permit form, and should include the following, as applicable: Base flood elevation data. Where base flood elevation data is provided through the City's Flood Insurance Study, or by other means as permitted in this Chapter, the developer shall obtain and record the actual elevation lowest floor (including basement) of all new or substantially improved structures, including the placement of a manufactured home, and whether or not the structure contains a basement. This information shall be based upon NAVD 88 and provided on a City Flood Hazard Permit form.

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a. For all new or substantially improved, elevated, or floodproofed structures, verify and record the actual elevation. a. For all new or substantially improved, elevated, or floodproofed structures, verify and record the actual elevation.

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b.b. Where development occurs within Zone A of the Flood Management Area and the Base Flood Elevation (BFE) data is not available either through the Flood Insurance Study or from another authoritative source as authorized in Subsection 4.513(BC) of this Chapter, the Flood Hazard Permit/Floodplain Development Permit shall be reviewed for compliance with FEMA Publication 265 issued July 1995 “Managing Floodplain Development in Approximate Zone A Areas” adopted herein for reference, and applicable State of Oregon Building Codes.

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3. Hydrology and soils report. This report shall include information on the hydrological activities of the site, the effect of hydrologic conditions on the proposed development, and any hydrological or erosion hazards. This report shall also include characteristics of the soils on the site, suitability for development, its carrying capacity, and erosion or slumping characteristics that might present a hazard to life and property, or adversely affect the use or stability of a public facility or utility. Finally, this report shall include information on the nature, distribution, and strength of existing soils; the adequacy of the site for development purposes; and an assessment of grading procedures required to impose the minimum disturbance to the natural state. The report shall be prepared by a professional engineer registered in Oregon.

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4. Hydrology and soils report. Where ground disturbance or vegetation removal is proposed that exposes the soil, this report shall be required. This report shall include information on the hydrological activities of the site, the effect of hydrologic conditions on the proposed development, and any hydrological or erosion hazards. This report shall also include characteristics of the soils on the site, suitability for development, its carrying capacity, and erosion or slumping characteristics that might present a hazard to life and property, or adversely affect the function or stability of a public use or facility. This report shall also include information on the nature, distribution, and strength of existing soils; the adequacy of the site for development purposes; and an assessment of grading procedures required to impose the minimum disturbance to the natural state. The report shall be prepared by a professional engineer registered in Oregon. In Oregon Department of Geology and Mineral Industries (DOGAMI) inventory of landslide hazard areas, on hillsides where grading will lessen stability, or in areas where historic or prehistoric mudflows have occurred, a soils engineer and/or engineering geologist registered in Oregon shall certify the development will not negatively impact public safety, adjacent properties, or water quality.

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45. Grading plan. If grading is to occur, a grading plan shall be required that shows existing and finished contours. The grading plan shall be specific to a proposed physical structure or use and shall include information on terrain (two-foot contour intervals of property), drainage, all cut and fill slopes and proposed drainage channels, direction of drainage flow, location of proposed structures and existing structures which may be affected by the proposed grading operations, and water quality facilities, post grading, and finished contours or elevations, including all cut and fill slopes and proposed drainage channels. Project designs including, but not limited to, locations of surface and subsurface devices, walls, dams, sediment basins, storage reservoirs, and other protective devices shall form part of the submission. The grading plan shall also include a construction phase erosion control plan and a schedule of operations and shall be prepared by a professional engineer registered in Oregon.

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65. Vegetation report. Where vegetation is to be removed or other impacts to the onsite vegetation is to be expected as a result of development, this report shall be required. This report shall consist of a survey of existing vegetation, whether it is native or introduced, and how it will be altered by the proposed development. Measures for enhancement of the site, including revegetation with approved plant species, will be clearly stated, as well as methods for immediate and long-term stabilization of slopes and control of soil erosion. The vegetation report shall be prepared by a landscape architect, landscape designer, botanist, or arborist with specific knowledge of approved plant species, planting and maintenance methods, survival rates, and their ability to control erosion and sedimentation. The contractor for installation and maintenance will be responsible for replacing any approved plant species that do not survive the first two (2) years after planting.

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76. A “No-Rise” certification and a Letter of Map Revision Change Fill (LOMRC-F) shall be submitted with the land use application for the following activities within the floodway as mapped by FEMA:

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a. Permanent bank stabilization that occurs in the floodway.

b. Development, alterations, or relocations of the floodway, including any permanent fill within the floodway.

8. Building and structure elevations. For all existing and proposed, relocated, or expanded buildings and structures, elevation in relation to the Highest Adjacent Grade, the North American Vertical Datum 1988 (NAVD88), and the base flood elevation as applicable, of the:

a. Lowest enclosed area of all existing and proposed, relocated, or expanded buildings and structures. This includes crawlspaces, basement floors, and attached garages, electrical equipment (except utility meters), heating and ventilation equipment, plumbing, air conditioning equipment, and/or other

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service facilities (including ductwork); top of proposed garage slabs; and next highest floor situated above the items herein.

- b. Elevation to which any existing building or structure has been or is proposed to be flood-proofed; and certification by a registered professional engineer that the flood-proofing methods for any nonresidential structure meet the floodproofing criteria in this Chapter.

- c. The locations and sizes of all flood openings in any proposed buildings and structures.

9. Infrastructure. Location of all proposed infrastructure necessary to serve the proposed development shall be required when such new development is proposed by the applicant. Such infrastructure includes, but is not limited to, streets, driveways, water, sanitary sewer, and storm drainage.

10. Floodplain or watercourse alterations. Where floodplain or watercourse alterations are proposed, a description of the extent to which any floodplain or watercourse is proposed to be altered or affected as a result of proposed development shall be required.

11. All federally-mandated or state-mandated permits issued by other governmental agencies shall be obtained, or obtaining such permits shall be a Condition of Approval to be satisfied prior to issuance of any construction permit. Such permits include but are not limited to Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334, 16 U.S.C. 1531-1544, and State of Oregon Removal-Fill permits, as amended.

E.B. Application for Floodplain Development Permit. A Floodplain Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 4.511. The permit shall be for all structures including manufactured dwellings, as set forth in Section 1.040 and for all development including fill and other activities, also as set forth in Section 1.040. Applications for a Floodplain Development Permit shall be made on forms furnished by the Community Development Department and may include, but not be limited to, plans drawn to scale showing the nature, location, dimensions, elevations of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing.

1. A Type I Flood Hazard Permit/Floodplain Development Permit is required for the following:

- +a. Construction of a single-family dwelling, including the placement of a manufactured home/manufactured dwelling or repair or alteration of existing single-family dwellings and manufactured home/manufactured dwellings. An elevation certificate and the information required in Subsection (E) of this Section shall be submitted with the Flood Hazard

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Permit application unless it is very clear on the plan view that the structure is on a portion of the site that is naturally elevated one (1) foot or more above the base flood elevation. Single-family dwellings and **manufactured homes** shall be built in compliance with the applicable development standards in Section 4.51 7. Development Standards, of this Chapter.

2. Any use in the underlying zoning district requiring a **Development Permit** except as provided in Section 4.516 C.

- 3b. Emergency bank stabilization necessary to preserve an existing structure during an emergency. During the **flood** event the permit is not required; however, immediately following the event a **Flood Hazard Permit**Floodplain Development Permit shall be obtained that documents the bank stabilization measures taken during the emergency and the schedule and procedure that will be used to remove any temporary fill, including sand bags. If the stabilization measures will not be removed, a Type II **Flood Hazard Permit**Floodplain Development Permit will be required as well as a "No-Rise" certification and LOMCR-F, as if applicable.

- c. Wildfire mitigation projects as identified in this Chapter.

4. Projects for stream habitat restoration subject to the following standards:

- a. The project qualifies for a U.S. Army Corps of Engineer's "Regional General Permit" for Stream Habitat Restoration (NWP 2007 1023) and complies with applicable Oregon Department of State Lands standards, as applicable; and
- b. If within the floodway, a qualified professional (a Registered Professional Engineer) provides a feasibility analysis and certification that the project was designed to keep any rise in 100 year flood levels as close to zero as practically possible given the goals of the project; and
- e. No structures would be impacted by a potential rise in flood elevation; and
- d. An agreement to monitor the project, correct problems, and ensure that flood carrying capacity remains unchanged is included in the application.

2. A Type II **site and design review** and **Flood Hazard Permit**Floodplain Development Permit is required for:

- a. Any use in the underlying zoning district requiring a Type II **site and design**Site Development review.
- b. New or expanded streets or bridges.

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- c3. New or expanded railroads or trestles.
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 - 4d. Permanent bank stabilization or fill within the floodplain or floodway.
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 - e5. Balanced cut and fill activity within the floodplain, with a Letter of Map Revision Fill Change, as required in this Code.
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 - f6. Fill of wetlands. ~~– but if~~ If the wetland is outside of the floodplain ~~and not hydrologically connected~~, a Flood Hazard Permit/Floodplain Development Permit is not required, only the Site and Design Development Review.
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 - g. Other uses similar in nature to those listed above.
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- D. 3. A Type III procedure and ~~Flood Hazard Permit~~Floodplain Development Permit shall be processed for uses requiring a Type III review in the underlying zoning district, for all special variances requested from the standards of this Chapter, and for any proposed alteration of a watercourse of any perennial or intermittent streams.
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- E. Submission Requirements. An application for development within the ~~Flood Management Area~~ shall include the following:
- 1. Topographic survey. Where development, excavation, or vegetation removal is proposed within the ~~Flood Management Area~~, an on the ground topographical survey shall be prepared for the entire site. The survey shall show trees or tree clusters, existing roads, utilities, and structures with two (2) foot contours. The survey maps shall be provided by the property owner or applicant for development approval.
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 - 2. Base flood elevation data. Where base flood elevation data is provided through the City's ~~Flood Insurance Study~~, or by other means as permitted in this Chapter, the developer shall obtain and record the actual elevation lowest floor (including basement) of all new or substantially improved structures, including the placement of a manufactured home, and whether or not the structure contains a basement. This information shall be based upon NAVD 88 and provided on a City Flood Hazard Permit form.
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 - a. For all new or substantially improved, elevated, or floodproofed structures, verify and record the actual elevation.
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 - b. Where development occurs within Zone A of the ~~Flood Management Area~~ and the Base Flood Elevation (BFE) data is not available either through the ~~Flood Insurance Study~~ or from another authoritative source as authorized in Subsection 4.513(B) of this Chapter, the Flood Hazard Permit shall be reviewed for compliance with FEMA Publication 265 issued July 1995 "Managing Floodplain Development in Approximate Zone A Areas" and applicable State of Oregon Building Codes.
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3. Hydrology and soils report. This report shall include information on the hydrological activities of the site, the effect of hydrologic conditions on the proposed development, and any hydrological or erosion hazards. This report shall also include characteristics of the soils on the site, suitability for development, its carrying capacity, and erosion or slumping characteristics that might present a hazard to life and property, or adversely affect the use or stability of a public facility or utility. Finally, this report shall include information on the nature, distribution, and strength of existing soils; the adequacy of the site for development purposes; and an assessment of grading procedures required to impose the minimum disturbance to the natural state. The report shall be prepared by a professional engineer registered in Oregon.
4. Grading plan. The grading plan shall be specific to a proposed physical structure or use and shall include information on terrain (two foot intervals of property), drainage, direction of drainage flow, location of proposed structures and existing structures which may be affected by the proposed grading operations, water quality facilities, post grading, and finished contours or elevations, including all cut and fill slopes and proposed drainage channels. Project designs including, but not limited to, locations of surface and subsurface devices, walls, dams, sediment basins, storage reservoirs, and other protective devices shall form part of the submission. The grading plan shall also include a construction phase erosion control plan and a schedule of operations and shall be prepared by a professional engineer registered in Oregon.
5. Vegetation report. This report shall consist of a survey of existing vegetation, whether it is native or introduced, and how it will be altered by the proposed development. Measures for enhancement of the site, including revegetation with approved plant species, will be clearly stated, as well as methods for immediate and long term stabilization of slopes and control of soil erosion. The vegetation report shall be prepared by a landscape architect, landscape designer, botanist, or arborist with specific knowledge of approved plant species, planting and maintenance methods, survival rates, and their ability to control erosion and sedimentation. The contractor for installation and maintenance will be responsible for replacing any approved plant species that do not survive the first two (2) years after planting.
6. A “No Rise” certification and a Letter of Map Revision Fill (LOMR F) shall be submitted with the land use application for the following activities within the floodway as mapped by FEMA:
 - a. Permanent bank stabilization that occurs in the floodway.
 - b. Development, alterations or relocations of the floodway, including any permanent fill within the floodway.
- E. Review Criteria - Requests for approval of a Floodplain Development Permit shall be reviewed by the Floodplain Administrator or designee to ensure:
 1. Consistency with the standards from Sections 1.040, Chapter 2, and Section

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- 4.517. as applicable:
2. Consistency with other applicable standards of this Code and all other applicable policies and standards adopted by the City.
- I. Mandatory Conditions of Approval - The following Conditions of Approval are mandatory and shall be imposed on every approved Floodplain Development Permit:
1. Required During Construction Elevation Certificate. For all new construction, development, and substantial improvements, the permit holder shall provide to the Floodplain Administrator or designee an as-built certification of the floor elevation or flood-proofing elevation immediately after the lowest floor or flood-proofing is placed and prior to further vertical construction. Any deficiencies identified by the Floodplain Administrator or designee shall be corrected by the permit holder immediately and prior to work proceeding. Failure to submit certification or failure to make the corrections shall be cause for the Floodplain Administrator or designee or the Building Official to issue a stop-work order for the project.
2. Required Documentation Prior to Issuance of Certificate of Occupancy
- a. In addition to the requirements of the Building Codes pertaining to Certificate of Occupancy, prior to the final inspection the owner or authorized agent shall submit the following documentation to the Floodplain Administrator or designee and the documentation shall be prepared and sealed by a registered surveyor or engineer:
- i. For elevated buildings and structures in Special Flood Hazard Areas, the as-built elevation of the lowest floor, including basement, or where no base flood elevation is available the height above highest adjacent grade of the lowest floor;
- ii. For buildings and structures that have been floodproofed, the elevation to which the building or structure was floodproofed.
- b. Failure to submit certification or failure to correct violations shall be cause for the Floodplain Administrator or designee or the Building Official to withhold a Certificate of Occupancy until such deficiencies are corrected.
3. For applications for partitions and subdivisions, one of the following shall be required:
- a. Protection of Flood Management Areas with a conservation easement;
- b. Platting Flood Management Areas as common open space; or

c. Offer of sale or donation of Flood Management Area property to public agencies or private non-profits for preservation where feasible.

4.517 Development Standards. The land use application shall establish through the use of narrative, site plans, and professional reports, the following:

- A. Type II or III approval for new development, including additions or alterations to existing structures, except for single family dwellings, in the Flood Management Area may be allowed, provided that:
 - 1. The applicant shall demonstrate that there is no reasonable nor practical alternative design or method of development that would have a lesser impact on the Flood Management Area than the one proposed.
 - 2. If there is no reasonable nor practical alternative design or method of development the project shall be designed in compliance with applicable parts of Subsections (BE) through (XH) of this Section, so that the impacts on the Flood Management Area are limited and the plans shall include restoration, replacement, or rehabilitation of the vegetation within the Flood Management Area.
 - 3. The applicant shall provide mitigation to ensure that impacts to the functions and values of the vegetation corridor and integrity of the slope will be mitigated or restored to the extent practicable.
- B. A professional engineer registered in Oregon must certify that the development will not result in any increase in flood levels throughout the SFHA during the occurrence of the base flood discharge, and that water quality will not be adversely affected.
- C. As applicable, the development must be authorized by the Oregon Department of State Lands, U.S. Army Corps of Engineers, the Oregon Department of Fish and Wildlife, and the Sandy Drainage Improvement Company. The applicant shall obtain and submit a copy of all required state and federal permits for any proposed development in the Flood Management Area, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1334.
- D. Unless otherwise authorized under the provisions of this Chapter, the development shall comply with the underlying zoning district dimensional standards and the minimum vegetation corridor as established in Sections 4.316, Width of Vegetation Corridor, and 4.317, Method for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Code. The applicant shall submit an exhibit that shows the location and provides a description of all actions to be provided to mitigate the impacts of permitted development as established in Section 4.314.
- E. Protect the water quality resource —and Flood Management Area functions and values from uncontained areas of hazardous materials as defined by the Department of Environmental Quality water quality standards.

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F. Limit impervious surface areas in the Flood Management Area.

1. The impervious surface of the development may not exceed thirty percent (30%) of the flood plain area, provided the standards of this Code are met. Exception: Public roads necessary to serve the transportation needs of the City may exceed thirty percent (30%) of the Flood Management Area provided all other applicable standards of this Chapter have been met.
2. Clustering of houses and multiple-family units, zero lot line developments, and/or modifications to setbacks may be approved under the Type II procedure in order to accommodate the density permitted within the underlying zoning district and not exceed the impervious surface limitation of thirty percent (30%) of the Flood Management Area on the site.
3. The Director or their designee, may grant an administrative variance of up to fifty percent (50%) of any dimensional standard in the underlying zoning district where necessary to avoid construction development within the Flood Management Area.

G. Maintain flood storage capacity. The developer is required to offset new fill placed in the floodplain by excavating an additional flood-able area to replace the lost flood storage area, preferably at hydrologically equivalent sites. All development proposals in the SFHA shall provide compensatory mitigation for impacts to flood storage, water infiltration, and riparian vegetation to ensure that new development does not increase flood hazards on other properties. A mitigation plan shall be submitted with the land use application. All required actions derived from that plan shall be completed prior to issuance of a Certificate of Occupancy, a Certificate of Completion for a subdivision, or the final building inspection, as applicable. Maintain flood storage capacity. Balanced cut and fill is required for permitted development in the Flood Management Area. Excavation and fill shall be performed in a manner to maintain or increase flood storage and conveyance capacity and not increase design flood elevations. A professional engineer registered in Oregon must certify that the development will not result in any increase in flood levels throughout the SFHA during the occurrence of the base flood discharge, and that water quality will not be adversely affected. The applicant shall obtain a Conditional Letter of Map Revision Fill (CLOMR-F) from FEMA prior to grading and filling the site and then obtain and submit the final Letter of Map Revision Fill (LOMR-F) prior to final inspections, or issuance of a certificate of completion, or issuance of the certificate of occupancy.

1. All fill placed at or below the design flood elevation in the Flood Management Area shall be balanced with at least an equal amount, volume or amount of soil material removal. The development shall be designed to minimize development within the Flood Management Area and amount of fill necessary. Balanced cut and fill may be used to elevate structures but shall not be used for density transfer.

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Residential density must be calculated prior to changes to the floodplain as a result of balanced cut and fill.

2. Excavation shall not be counted as compensating for fill if such areas will be filled with water in non-storm winter conditions.
3. The cumulative effect of any proposed development shall not increase the water surface elevation of the base flood. Onsite flood storage capacity shall not decrease as a result of development, vegetation removal, or excavation.
4. A “No-Rise” certification is required for any fill or permitted development within the floodway pursuant to Section 60.3(d)(3) of the National Flood Insurance Program.
 - a. _____ The “No-Rise” supporting data and a copy of the engineering certification must be submitted to, and reviewed by, the City prior to approval of development, and the data shall be submitted with the [Flood Hazard Permit](#)/[Floodplain Development Permit](#).
 - b. _____ The “No-Rise” certification and supporting technical data must stipulate no impact on the 100-year flood elevations, floodway elevations, or floodway widths at the new cross-sections and at all existing cross-sections anywhere in the model.
 - c. _____ A sample “No-Rise” certification is available in the Community Development Department.

5. [All new buildings built on fill in the regulatory floodplain shall be constructed on fill:](#)

- a. [Certified by a professional engineer registered in Oregon as suitably designed and compacted for the development \(e.g. fill that meets the criteria of 1803.5.8 and Section 1804.4 of the International Building Code, Section 2.4 of ASCE 24, or their equivalent\); and](#)
- b. [Providing protection from erosion and scour.](#)

6. [Obtain a Conditional Letter of Map Change from FEMA prior to grading and filling the site and then obtain and submit the final Letter of Map Change prior to final inspections, or issuance of a certificate of completion, or issuance of the certificate of occupancy as required under this Section. When a project applicant has demonstrated through the Floodplain Development Permit that, in addition to the standards listed for Section 4.517.G, the following standards have been achieved, a Conditional Letter of Map Change/Letter of Map Change may not be required:](#)

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- a. Fill is not proposed in the floodway for the site to be impacted through development;
 - b. The project site is not being elevated to or above the base flood elevation (BFE);
 - c. The project is proposing to remove unsuitable existing material (topsoil) and backfilling with select structural material, not alter the existing (natural grade) elevation of the site;
 - d. The site to be impacted does not have US Fish and Wildlife Service designations for critical habitat for endangered species; and
 - e. In areas where a regulatory floodway has not been designated, the new construction, substantial improvements, or other development (including fill) within A or AE Zones on the community's FIRM, has demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood at any point within the community.
7. All proposals that include engineering analysis for maintenance of flood storage capacity are subject to review by a qualified engineer licensed in the State of Oregon. The applicant shall be responsible for the cost of this independent review and will be advised at the time of application of this expectation.
- H. Residential ConstructionDevelopment, including accessory structures as referenced in Section 5.010 of this Code and not constructed in accordance with Section 4.517.V; including accessory structures associated with residential dwellings. -Note: -if more than fifty percent (50%) of the lot being developed is affected by the floodplain, then the minimum density standard of this Code does not apply.
- 1. Elevate structures. -The minimum finished floor elevation, including basement floor, for all new or substantially improved residential structures in the Flood Management Area shall be at least one foottwo (2) feet above the base flood elevation, as established by in 4.511.B the Federal Emergency Management Agency, and as demonstrated through the Elevation Certificate submittals as established in this Section. Elevation Certificates shall be required for all residential development as required by the Community Rating System.
 - a. An Federal Emergency Management Agency National Flood Insurance Program Elevation Certificate shall be submitted with the construction plans unless there is a LOMA for the site or it is very clear on the plan view that the area is outside of the Special Flood Hazard area and above the Base Flood Elevation. The Elevation Certificate shall include the elevation of the lowest floor (including basement). The Elevation

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Certificate shall be certified by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information for construction within specific flood hazard areas.

- b. A second certified Elevation Certificate shall be submitted to the City of Troutdale prior to pouring the foundation.
 - c. A third certified Elevation Certificate shall be submitted after the structure is completed based upon finished construction.
 - d. The City shall maintain the Elevation Certificates for public inspection.
2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:
- a. A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
 - b. The bottom of all openings shall be no higher than one (1) foot above grade.
 - c. Openings may be equipped with screens, louvers, or other devices provided that they permit the automatic entry and exit of floodwaters.
 - d. Where possible, openings will be installed on at least two opposing sides of the enclosed area.
3. Below-grade crawlspaces are allowed only when in compliance with the design requirements of FEMA Technical Bulletin 11-01, “Crawlspace Construction for Buildings Located in Special Flood Hazard Areas.” Buildings that have below-grade crawlspaces will have higher flood insurance premiums than buildings that have the preferred crawlspace construction with an interior elevation at or above the lowest adjacent exterior grade.
- a. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings:
 - i. Openings that equalize hydrostatic pressures by allowing for the automatic entry and existence of floodwaters is required. The

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bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade. See FEMA Technical Bulletin 1-93, Opening in Foundation Walls, for guidance.

- ii. All portions of the building below the base flood elevation must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE. Ductwork or other utility systems located below the insulation may pull away from their supports. See page 8 of Technical Bulleting 1-93 and FEMA Technical Bulletin 2-93 Flood Resistant Materials Requirements.
 - iii. Any building utility systems within the crawlspace must be elevated above the base flood elevation or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters. For further guidance, see FEMA 348, Protecting Building Utilities from Flood Damage.
- b. The interior grade of a crawlspace below the base flood elevation must not be more than two (2) feet below the lowest adjacent exterior grade.
 - c. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building Code requirements for flood hazard areas. Crawlspaces may not be converted to basements.
 - d. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel, or crushed stone drainage by gravity or mechanical means.
 - e. Crawlspace construction is not permitted in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional

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engineer. For velocities in excess of five (5) feet per second, other foundation types should be used.

- f. The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest immediate interior or exterior grade.
4. Substantial improvements of existing dwellings will require elevation of any non-elevated structure to twoone (24) feet above the base flood elevation in compliance with this Section and in accordance with Section 1.040. Substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. Substantial improvements include:
 - a. Any repair, reconstruction, or improvement of a structure, the cost of which exceeds forty-nine fifty percent (5049%) of the market value of the structure as established by the County appraiser or a licensed professional appraiser.
 - b. Reconstruction or repair of a structure that exceeds fifty forty-nine percent (5490%) of the market value of the building before it was damaged.
 - c. Additions to an existing structure when the addition increases the market value of the structure by more than fifty forty-nine percent (5049%) or the floor area by more than twenty percent (20%).
4. The term does not include the following:
 - i. Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or
 - ii. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.
5. Accessory structures may either be elevated or meet these standards:
 - a. Be equipped with adequate flood vents;
 - b. Be constructed of flood resistant materials;
 - e. Utilities and mechanicals, if used, comply with Section Q of this Section.

d. Be anchored.

65. Comply with other standards of this Section, as applicable.
- I. ~~Manufactured Home~~Manufactured dwellings within the Special Flood Hazard Area.
1. All ~~manufactured home~~manufactured dwellings to be placed or substantially improved on sites that are outside of a ~~manufactured home~~manufactured dwelling park or subdivision; in a new ~~manufactured home~~manufactured dwelling park or subdivision; in an expansion to an existing ~~manufactured home~~manufactured dwelling park or subdivision, or in an existing ~~manufactured home~~manufactured dwelling park or subdivision on which a ~~manufactured home~~manufactured dwelling has incurred ~~“substantial damage” as the result of a flood~~ shall be elevated on a permanent foundation such that the finished floor of the ~~manufactured home~~manufactured dwelling is elevated to a minimum eighteen (18) inches (46 cm) above the base flood elevation and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement.
 2. ~~Manufactured home~~Manufactured dwellings to be placed or substantially improved on sites in an existing ~~manufactured home~~manufactured dwelling park or subdivision within the Special Flood Hazard Area on the community’s FIRM that are not subject to the above ~~manufactured home~~manufactured dwelling provisions shall be elevated so that either:
 - a. The finished floor of the ~~manufactured home~~manufactured dwelling is elevated to a minimum of eighteen (18) inches (46 cm) above the base flood elevation; or
 - b. The ~~manufactured home~~manufactured dwelling chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above grade and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement. Anchoring shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA’s “Manufactured Home Installation in Flood Hazard Areas” guidebook for additional techniques).
 3. Manufactured dwellings shall have all electrical crossover connections installed at a minimum of 12 inches above BFE.
 4. Manufactured dwellings supported on solid foundation walls shall be constructed with flood openings that comply with Section 4.517.H(2).

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5. Comply with the other standards of this Section as applicable.
- J. Recreational Vehicles (RV) within the Special Flood Hazard Area, whether in a park or on private property outside of a park, are required to be subject to the following standards:
1. The RV is built on a single chassis.
 2. The RV is four hundred (400) square feet or less in area when measured at the largest horizontal projection.
 3. The RV is self propelled or permanently towable by a light duty truck.
 4. The RV is designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
 - 1.5 Be on the site for fewer than 180 consecutive days, and
 2. Be fully licensed and ready for highway use. Highway use means on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or The RV is fully licensed and ready for highway use (street legal), on its wheels or jacking system, and attached to the site only by quick disconnect type utilities (water, electricity, sewer) and security devices, and having no permanent attached additions.
 3. Meet the permit requirements of Section 4.517.I and the elevation and anchoring requirements for manufactured dwellings.⁶ The occupancy of the RV site is for fewer than one hundred eight (180) consecutive days.
 74. The RV “pads” shall be paved with asphaltic concrete or comparable, and have a special water quality facility for the collection of the stormwater from the site.
 58. The RV “pads” shall be wide enough to accommodate a trailer parked next to the towing vehicle or be long enough to accommodate both towing vehicle and trailer.
 9. National Flood Insurance Program regulations (reference Code of Federal Regulations (CFR) 60.3(e)(14)(iii)) require that if a recreational vehicle does not meet the criteria of this Subsection, then the vehicle must “meet the elevation and anchoring requirements for manufactured homes” pursuant to Subsection (I) of this Section.
- K. Nonresidential Construction. New construction, development, and substantial improvement of any commercial, industrial, or other nonresidential structure shall have

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the lowest floor, including basement, elevated to no less than twoone (42) feet above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

1. Be dry floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water. A dry floodproofing certificate shall be filed with the City following the form and procedure established by the Federal Emergency Management Agency.
2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy, in accordance with standards established by the Federal Emergency Management Agency and the National Flood Insurance Program.
3. Be certified by a registered professional engineer or architect that the design and methods of construction development are in accordance with accepted standards of practice for meeting provisions of National Flood Insurance Program regulations (CFR 60.3(c)(4) and (5)) based on their development and/or review of the structural design, specifications, and plans. Such certifications shall be provided to the City.
4. Nonresidential structures that are elevated, not dry floodproofed, must meet the same standards for space below the lowest floor as described in 4.517.HSubsection (H)(2) of this Section. -If elevated, an Elevation Certificate shall be submitted with the construction plans, prior to pouring the foundation, and after construction, unless there is a LOMA for the site or it is very clear on the plan view that the area is outside of the Special Flood Hazard area and above the Base Flood Elevation.
5. Applicants dry floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the floodproofed level (e.g., a building floodproofed to the base flood elevation will be rated as one (1) foot below the base flood elevation).
6. Applicants that elect to utilize floodproofing instead of elevation shall supply a comprehensive Maintenance Plan at the time of building plan review for the entire structure to include but not limited to: exterior envelope of structure; all penetrations to the exterior of the structure; all shields, gates, barriers, or components designed to provide floodproofing protection to the structure; all seals or gaskets for shields, gates, barriers, or components; and, the location of all shields, gates, barriers, and components as well as all associated hardware, and any materials or specialized tools necessary to seal the structure.
7. Applicants may be required by the Floodplain Manager to supply an Emergency Action Plan (EAP) for the installation and sealing of the structure prior to a flooding event that clearly identifies what triggers the EAP and who is responsible for enacting the EAP.

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8. Comply with other standards of this Section as applicable.
- L. Remove temporary fills. Temporary fills permitted during construction or emergency bank stabilization shall be removed if not in compliance with the balanced cut and fill standard of this Code or prior to issuance of a Certificate of Occupancy or release of any bond issued for the development.
 - M. Preserve and/or restore the vegetation corridor within the disturbed areas, and retain the existing tree canopy as established in Sections 4.316, Width of Vegetation Corridor, and 4.317, Methods for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Chapter. An enhancement plan for disturbed areas shall be prepared and implemented to stabilize slopes to prevent landslides on slopes and sedimentation of water features. This plan shall provide for the replanting and maintenance of approved plant species designed to achieve pre-disturbance conditions.
 - N. Maintain or reduce stream temperatures.
 - O. Minimize erosive velocities, nutrient, and pollutant loading into water. Use filtering, infiltration, and natural water purification for stormwater runoff in compliance with the Erosion Control and Water Quality Standards of Chapter 5.600 of this Code. The applicant's engineering plans shall certify that runoff and sedimentation from the site will comply with the standards of Chapter 5.600, Erosion Control and Water Quality Standards, of this Code.
 - P. Anchoring. All new construction, development, and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
 - Q. Construction Materials and Methods. All new construction, development, and substantial improvements shall use flood-resistant materials in accordance with the requirements of FEMA Technical Bulletin 2-93 "Flood Resistant Materials Requirements" and utilities shall be designed and installed in accordance with FEMA Publication 348 "Protecting Building Utilities from Flood Damage." The following standards are only a summary of those requirements:
 - 1. All new construction, development, and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 - 2. All new construction, development, and substantial improvements shall be constructed using methods and practices that minimize flood damage and minimize impacts to natural floodplain functions, including flood storage, water infiltration, and riparian vegetation.
 - 3. Electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during

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conditions of flooding.

4. No construction materials or methods may be used within the floodplain that would impair or damage water quality or native vegetation.
5. All development shall have adequate drainage provided to reduce exposure to flood damage and maintain water quality.

R. Utilities and Roads.

1. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable, and comply with the Oregon Department of Fish and Wildlife construction standards.
2. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
3. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.
4. Onsite waste disposal systems shall be located to avoid impairment to them, or contamination from them, during flooding consistent with the Oregon Department of Environmental Quality.
5. Utility and road placement shall occur outside the floodway unless the utility or road is necessary to serve permitted development, and there is no reasonable alternative. [Roads built in the floodplain shall be built at or above the base flood elevation to provide access to emergency vehicles during a flood.](#)
6. Stormwater management and water quality facilities shall comply with the siting and construction standards of Chapter 5.700, Stormwater Management, of this Code.

- S. For any alterations or relocations of a watercourse, [the floodplain or floodway](#), the developer shall [be required to notify the Oregon Department of State Lands, the Oregon Department of Land Conservation and Development, and adjacent communities that will be impacted by the alteration or relocation. The developer shall be responsible for obtaining and submitting copies of any the required authorization and project permits required by the from the Oregon Department of Land Conservation and Development, Oregon DivisionOregon Department of State Lands, U.S. Army Corps of Engineers, Oregon Department of Fish and Wildlife Service, Federal Emergency Management Agency, and other affected agencies, as applicable. The flood carrying capacity of the altered or relocated watercourse shall not be diminished and shall be maintained.](#) Alterations will require a “No-Rise” certification for changes to the floodway, and

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changes that relocate the floodplain will require a Letter of Map [Revision Change Fill \(LOMRLOMCF\)](#) from FEMA or may require a revised Flood Insurance Study and Flood Insurance Rate Map for the City. The burden for all engineering studies required to process these forms is the applicant's, not the City's.

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- T. Subdivision Proposals. In addition to compliance with the underlying zoning district standards of this Code and this Chapter, the [construction development](#) of the subdivision shall be subject to the following additional criteria:
1. All subdivision proposals shall be consistent with the need to minimize flood damage.
 2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
 3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
 4. Where the base flood elevation data has not been provided or is not available from another authoritative source [for Zone A](#), it shall be generated for subdivision proposals and other proposed developments which contain at least fifty (50) lots or five (5) acres, whichever is less.
 - a. [BFE data is not required when the actual building envelopes are clearly outside of Zone A or are on naturally higher ground \(not created by fill\) that is above the grade of Zone A by five \(5\) feet or more.](#)
 - b. [BFE data is required when the building envelope outside of Zone A is elevated above Zone A by a five \(5\) foot or less change in grade of the natural ground elevation \(not created by fill\).](#)
 5. If more than fifty percent (50%) of the lot being partitioned or subdivided is affected by the floodplain, then the minimum density standard of this Code does not apply.

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- U. Critical Facilities. [A critical facility means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, congregate care facilities, clinics and/or hospitals, police, fire and emergency response installations, water pollution control facilities, and installations which produce, use, or store hazardous materials or hazardous waste.](#)

1. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area [\(SFHA\), \(100-year floodplain\).](#)

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2. Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available.
3. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet or to the one foot above the height of the 500-year flood level, whichever is higher. Submit Elevation Certificates with the construction plans, prior to pouring the foundation, and upon completion of the structure in accordance with Subsections H(G1)(a), (b), and (c) of this Section.
4. Access to and from the critical facility shall also be protected to the height utilized above.
5. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.
6. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.
7. Comply with the other standards of this Section as applicable.

V. Small Accessory Structure. -Relief from elevation or floodproofing as required in this Section may be granted for small accessory structures that meet the following standards. The applicant shall be advised that this type of allowance will result in higher insurance rates for these structures, as applicable.

1. Less than 200 square feet, less than \$5000 in valuation, and do not exceed one story;
2. Not temperature controlled;
3. Not used for human habitation and are used solely for parking of vehicles or storage of items having low damage potential when submerged;
4. Not used to store toxic material, oil or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality unless confined in a tank installed in compliance with this ordinance or stored at least two feet above base flood elevation;
5. Located and constructed to have low damage potential;
6. Constructed with materials resistant to flood damage as described in this Section;
7. Anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood;

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8. Constructed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for complying with this requirement must be certified by a licensed professional engineer or architect or designed in compliance with Section 4.517.H(2);

9. Constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.

4.518 Floodways. Located within areas of special flood hazard established in Section 4.511.B are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

A. Except as provided in Section 4.518.C, encroachments, including fill, new construction, development, substantial improvements, and other development are prohibited unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

B. If Section 4.517.A is satisfied, all new construction, development, and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 4.517.

C. Floodways and other high hazard zones are extremely hazardous areas due to exceptionally high flood and erosion potential. In these areas, the development actions permitted in high hazard zones shall be limited to water-dependent uses; bridges and other location-dependent uses; habitat restoration activities consistent with Sections 4.516.C(2); low-intensity recreation; and bioengineered banks.

4.519 Before Regulatory Floodway. In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

4.520¹⁸ Flood Management Area Variance Procedures. Variances from dimensional standards of the underlying zoning district or other provisions of this Code not part of this Chapter shall be processed in accordance with Chapter 6.800, Variance, of this Code.

A. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction, development, and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing

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structures constructed below the base flood level, providing that the considerations of Section 4.520.A(1 - 11) have been fully reviewed. As the lot size increases the technical justification required for issuing the variance increases.

1. The danger that materials may be swept onto other lands to the injury of others;
2. The danger to life and property due to flooding or erosion damage;
3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
4. The importance of the services provided by the proposed facility to the community;
5. The necessity to the facility of a waterfront location, where applicable;
6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
7. The compatibility of the proposed use with existing and anticipated development;
8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

B. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the Statewide Inventory of Historic Properties, without regard to the procedures set forth in this Section.

1. Is the minimum necessary to preserve the historic character and design of the site, building or structure;
2. Will not result in the site, building or structure losing its historic designation; and
3. Demonstrates consistency with all other local, state, or federal laws or ordinances, including documentation of any necessary consultations with state or federal

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- agencies.
- C. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
- D. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- E.A. The Director, or their designee, may grant a Type II variance of up to fifty percent (50%) of any dimensional standard in the underlying zoning district where necessary to avoid construction or development within the Flood Management Area. The Director or designee shall make a determination in accordance with the criteria established in Section 4.520.J.
- F.B. Applications for variances to dimensional standards in excess of that provided in paragraph ASection 4.520.E or to the maximum impervious surface area shall be a Type III application.
- G.C. The Planning Commission or Director, or their designee, may attach such conditions to the granting of variances as it deems necessary to further the purpose of this Chapter.
- H.D. As a participant in the National Flood Insurance Program, the City is not authorized to grant a variance from the requirement to elevate or floodproof structures in accordance with state and federal regulations, whichever is most restrictive. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except Section 4.520.A and otherwise complies with Sections 4.517.P - R.
- I.E. The City cannot grant a variance from the special flood hazard designation assigned by the Federal Emergency Management Agency Insurance Administrator to a site. However, a property owner may request a Letter of Map Amendment (LOMA), a Letter of Map Revision (LOMR), or a Letter of Map Change (LOMC) from the Federal Emergency Management Agency.
- J.F. In reviewing a Type III Variance, the Planning Commission shall consider all technical evaluations, relevant factors, and standards specified in other Sections of this Chapter and other Chapters of this Code, and make affirmative findings, with or without conditions, for each of the following criteria:
1. A showing of good and sufficient cause that the need for the variance is not of the applicant's making and will not result in a use of the site that is not otherwise permitted in the underlying zoning district.

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2. A determination that failure to grant the variance would result in exceptional hardship to the applicant and is the minimum necessary to grant relief.
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in Section 4.520.A(1) – (11) or conflict with existing local, state, or federal laws or ordinances. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, impairment of water quality;

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~~extraordinary public expense, create nuisances, cause fraud on, or victimization of, the public, or conflict with existing local laws and ordinances.~~

4. The safety of access to the property in times of flood for ordinary and emergency vehicles.

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5. A determination that the development project cannot be located outside the Special Flood Hazard Area and/or high hazard area and that impacts to flood storage, water infiltration, and riparian vegetation have been minimized to the extent practicable.

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6. A demonstration of consistency with all other local, state, or federal laws or ordinances, including documentation of any necessary consultations with state or federal agencies.

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Prescribed Conditions for the Rehabilitation or Replacement of Pre-Existing Structures.

The replacement of pre-existing structures or development damaged or destroyed accidentally is ~~not~~ subject to the ~~limitations and standards of Section 5.330, Reconstruction of a Damaged Nonconforming Structure or Development, and/or Section 5.335, Destruction of a Nonconforming Structure or Development, of this Code, provided the following standards are met:~~

- A. The structure or development was in existence within the Flood Management Area prior to ~~November 24~~February 1, 2019~~2000~~.
- B. The use is allowed in the underlying zoning district at the time the application is made to rehabilitate or replace the structure.
- C. A Type I ~~Flood Hazard Permit~~Floodplain Development Permit is approved prior to applying for building permits.
- D. The rehabilitation or replacement is rebuilt on the same footprint of the original structure and does not increase the impervious area within the ~~100-year floodplain~~Special Flood Hazard Area.
- E. The rehabilitated or replaced structure is elevated, if residential, or floodproofed or elevated, if non-residential, in accordance with the applicable standards of this Chapter, ~~the definition found Section 1.040, and all additional relevant standards in this Code.~~

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EXHIBIT H

ATTACHMENT

H**Common Floodplain Management Terms**

Acronym	Term	Definition / Explanation
FEMA	Federal Emergency Management Agency	The entity within the Department of Homeland Security that regulates floodplain insurance and management activities in the U.S.
NFIP	National Flood Insurance Program	Established in 1968 and run by FEMA, NFIP sets standards for purchasing flood insurance and coordinates flood management regulations in working with states and localities to reduce flood risks.
FIRM	Flood Insurance Rate Map	Also called a Flood Map, it is the official flood hazard map for a community produced by FEMA. To show detail, maps for a community are broken into smaller map "panels".
FIS	Flood Insurance Study	A technical report that is released concurrently with the FIRM. It discusses particular flood risks for a hydrologic area, such as the Sandy River and Beaver Creek and provides profiles to display risk.
SFHA	Special Flood Hazard Area	Commonly referred to as "the flood zone" or "the 100 year flood", this is a zone shown on a FIRM where there is a 1% annual chance of a flood event, called a "base flood". Structures and development located in SFHA are regulated by local flood management ordinances and typically are required to carry flood insurance under the NFIP.
BFE	Base Flood Elevation	The computed elevation to which floodwater is anticipated to rise during the base flood. The BFE determines the requirement for the elevation or floodproofing of structures. BFEs are mapped and established in most SFHA zones.
A	SFHA Flood Zone A	An area where flood hazards have been mapped but BFE has not been established and technical data has not been fully evaluated.
AE	SFHA Flood Zone AE	An area where flood hazards have been mapped, BFE has been established and the hazard area has been studied. The majority of SFHA located in Troutdale fall in this category.
X	Flood Zone X	Areas of minimal flood risk. Flood insurance purchase is optional. Please note that properties in Flood Zone X are not immune to flood risk; they carry less risk than those SFHA zones.
LOMC - LOMR - LOMA	Letter of Map Change (2 types) - Letter of Map Revision - Letter of Map Amendment	An action taken to update the FIRM and/or FIS that reflects new or more detailed information about a property in an effort to better map or reduce risk in and around SFHA areas.
CRS	Community Rating System	An optional program within the NFIP that rewards property owners in participating cities with reduced insurance premiums due to the City's additional efforts to reduce flood damage, strengthen development regulations, and engage in public outreach. CRS communities must be re-certified on an annual basis. Troutdale participates in the CRS.
7	CRS Class (or CRS Rating)	CRS communities are rated on a scale of 1-9, with Class 1 communities receiving the biggest insurance premium reduction. Troutdale is a Class 7 community, which translates to a 15% premium reduction for SFHA properties. Nearly all CRS communities in Oregon are in the 6-9 range.



ATTACHMENT

I

EXHIBIT I

CITY OF TROUTDALE

Community Development Department

THIS IS TO NOTIFY YOU THAT THE CITY OF TROUTDALE HAS PROPOSED A LAND USE REGULATION THAT MAY AFFECT THE PERMISSIBLE USES OF YOUR PROPERTY AND OTHER PROPERTIES.

October 16, 2018

Dear Property Owner:

This land use hearing notice is being sent to you to comply with Oregon Revised Statute (ORS) 227.186 (Measure 56) with the following required language:

ON THURSDAY NOVEMBER 14, 2018 THE CITY OF TROUTDALE WILL HOLD A PUBLIC HEARING REGARDING ADOPTION OF ORDINANCE NO. 851. THE CITY HAS DETERMINED THAT ADOPTION OF THIS ORDINANCE MAY AFFECT THE PERMISSIBLE USES OF YOUR PROPERTY, AND OTHER PROPERTIES IN THE AFFECTED ZONE, AND MAY CHANGE THE VALUE OF YOUR PROPERTY.

HERE IS WHAT THIS MEANS:

The City of Troutdale Planning Commission is proposing to amend the Troutdale Development Code Sections 1.040 Vegetation Corridor and Slope District, and Water Quality and Flood Management Definitions; 2.220 Expiration of a Decision; and 4.500 Flood Management Area to adopt Federal Emergency Management Agency (FEMA) requirements for development in the floodplain.

The purpose of these amendments is to facilitate local implementation of the National Flood Insurance Program and Community Rating System requirements, and to adopt the best available geographic data defining locations that are at a high risk of flooding.

FURTHER DETAILS ON THE BACK PAGE

CONTINUED FROM FRONT PAGE**WHEN AND WHERE IS THE HEARING AND WHAT ARE THE DETAILS?**

When: Thursday November 14, 2018 at 7:00 p.m.

Where: Troutdale Police Community Center – Kellogg Room, 234 SW Kendall Ct, Troutdale, Oregon 97060

Details: You may comment in writing to the Community Development Department prior to the hearing and/or present written and/or verbal testimony to the Planning Commission at the hearing. Failure (1) to raise an issue in the hearing in person or by letter to the address above or (2) provide sufficient detail and clarity to enable a decision-maker to respond to the issue precludes appeal to the Oregon Land Use Board of Appeals (LUBA) on that issue.

IF YOU WANT ADDITIONAL INFORMATION:

- To view the application materials, visit <http://www.ci.troutdale.or.us/>.
- Ordinance No. 851 is available for inspection at no cost at the Troutdale Community Development Department located at 2200 SW 18th Way, Troutdale, OR 97060. A copy of Ordinance No 851 is available for review at least seven (7) days prior to the hearing.
- For additional information concerning Ordinance No. 851, you may contact Breezy Poulin at the Community Development Department at 503-674-7229 or planning@troutdaleoregon.gov.

Attachment(s): Map of Tax Lots Impacted by the 1% Annual Chance of Flood (100 Year Flood) Floodplain





Exhibit B

12/11/18 Council Mtg. Item #6

CITY OF TROUTDALE

Community Development Department

Date: December 3, 2018
From: Chris Damgen, Community Development Director
Ryan Krueger CFM, Senior Planner & Floodplain Manager
To: Troutdale City Council
CC: Ray Young, City Manager; Ed Trompke, City Attorney
Subject: Troutdale Development Code – Floodplain Management Area Code Revisions

At the November 27, 2018 public hearing to discuss the proposed text amendments to the Troutdale Development Code, a request was made to show within the draft code the source of the required amendments. Such an exhibit would provide more clarity over which proposed amendments could be further changed at the local level and which would require more review from federal, state, or regional agencies.

Attached to this memo is a color-coordinated version of Chapter 1, Chapter 14, and the exhibit handed out at the November 27, 2018 hearing that documented other required amendments. As you review this information and personal questions arise please reach out to Ryan Krueger for more information. Please note the following:

- Text highlighted in **YELLOW** means FEMA has required such language under the Code of Federal Regulations, or that FEMA is requiring it for compliance with the National Flood Insurance Program (NFIP)
- Text highlighted in **GREEN** means DLCD has required such language for compliance with State requirements, or DLCD has completed their review of code language to provide their approval for current compliance. Many of these changes stem from the Community Assistance Visit (CAV) initiated in 2013 following the "Shed B" incident and are required in order for Troutdale to complete its obligations from the CAV
- Text highlighted in **PINK** follow Metro standards and are in accordance with the Urban Growth Management Functional Plan.
- Text highlighted in **RED** are staff recommendations in line with the NFIP Community Rating System (CRS). Adoption of the standards as currently written could allow Troutdale to become a Class 6 community, thus offering twenty percent (20%) premium discounts for property owners within the special flood hazard area and ten percent (10%) for all other properties. These were the sections that generated the most discussion at the hearing on the 27th and is where the City has greatest flexibility to amend what's proposed.
- Staff recommendations have also been included to reference the Multnomah County Natural Hazard Mitigation Plan (NHMP) and the Oregon Biological Opinion.

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Please keep the following in mind the following as you review the documents:

- Planning Commission voted 6-0 to forward a recommendation of approval for the draft that was forwarded in your packet.
- Any changes to the yellow, green, or pink highlighted sections **would require a re-review from FEMA, DLCD, and/or Metro** which adds additional time to the process, with no guarantees that changes would be accepted by those agencies.
- The City has a hard deadline of February 1, 2019 to have flood standards be in line with FEMA, or it will face suspension from NFIP.

If you have questions or concerns following your review of these materials, members of Council are encouraged to contact Ryan Krueger directly. Ryan can be reached at ryan.krueger@troutdaleoregon.gov or at 503-674-7261 to schedule follow up phone calls or meetings related to this matter.

Memo Attachments:

- TDC Section 1.040 Flood Management Definitions;
- TDC Chapter 14 – Flood Management
- Potential Amendments in Follow Up to Planning Commission held November 14, 2018 Public Hearing

Exhibit C

1.040 Vegetation Corridor and Slope District, Water Quality, and Flood Management Definitions.

- .01 **100-Year Flood.** The flood that is equaled or exceeded once in one hundred (100) years on the average; equivalent to the one percent annual chance flood. Also called the Special Flood Hazard Area, Base Flood, and 100-year floodplain.
- .02 **Area of Shallow Flooding.** Means a designated AO, AH, AR/AO, AR/AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a one percent (1%) or greater annual chance of flooding to an average depth of one to three (1 - 3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.
- .03 **Area of Special Flood Hazard.** Means the land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the Flood Hazard Boundary Map (FHB). After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".
- .04 **Bankfull Stage.** As defined in the Oregon Administrative Rules pertaining to removal/fill permits, the stage or elevation at which water overflows the natural banks of a stream or other waters of the state and begins to inundate upland areas. In the absence of physical evidence, the two-year recurrent flood elevation (storm level) may be used to approximate the bankfull stage. The bankfull stage is the starting point for measuring the width of a vegetation corridor from a protected water feature. In the absence of any data to establish the bankfull stage or two-year storm event, the starting point for measuring the vegetation corridor is determined by the following indicators:
- a. Water marks on fixed objects (vegetation, rocks, buildings, etc.);
 - b. Drift lines (deposited waterborne twigs, litter, etc.); or
 - c. Waterborne sediment deposits on the soil surface or fixed objects (vegetation, rocks, buildings, etc.)
- .05 **Base Flood.** A flood having a one percent (1%) chance of being equaled or exceeded in any given year.
- .06 **Base Flood Elevation.** The water surface elevation during the Base Flood in relation to a specified datum. The Base Flood Elevation (BFE) is depicted on the Flood Insurance Rate Map to the nearest foot and in the Flood Insurance Study to the nearest one-tenth (0.1) foot. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the

Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Manager or designee is authorized through Section 14.020 to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas and the associated Base Flood Elevation as part of reviewing development proposals that affect the 100-year Floodplain. Such information shall be used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps.

- .07 **Basement**. Any area of the building having its floor subgrade (below ground level) on all sides.
- .08 **Below-Grade Crawl Space**. Means an enclosed area below the base flood elevation in which the interior grade is not more than two feet below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed four (4) feet at any point.
- .09 **Breakaway Wall**. Means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.
- .10 **Conservation Easement**. An easement applied to environmentally sensitive lands including, but not limited to, lands identified as hillsides, wetlands, floodplains, and floodways. The field verification shall be done by a licensed surveyor, engineer, hydrologist, or any other licensed specialist in the fields of engineering, hydrology, or botany. A conservation easement prohibits most forms of development and assures that native vegetation will be maintained or enhanced. Conservation easements usually affect privately owned land and are enforceable by the City. Trails and limited public facilities may be permitted under carefully controlled conditions within conservation easements.
- .11 **Construction, Start of**. (For other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the

building.

- .12 **Critical Facility.** A facility that is critical for the health and welfare of the population and is especially important to be located above the Base Flood Elevation following hazard events. The following is the list of Critical Facilities for the purposes of Chapter 14:

- a. Hospitals and other medical facilities having surgery and emergency treatment areas;
- b. Fire and police stations;
- c. Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures. These tanks or other structures do not include City water distribution facilities;
- d. Emergency vehicle shelters and garages;
- e. Structures and equipment in emergency-preparedness centers;
- f. Standby power generating equipment for essential facilities;
- g. Structures and equipment in government communication centers and other facilities required for emergency response; and
- h. Other facilities as determined by the Floodplain Manager or designee.

Some types of facilities may be critical to a community, but require location within or partially within Special Flood Hazard Areas because of the nature of the facilities.

- .13 **Debris.** Debris includes discarded manmade objects and may include tires, vehicles, litter, scrap metal, construction waste, lumber, plastic, or styrofoam. Debris does not include objects necessary to a use allowed by this Code, or ornamental and recreational structures. Debris does not include existing natural plant materials or natural plant materials which are left after flooding, downed or standing dead trees, or trees which have fallen into protected water features.
- .14 **Department of Environmental Quality (DEQ) Water Quality Standards.** State of Oregon DEQ water quality standards are the numerical criteria or narrative condition needed in order to protect an identified beneficial use.
- .15 **Design Flood Elevation.** The elevation of the 100-year storm as defined in the Federal Emergency Management Agency Flood Insurance Studies or, in areas without Federal Emergency Management Agency floodplains, the elevation of the 25-year storm or the edge of mapped flood-prone soils or similar methodologies.

- .16 **Developer.** The owners of property, their agents or contractors, or their successors and assigns, who have undertaken or are proposing development which is regulated by Sections 4.300, 5.600, 5.700, and Chapter 14 of this Code.
- .17 **Development.** Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.
- .18 **Digital Flood Insurance Rate Map.** Depicts flood risk and federal flood zones and flood risk information. The Digital Flood Insurance Rate Map (DFIRM) presents the flood risk information in a format suitable for electronic mapping applications.
- .19 **Disturb.** Any manmade changes to the existing physical status of the land which are made in connection with development.
- .20 **Elevated Building.** Means for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.
- .21 **Elevation Certificate.** A form supplied by the Federal Emergency Management Agency (FEMA) and used to document the lowest floor elevation of a building.
- .22 **Emergency.** Any manmade or natural event or circumstance causing or threatening loss of life, injury to person or property, and includes, but is not limited to, fire, explosion, flood, severe weather, drought, earthquake, volcanic activity, spills or releases of oil or hazardous material, contamination, utility or transportation disruptions, and disease.
- .23 **Engineer.** A registered professional engineer licensed by the State of Oregon.
- .24 **Enhancement.** The process of improving upon the natural functions and/or values of an area or feature which has been degraded by human activity. Enhancement activities may or may not return the site to a pre-disturbance condition, but create/recreate processes and features that occur naturally.
- .25 **Erosion.** Erosion is the detachment and movement of soil particles, rock fragments, or other material, organic or inorganic, resulting from actions of water, wind, human, or animal activity.
- .26 **Erosion Hazard Zone.** The area adjacent to a stream or river that is at risk of bank erosion from stream flow or mass wasting, as designated on the communities FIRM.
- .27 **Erosion Prevention and Sediment Control Plans.** Plan requirements are specified in the City of Troutdale's Construction Standards for Public Works Facilities.
- .28 **Erosion, Visible or Measurable.** Visible or measurable erosion includes, but is not limited to:

- a. Deposits of mud, dirt sediment, or similar material exceeding one-half cubic foot in volume on public or private streets, adjacent property, or onto the storm and surface water system, either by direct deposit, dropping discharge, or as a result of the action of erosion.
 - b. Evidence of concentrated flows of water over bare soils, turbid or sediment laden flows, or evidence of onsite erosion such as rivulets on bare soil slopes where the flow of water is not filtered or captured on the site.
 - c. Earth slides, mudflows, earth sloughing, or other earth movement that leaves the property.
- .29 **Excavation.** Any act by which soil or rock is cut into, dug, quarried, uncovered, removed, displaced, or relocated.
- .30 **Existing Building or Structure.** A structure for which the Start of Construction commenced before February 1, 2019.
- .31 **Federal Emergency Management Agency (FEMA).** The agency with the overall responsibility for administering the National Flood Insurance Program.
- .32 **Fill.** Any material such as, but not limited to, sand, soil, rock, gravel, clay, or mud that is placed on a site for the purposes of development or redevelopment.
- .33 **FIRM.** See Flood Insurance Rate Map.
- .34 **Flood or Flooding.** Means:
- a. A general and temporary condition of partial or complete inundation of normally dry land areas from:
 1. The overflow of inland or tidal waters.
 2. The unusual and rapid accumulation or runoff of surface waters from any source.
 3. Mudsides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
 - b. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high

water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.

- .35 **Flood Insurance Rate Map (FIRM)**. An official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community.
- .36 **Flood Insurance Study (FIS)**. Or flood elevation study means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.
- .37 **Flood Management Area (FLMA)**. All lands contained within the 100-year floodplain and floodway as shown on the Flood Insurance Rate Map, and the area of inundation for the February 1996 flood. In addition, all lands which have documented evidence of flooding.
- .38 **Floodplain**. As shown below in Figure 1 - Floodplain Cross Section, the area adjacent to a stream or river channel that is covered by water when the river or stream overflows its banks.
- .39 **Floodplain Development Permit**. Federally required permit required prior to construction and other development in any Special Flood Hazard Area (100-yr. Floodplain). See Section 14.035 of this Code.
- .40 **Floodplain Functions**. Hydrological and ecological functions including conveyance and temporary storage of floodwater, depositions of sediments outside of the channel, ground water recharge, filtering of pollutants, and reduction of floodwater velocity and erosive forces. Also included, but to a lesser extent in previously urbanized areas, are such functions as nutrient exchange, refuges, and feeding areas for fish.
- .41 **Floodplain, 100-Year**. As shown below in Figure 1 - Floodplain Cross Section, land area adjacent to a river, stream, or other water body that is subject to a one percent or greater chance of flooding in any given year. It consists of land ranging from that which is subject to annual flooding to that which has a one percent (1%) or greater chance of flooding in any given year. The 100-year Floodplain consists of the Floodway and the Floodway Fringe. The 100-year Floodplain is mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRMs) and is the area subject to Base Flood regulations. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Manager or designee is authorized through Section 14.020 to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals

that affect the 100-year Floodplain. Such information shall be used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps and these areas are also subject to Base Flood regulations. See Base Flood.

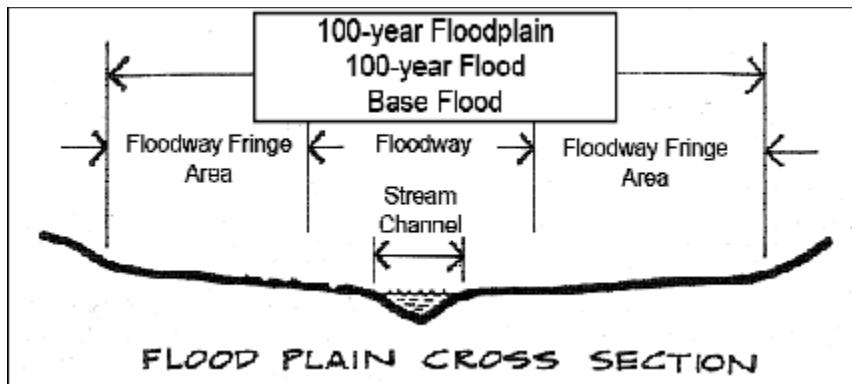


Figure 1 – Floodplain Cross Section

- .42 **Floodway (Regulatory Floodway).** Means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height..
- .43 **Flow-through Design.** Typically a structure that does not displace surface floodwater or hinder or obstruct the movement of surface floodwater.
- .44 **High Hazard Zone.** Lands within the furthest landward extent of the floodway and erosion hazard zone, as designated on the communities FIRM.
- .45 **Highest Adjacent Grade (HAG).** The highest natural elevation of the ground surface prior to construction, adjacent to the proposed walls of a structure. Refer to the Elevation Certificate, FEMA Form 81-31, for more information.
- .46 **Hydrodynamic Load.** Force of water in motion.
- .47 **Hydrostatic Load.** Force of water at rest.
- .48 **Invasive Non-native or Noxious Vegetation.** Plant species that are listed as nuisance plants or prohibited plants on the most recent Portland Plant List as adopted by the City of Portland by ordinance because they are plant species that have been introduced and, due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities.
- .49 **Joint Fill Permit/404 Removal/Fill Permit.** A permit issued jointly by the Oregon Department of State Lands and U.S. Army Corps of Engineers to allow, with conditions and mitigation, the removal or fill of wetlands determined to be of either local or state significance by the Oregon Department of State Lands.

.50 **Letter of Map Change (LOMC).** An official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and Flood Insurance Studies. LOMCs are issued in the following categories:

- a. Letter of Map Amendment (LOMA) - A revision based on technical data showing that a property was incorrectly included in a designated Special Flood Hazard Area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property is not located in a Special Flood Hazard Area.
- b. Letter of Map Revision (LOMR) - A revision based on technical data showing, usually due to manmade changes, alterations to Federal Flood Zones, flood elevations floodplain and floodway delineations, and planimetric features. One common type of LOMR, a LOMR-F, is a determination that a structure has been elevated through the placement of fill above the Base Flood Elevation and is excluded from the Special Flood Hazard Area.
- c. Conditional Letter of Map Revision (CLOMR) - A formal review and comment by FEMA as to whether a proposed project complies with the minimum National Flood Insurance Program floodplain management criteria. A CLOMR does NOT amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.

.51 **Lowest Floor.** Means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor. Provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of CFR Sec. 60.3.

.52 **Manufactured Dwelling.** Means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term “manufactured dwelling” does not include a “recreational vehicle.”

.53 **Manufactured Dwelling Park or Subdivision.** Means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale

.54 **Mean Sea Level.** For purposes of the National Flood Insurance Program, the North American Vertical Datum of 1988 or other Datum, to which Base Flood Elevations shown on a community's FIRM are referenced.

.55 **Mitigation.** The reduction of adverse effects of a proposed project by considering, in this order:

- a. Avoiding the impact altogether by not taking a certain action or parts of an action;

- b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
 - c. Rectifying the impact by repairing, rehabilitating, or restoring the effected environment;
 - d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action by monitoring and taking appropriate measures; and
 - e. Compensating for the impact by replacing or providing comparable substitute water quality resource areas.
- .56 **Mulch.** Application of plant residue, netting, or other suitable materials to the land surface to conserve moisture, hold soil in place, and aid in establishing plant cover.
- .57 **NAVD 88.** The North American Vertical Datum of 1988 (NAVD 88) is the vertical control datum established in 1991 by the minimum-constraint adjustment of the Canadian-Mexican-U.S. leveling observations. This is the data used on FIRMs and in flood insurance studies adopted in 2009.
- .58 **NGVD 29.** “The National Geodetic Vertical Datum of 1929: The name, after May 10, 1973, of (the) Sea Level Datum of 1929.” (Vertical control datum established for vertical control in the United States by the general adjustment of 1929.) This is the datum used on FIRMs and in flood insurance studies prior to 2009.
- .59 **National Flood Insurance Program (NFIP).** A federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for state and community floodplain management regulations that reduce future flood damages.
- .60 **Native Vegetation or Native Plant.** Vegetation listed as a native plant on the most recent Portland Plant List as adopted by the City of Portland by ordinance and any other vegetation native to the Portland metropolitan area provided that it is not listed as a nuisance plant or a prohibited plant on the Portland Plant List.
- .61 **National Wetland Inventory (NWI) Map.** The City is mapped on the Camas and Washougal, Washington-Oregon wetland maps prepared by the U.S. Department of the Interior, Fish and Wildlife Service.
- .62 **New Construction.** A structure for which the Start of Construction commenced after February 1, 2019, and includes subsequent Substantial Improvements to the structure
- .63 **NPDES Permit.** The National Pollutant Discharge Elimination System 1200-C Permit is a State of Oregon Department of Environmental Quality permit that covers federal stormwater regulations as they pertain to construction activities in Oregon. The permit is

- administered by the City.
- .64 **ODFW Construction Standards**. The Oregon Department of Fish and Wildlife construction guidelines for building roads, bridges, and culverts, or any transportation structure within a waterway.
- .65 **One Percent Annual Chance Flood**. The flood that has a one percent (1%) chance of being equaled or exceeded on the average in any given year; equivalent to the 100-year flood.
- .66 **Open Space**. Land that is undeveloped and that is planned to remain so indefinitely. The term encompasses parks, forests, and farmland. It may also refer only to land zoned as being available to the public, including playgrounds, watershed preserves, and parks.
- .67 **Perennial Streams**. All primary and secondary perennial waterways mapped by the U.S. Geological Survey, having year-round flow.
- .68 **Practicable**. Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose.
- .69 **Pre-FIRM Structures**. Buildings that were built before the flood risk was known and identified on the community's FIRM.
- .70 **Protected Water Features, Primary**. Includes:
- a. Title 3 wetlands.
 - b. Rivers, streams (creeks or brooks) and drainages downstream from the point at which one hundred (100) acres or more are drained to that water feature (regardless of whether it carries year-round flow).
 - c. Streams carrying year-round flow.
 - d. Springs which feed streams and wetlands and have perennial (year-round) flow.
 - e. Natural lakes.
- .71 **Protected Water Features, Secondary**. Includes intermittent streams and seeps downstream of the point at which fifty (50) acres are drained and upstream of the point at which one hundred (100) acres are drained to that water feature.
- .72 **Restoration**. The process of returning a disturbed or altered area or feature to a previously existing natural condition. Restoration activities reestablish the structure, function, and/or diversity to that which occurred prior to impacts caused by human activity.
- .73 **Recreational Vehicle (RV)**. A vehicle which is:

- a. Built on a single chassis;
 - b. Four hundred (400) square feet or less when measured at the largest horizontal projection;
 - c. Designed to be self-propelled or permanently towable by a light duty truck; and
 - d. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- .74 **Resource**. A functioning natural system such as a wetland or stream.
- .75 **Riparian**. Those areas associated with streams, lakes, and wetlands where vegetation communities are predominately influenced by their association with water.
- .76 **Routine Repair and Maintenance**. Activities directed at preserving an existing allowed use or facility, or nonconforming use, without expanding the development footprint or site use.
- .77 **Sediment**. Any material that is in suspension, is being transported, or has been moved from its site of origin by water, wind, or gravity as a result of erosion.
- .78 **Site**. The lot, or contiguous lots, under the same ownership that are subject to a development permit or erosion control plan.
- .79 **Slope District**. Slopes of twenty-five percent (25%) or greater throughout the City that have a minimum horizontal distance of fifty (50) feet. Engineered slopes associated with public streets or roads are not included.
- .80 **Special Flood Hazard Area (SFHA)**. The land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM (Flood Hazard Boundary Map). After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term “special flood hazard area” is synonymous in meaning with the phrase “area of special flood hazard”.
- .81 **Statewide Planning Goal 5**. Oregon’s statewide planning goal that addresses open space, scenic and historic areas, and natural resources. The purpose of the goal is to conserve open space and protect natural and scenic resources.
- .82 **Statewide Planning Goal 6**. Oregon’s statewide planning goal that addresses air, water, and land resources quality to “maintain and improve the quality of the air, water, and land resources of the state” as implemented by the Land Conservation and Development

Commission (LCDC).

- .83 **Statewide Planning Goal 7.** Oregon's statewide planning goal that addresses areas subject to natural disasters and hazards to "protect life and property from natural disasters and hazards" as implemented by the Land Conservation and Development Commission.
- .84 **Stockpile.** Onsite storage of any soil, sand, gravel, clay, mud, debris, vegetation, refuse, or any other material, organic or inorganic, in a concentrated state.
- .85 **Stream.** A body of running water moving over the earth's surface in a channel or bed, such as a creek, rivulet, or river, that flows at least part of the year, including perennial and intermittent streams. Streams are dynamic in nature and their structure is maintained through build-up and loss of sediment.
- .86 **Stream Bank, Top of.** See Bankfull Stage.
- .87 **Structure.** Means, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. Structure, for insurance purposes, means:
- a. A building with two or more outside rigid walls and a fully secured roof that is affixed to a permanent site;
 - b. A manufactured dwelling; or
 - c. A travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws.
- For the latter purpose, structure does not mean a recreational vehicle or a park trailer or other similar vehicle, except as described in Section 1.040.87(c), or a gas or liquid storage tank.
- .88 **Substantial Damage.** Damage of any origin sustained by a structure located within the 100-year Floodplain, whereby the cost of restoring the structure to its prior condition would equal or exceed fifty percent (50%) of the structure's market value before the damage occurred.
- .89 **Substantial Improvement.** Means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds forty-nine percent (49%) of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:
- a. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified

- by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or,
- b. Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.
- .90 **Surface Water Management System.** All natural and constructed facilities used to regulate the quantity and quality of surface water, including drainage easements, culverts, storm drains, catch basins, drainage ditches, natural drainageways, stream corridors, rivers, ponds, wetlands, and impoundments.
- .91 **Title 3.** Title 3 is part of the Metro Urban Growth Management Functional Plan pertaining to water quality, flood management, and fish and wildlife conservation, and directly pertains to Statewide Planning Goals 5, Open Spaces, Scenic and Historic Areas, and Natural Resources; 6, Air, Water, and Land Resources Quality; and 7, Areas Subject to Natural Disasters and Hazards.
- .92 **Variance.** Means a grant of relief by a community from the terms of a floodplain management regulation.
- .93 **Vegetation, Approved.** Vegetation which typically does not require irrigation or fertilization because it is adapted to natural soil, water, and climatic conditions. The list of approved vegetation species is based on the most recent Portland Plant List as adopted by the City of Portland by ordinance, and is on file in the Community Development Department.
- .94 **Vegetation Corridor.** The undisturbed area between a development and a protected water feature as designated in Sections 4.316, Width of Vegetation Corridor, and 4.317, Method for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Code, or slopes of twenty-five percent (25%) or greater throughout the City, except engineered slopes associated with public streets or roads.
- .95 **Vegetation, Invasive, Non-Native, or Noxious.** Plant species that have been introduced and due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities, or which are not listed on the most recent Portland Plant List as adopted by the City of Portland by ordinance.
- .96 **Vegetation, Native.** Any vegetation native to the Portland Metropolitan Area or listed on the Portland Plant List as adopted by the City of Portland by ordinance.
- .97 **Water-dependent.** A structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.
- .98 **Water Features.** See Protected Water Features, primary and secondary.
- .99 **Water Quality Facility.** A created or constructed structure or drainageway that is

designed, constructed, and maintained to collect, filter, retain, or detain surface water runoff during and after a storm event for the purpose of stormwater management and water quality improvement. The facility may take on characteristics of a wetland, but it does not become a resource.

.100 **Watershed**. A geographic unit defined by the flows of rainwater or snowmelt. All land in a watershed drains to a common outlet, such as a stream, lake, or wetland.

.101 **Water Surface Elevation**. The height, in relation to a specific datum, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

.102 **Wetlands**. Areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands are those areas identified and delineated by qualified wetland specialists as set forth in the 1987 Corps of Engineers Wetland Delineation Manual.

- a. Wetland determinations. The identification of an area as either wetland or non-wetland.
- b. Wetlands, constructed. Wetlands developed as a water quality or quantity facility, subject to change and maintenance as such. These areas must be clearly defined and/or separated from naturally occurring or created wetlands.
- c. Wetlands, created. Those wetlands developed in an area previously identified as a non-wetland to replace or mitigate wetland destruction or displacement. A created wetland shall be regulated and managed the same as an existing wetland.
- d. Wetlands, Title 3. Wetlands of metropolitan concern as shown on the Metro Water Quality and Flood Management Overlay District Map and other wetlands not mapped but determined significant by the Oregon Department of State Lands, consistent with the criteria in Title 3, Section 7.C. of the Metro Urban Growth Management Functional Plan. Title 3 wetlands include created wetlands approved and monitored by the Oregon Department of State Lands and U.S. Army Corps of Engineers. Title 3 wetlands do not include artificially constructed and managed stormwater and water quality treatment facilities.

Chapter 14 – Flood Management

14.005 Purpose. Without establishing any priority, the purpose of this Chapter is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions or degradation of water quality in specific areas by provisions designed to:

- A. Protect human life, health, and property in areas subject to periodic flooding;
- B. Implement the Floodplain requirements of Statewide Planning Goal 7 - which relates to areas subject to natural disasters and hazards;
- C. Through floodplain regulation, contribute to the properly functioning condition of streams and rivers and address, in part, the water quality aspects of Statewide Planning Goal 6;
- D. Implement requirements for the City's participation in the National Flood Insurance Program, and voluntary participation in the Community Rating System;
- E. Implement the actions derived from the Multnomah County Hazard Mitigation Plan to minimize the risk of natural hazards, such as flooding, to people and property;
- F. Ensure continuity of City services, access to City facilities, and minimal prolonged business interruptions during times of flood;
- G. Manage stormwater drainage in a manner that:
 - 1. Maintains the properly functioning conditions of waterways;
 - 2. Provides for the conveyance and temporary storage of floodwater;
 - 3. Reduces floodwater velocity;
 - 4. Facilitates sediment deposition in the floodplain;
 - 5. Provides an opportunity for groundwater recharge; and
 - 6. Promotes other stormwater and floodplain functions.

These provisions are also intended to minimize maintenance costs, eliminate potential hazards before they occur, and protect properties and persons adjacent to drainageways and to other natural hazard areas;

- H. Minimize damage to public facilities and utilities, such as water purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets, and bridges located in floodplains;

- L. Help maintain a stable tax base by providing for sound use and development;
- J. Ensure that potential buyers are notified that property is in an area of special flood hazard;
- K. Compel those who occupy the areas of special flood hazard assume responsibility for their actions;
- L. Maintain and improve water quality;
- M. Minimize erosion and loss of native vegetation;
- N. Maintain wetlands, including swamps, marshes, bogs, and similar areas within the City, because wetlands help to maintain water quality and flood storage capacities;
- O. Avoid any increase in base flood elevations as a result of development;
- P. Minimize expenditure of public money for costly flood control projects;
- Q. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- R. Reduce flood losses and maintain water quality. In order to accomplish its purpose, this Chapter includes methods and provisions to:
 1. Require that development that is vulnerable to floods, including buildings, structures, and facilities necessary for the general health, safety and welfare of citizens, be protected against flood damage at the time of initial construction;
 2. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;
 3. Control filling, grading, dredging and other development which may increase flood damage or erosion;
 4. Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or that may increase flood hazards on other lands;
 5. Preserve and restore natural floodplains, stream channels, and natural protective barriers which carry and store flood waters, and;
 6. Coordinate with and supplement provisions of Oregon Building Codes.
- S. To advance these purposes, where not required, creation of open space tracts is encouraged within areas designated as natural hazards on the Comprehensive Plan and official zoning maps.

14.010 Applicability.

- A. These provisions shall apply to public and private properties in the one percent (1%) annual chance of flood floodplain (100-year floodplain or Special Flood Hazard Area) as mapped by the Federal Insurance Administrator of rivers and local streams within the planning jurisdiction of the City of Troutdale, which includes land in unincorporated Multnomah County within the City's Urban Planning Area.
- B. The areas of special flood hazard identified by the Federal Insurance Administrator in a scientific and engineering report entitled "The Flood Insurance Study for Multnomah County, Oregon and Incorporated Areas of Multnomah County", with accompanying Flood Insurance Rate Maps, are hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study is on file at the Community Development Department located at 2200 SW 18th Way, Troutdale, OR 97060 (storage location subject to change, consult the Floodplain Manager for current file storage location). Metro, a regional metropolitan planning agency representing portions of Clackamas, Multnomah, and Washington Counties, mapped the flood hazard areas from areas inundated by flooding in 1996 on the Title 3 map. The Title 3 maps are adopted for reference only. Not every Special Flood Hazard Area has been mapped by the Federal Insurance Agency through the Flood Insurance Study and Flood Insurance Rate Maps cited above. The Floodplain Administrator or designee is authorized through Sections 14.020 to obtain from applicants the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals that affect the floodplain. Once approved by the Floodplain Administrator or designee, such information shall be incorporated into the Natural Hazards Map and used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps cited above to ensure consistency with the floodplain regulations contained in this Chapter. Contested base flood elevations are to be reviewed under the provisions of Subsection 14.020.D of this Chapter. The City will keep a record of all surveys, delineations, and any Letter of Map Change (LOMC) approved by the Federal Emergency Management Agency, as revisions to the local copy of the Title 3 map. The City will submit this information to Metro for future updates of the Title 3 map.
- C. Warning and Disclaimer of Liability. The degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This Code does not imply that land or uses will be free from flooding or flood damage. This Code shall not create liability on the part of the City, any officer or employee thereof, or the Federal Insurance Administrator, for any damages that result from reliance on this Code or any administrative decision lawfully made hereunder.

14.015 Severability. The standards of this Chapter are subject to the severability standards as described in Section 17.100 of this Code.

14.020 Administration and Interpretation of Flood Insurance Rate Map Boundaries and Flood Management Area Standards.

A. The Community Development Director shall designate a Floodplain Manager to be the Local Administrator of this Chapter. The Floodplain Manager shall implement the provisions and standards of the National Flood Insurance Program, the standards of this Chapter, and make interpretations, where needed, including determinations regarding the exact location of the boundaries of the Special Flood Hazard Area (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) by granting or denying Floodplain Development Permit applications in accordance with its provisions. In the interpretation and application of this Chapter, all provisions shall be:

1. Considered as minimum requirements;
2. Liberally construed in favor of the governing body;
3. Judged by established historical facts of flooding as known by, or made known to, the governing body;
4. Deemed neither to limit nor repeal any other powers granted under State statutes; and
5. Defined in Section 1.040 of this Code.

B. Duties and Responsibilities of the Floodplain Manager. Duties of the Floodplain Manager shall include, but not be limited to:

1. Review all Floodplain Development Permits to determine that the permit requirements of this ordinance have been satisfied.
2. Review all Floodplain Development Permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.
3. Review all Floodplain Development Permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of this Chapter are met.
4. When base flood elevation data has not been provided (A Zones) in accordance with Section 14.010 of this Chapter, the Floodplain Manager shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer Section 14.040 of this Chapter.
5. Where base flood elevation data is provided through the Flood Insurance Study, FIRM, or required as in Section 14.020.C, obtain and record the actual elevation

(in relation to mean sea level) of the lowest floor (including basements and below-grade crawlspaces) of all new or substantially improved structures, and whether or not the structure contains a basement.

6. For all new or substantially improved floodproofed structures where base flood elevation data is provided through the Flood Insurance Study, FIRM, or as required in Section 14.020.C, the administrator shall:
 - a. Verify and record the actual elevation (in relation to mean sea level), and
 - b. Maintain the floodproofing certifications required in Section 14.040 of this Chapter.
7. Maintain for public inspection all records pertaining to the provisions of this ordinance.
8. Notify adjacent communities, the Oregon Department of Land Conservation and Development, and other appropriate state and federal agencies, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administrator.
9. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.
10. Notify FEMA within six (6) months of project completion when an applicant had obtained a Conditional Letter of Map Change from FEMA, or when development altered a watercourse, modified floodplain boundaries, or modified Base Flood Elevations. This notification shall be provided as a Letter of Map Change. The property owner shall be responsible for preparing technical data to support the Letter of Map Change application and paying any processing or application fees to FEMA. The Floodplain Manager shall be under no obligation to sign the Community Acknowledgement Form, which is part of the Conditional Letter of Map Change and Letter of Map Change application, until the applicant demonstrates that the project will or has met the requirements of this Code and all applicable State and Federal laws.
11. Report to FEMA on each development permit issued in the SFHA, including:
 - a. Amount of fill or structural displacement of flood storage, and the amount (in volume and area) of compensatory storage provided;
 - b. Amount of new impervious surface and types and amounts of compensatory mitigation provided;
 - c. The number of trees equal to or greater than six (6) inches in diameter at

breast height removed, and the types and amounts of compensatory mitigation provided;

- d. The area in which clearing and/or grading occurred;
- e. For any project that disconnects or reconnects land to the floodplain, the type of project and amount of land disconnected or reconnected; and
- f. Location of the project and of the corresponding mitigation.

14. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 14.055 of this Chapter.

C. Use of Other Base Flood Data for Permit Review. When base flood elevation data is not available through the Flood Insurance Study, FIRM, or has not been provided in accordance with Section 14.010 of this Chapter, the City may obtain, review, and utilize any reasonable base flood elevation and floodway data available from a federal, state, or other source, in order to assure that proposed development will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two (2) feet above grade in these zones may result in higher insurance rates.

D. Contested Boundaries. A person contesting the location of the boundary has the opportunity to submit a Letter of Map Change (LOMC) directly to the Federal Emergency Management Agency to change the Flood Insurance Rate Map mapping of their property. If a land use application is submitted before a LOMC is approved by the Federal Emergency Management Agency, the application will be processed under the standards of this Chapter.

E. Inspections. The Floodplain Manager shall inspect development that is subject to the permit requirements of this Chapter, including buildings and structures exempt from the Building Code. The floodplain administrator shall inspect Special Flood Hazard Areas to determine if development is being undertaken without the issuance of a permit. Annual inspection logs shall be maintained by the Floodplain Manager.

14.025 Uses within the Floodplain but Outside the Floodway and Outside Wetlands.

A. Prohibited Uses.

1. Any prohibited use in the underlying zoning district.
2. Excavation, fill, or vegetation removal without an approved land use permit.

3. Expansion of legal nonconforming uses.
4. Uncontained, outside storage areas of hazardous materials for hazardous materials as defined by the State of Oregon Department of Environmental Quality.
5. No new land divisions will be approved for properties exclusively within the floodplain or that propose to create a buildable lot that is exclusively within the floodplain.

B. Permitted Uses.

1. Any use permitted in the underlying zoning district, subject to the standards for development outlined in Section 14.040 of this Chapter, including stormwater management facilities developed in accordance with the standards of Section 5.700 of this Code.
2. Open space, trails, walkways, and bike paths as designated by the Troutdale Parks Plan, or as approved with a land use application and constructed in compliance with Section 4.315.D.
3. Removal of unauthorized fill.
4. Removal of nuisance or invasive plant species, and/or the restoration of approved plant species on the City of Portland Plant List as defined in Section 1.040 of this Code.
5. Removal of dead or dying trees that are an imminent danger to public safety as determined by a certified arborist or the equivalent.
6. Construction of new roadways and utilities necessary to support permitted development within and outside the Flood Management Area, subject to the standards of Section 14.040 of this Chapter and the Construction Standards on file in the Public Works Department or the applicable jurisdiction of the roadway.
7. New culverts, stream crossings, and transportation projects may be permitted if designed as balanced cut and fill projects, and in compliance with the standards of Section 14.040 of this Chapter. Such projects shall be designed to minimize the area of fill in Flood Management Areas and to minimize erosive velocities. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable.
8. Excavation and fill required for the construction of detention facilities or structures, and other facilities such as levees specifically designed to reduce or mitigate flood impacts. Levees shall not be used to create vacant buildable land.

9. Temporary bank stabilization or tree and vegetation removal necessitating immediate action during a flood emergency or other emergency to prevent the loss of an existing structure, or to repair a bank damaged during a flood. Following the flood emergency or other emergency, the owner shall submit a Floodplain Development Permit according to Section 14.035.E(1)(b)..
10. Routine repair and maintenance of existing structures (conforming and nonconforming uses), streets, driveways, utilities, culverts, drainageways and levees constructed for flood control, accessory uses, and other existing development on the site (including landscaped yards, decks, patios, boat ramps, etc.).
11. Rehabilitation or replacement of a structure that is damaged or destroyed to any extent, whether it is partially or fully within the Flood Management Area, and in compliance with Section 4.521 of this Chapter. Any structure or use deliberately removed or demolished may not be restored, replaced, or rebuilt, except in compliance with all applicable provisions of this Code, federal, state, and county regulations.
12. Any development that must implement a Federal Aviation Administration (FAA) compliant wildlife hazard management plan on property owned by the Port of Portland or within ten thousand (10,000) feet of an Aircraft Operating Area, as defined by the FAA, and removal of trees that interfere with the landing or takeoff flight path of aircraft at the Troutdale Airport or otherwise interferes with the safe operation of the airport as determined by the Port of Portland. The removal of trees that interfere with the operation of the Troutdale Airport are permitted outright.
13. Wildfire mitigation projects, such as fuels reduction or the creation of defensible space.
14. Removal of refuse as defined in the Troutdale Municipal Code.

14.030 Uses within the Floodway or within Wetlands.

- A. Prohibited Uses within the Floodway or within Wetlands. Unless specifically permitted under this Section, the following uses are prohibited within floodways and wetlands:
 1. Manmade structures.
 2. Vegetation removal, fill, or excavation. Vegetation removal in the floodway in concert with an approved wildfire mitigation project may be permitted subject to review under the standards for development of Section 14.040 of this Chapter.
 3. Private road construction.

4. Alterations and relocations of the watercourses of Arata, Salmon, or Beaver Creeks, the Sandy and Columbia Rivers, or the watercourse of any unnamed perennial or intermittent stream except as provided for in Subsection B(11) of this Section and Section 14.040.O of this Chapter.
 5. Fill of wetlands without both an approved land use application and an approved Joint Fill Permit issued by the Oregon Department of State Lands and the U.S. Army Corps of Engineers.
 6. Uncontained, outside storage areas of hazardous materials for hazardous materials as defined by the State of Oregon Department of Environmental Quality.
 7. Expansion of nonconforming uses.
 8. New installation of manufactured dwellings.
- B. Permitted Uses within the Floodway or within Wetlands. The following uses are permitted subject to review under the standards for development of Section 14.040 of this Chapter:
1. Open space, trails, walkways, and bike paths, as designated by the Troutdale Parks Plan, or as approved with a land use application.
 2. Removal of unauthorized fill.
 3. Removal of dead or dying trees that are an imminent danger to public safety as determined by a certified arborist or the equivalent.
 4. Routine repair and maintenance of existing structures (conforming and nonconforming uses), streets, driveways, utilities, culverts, drainageways and levees constructed for flood control by the Sandy Drainage Improvement Company or its successor, accessory uses, and other existing development on the site (including landscaped yards, decks, patios, boat ramps, and the operation, maintenance, and repair of manmade water control facilities such as irrigation and drainage ditches, constructed ponds or lakes, wastewater facilities, and stormwater quality facilities, and similar development).
 5. Construction, expansion, and/or maintenance of public roadways and public utility facilities necessary to support permitted development. A “No-Rise” Certification for construction or expansion of public roadways and public utilities shall be required consistent with Section 14.040.G(4) for all approved projects.
 6. Balanced excavation and fill required for the construction of detention facilities or structures and other facilities such as levees specifically designed to reduce or mitigate flood impacts. Levees shall not be used to create vacant buildable lands.

7. New culverts, stream crossings, and transportation projects necessary to implement the City, County, or State Transportation System Plans or other development permitted under this Chapter, and as applicable, meets the specifications of the Oregon Department of State Lands, Oregon Department of Fish and Wildlife, and federal regulations.
8. Permanent bank stabilization necessary to preserve an existing structure provided the balanced cut and fill standard is met if the work is in the floodplain or a “No-Rise” certification if the work is within the floodway. Exception: Bank stabilization is not permitted for development on a vacant lot of record.
9. Temporary bank stabilization or tree and vegetation removal necessitating immediate action during a flood emergency or other emergency to prevent the loss of an existing structure, or to repair a bank damaged during a flood. Following the flood emergency or other emergency, the owner shall submit a Floodplain Development Permit according to Section 14.035.E(1)(b).
10. Fill of wetlands when there is no other practicable way to build on the site as established through Section 14.040 of this Chapter, and provided fill of wetlands within the floodplain is balanced with cut elsewhere within the floodplain, and a Fill/Removal Permit is issued from the Oregon Department of State Lands (DSL) and U.S. Army Corps of Engineers (Corps), as applicable. The application to DSL and the Corps may be processed concurrently with a land use application for site and design review, land division, a planned development application, or a conditional use. A joint fill permit may be applied for prior to application for a land use permit. However, if a joint fill permit is approved by the Oregon Department of State Lands and the U.S. Army Corps of Engineers prior to applying for the land use application, fill may not proceed until the final decision for the land use application has been made by the City. Mitigation for fill of wetlands and the location of the mitigation shall be as prescribed by the DSL/Corps permit.
11. New drainageways, levees, or alteration of watercourses to accommodate public projects administered by the Sandy Drainage Improvement Company or its successor, the City, Multnomah County, the state, or a federal agency, provided it is in compliance with Sections 14.035(C), and 14.040(R) and (S) of this Chapter.
12. Any development that must implement a Federal Aviation Administration (FAA) compliant wildlife hazard management plan on property owned by the Port of Portland or within ten thousand (10,000) feet of an Aircraft Operating Area, as defined by the FAA, and removal of trees that interfere with the landing or takeoff flight path of aircraft at the Troutdale Airport or otherwise interferes with the safe operation of the airport as determined by the Port of Portland. The removal of trees that interfere with the operation of the Troutdale Airport are permitted outright.

13. Removal of refuse as defined in the City of Troutdale Municipal Code.

14.035 Floodplain Development Permit

- A. Background. To participate in the National Flood Insurance Program (NFIP), a community must adopt and enforce a floodplain management ordinance that regulates development in the floodplain. This floodplain management ordinance is housed primarily in Chapter 14 of this Code, but is in part addressed in other Chapters of this Code. One of the basic Federal requirements for regulating Development in the Floodplain is a requirement for a Floodplain Development Permit (locally, a Floodplain Development Permit) before construction or other development begins within any Special Flood Hazard Area. In this context, the term "development" is defined in Section 1.040. This chapter contains provisions for the federally required Floodplain Development Permit and is consistent with the National Flood Insurance Program (NFIP) regulations. A Floodplain Development Permit is required for development within the Flood Management Area except as noted in Section 14.035.C of this Chapter.
- B. Applicability. Unless exempt per Section 14.035.C, below, approval of a Floodplain Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 14.010.B of this Chapter. The permit shall be for all structures including manufactured dwellings, as set forth in the Section 1.040 and for all development including fill and other activities, also as set forth in the Section 1.040.
- C. Exemptions. The following activities do not require a Floodplain Development Permit:
1. Removal of invasive, nuisance, or prohibited plant species that exposes the ground, provided a revegetation plan approved or prepared by the City, state, a federal agency, Metro, SOLV, the East Multnomah Soil & Water Conservation District, or other similar organizations as determined by the Floodplain Manager, is carried out to provide shade and habitat, prevent erosion of steep slopes and/or sedimentation into the protected water feature. A copy of the plan shall be provided to the Community Development Department prior to beginning the work.
 2. Placement of fill in residential zones, provided it is consistent with other applicable provisions of this Code, and provided the fill is used solely for the purpose of constructing a sandbox, a raised gardening bed, or other similar landscape feature.
 3. Installation of three strand, on bendable pole, wire farm type fencing that is constructed consistent with the provisions in Section 14.040 of this Chapter.

4. Landscape maintenance activities consistent with the standards identified in this Section.
5. Wetlands not subject to flooding as described Section 14.010.B of this Chapter, nor identified as designated habitat covered under the Endangered Species Act, and are not exempt for review under Section 4.300 of this Code.

D. Submission Requirements. An application for a Floodplain Development Permit within the Flood Management Area shall include the following, and these requirements apply to all applicants for development approval unless otherwise noted below:

1. A site plan showing the proposed development on the site, drawn to a standard scale, and including an illustrated scale for use in reductions. A site plan shall also consist of the following:
 - a. SFHA boundaries, and the base flood elevations based upon the North American Vertical Datum of 1988 (NAVD 88);
 - b. The 1996 flood boundaries established by Metro;
 - c. Floodway boundaries as determined by datum available from the FIRM and Flood Insurance Study;
 - d. The name, location, and dimensions of affected streams or rivers, and the bankfull stage or the two-year storm level.
 - e. The area comprising the vegetation corridor as established by Sections 4.316 and 4.317 of this Code;
 - f. Wetlands that are determined significant by the Oregon Department of State Lands or have the following characteristics. All wetland determinations made prior to development must be reviewed and acknowledged by the Oregon Department of State Lands prior to issuance of City permits. The characteristics shall be determined by a qualified scientist.
 - i. The wetland is fed by surface flows, sheet flows, or precipitation; has evidence of flooding during the growing season; at least sixty percent (60%) of the area is vegetation; and is over one-half acre in size; or, the wetland qualifies as having “intact water quality function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or
 - ii. The wetland is in the Flood Management Area; has evidence of flooding during the growing season; is five (5) acres or more in size; and has a restricted outlet or no outlet; or, the wetland qualifies as

having “intact hydrologic control function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or

- iii. The wetland, or a portion of the wetland, is within a horizontal distance of less than one-fourth (1/4) mile from a water body which meets the State of Oregon Department of Environmental Quality definition of “water quality limited water body” in OAR Chapter 340, Division 41 (1996).

2. Topographic survey. The survey shall show the floodway and floodplain. The survey shall also show the location of existing and proposed improvements on the site, trees or tree clusters (including those to be removed), existing roads, utilities, and structures, buildings, structures, fencing, walls, landscaping, storage of materials or equipment, drainage facilities, parking areas, and other impervious surface areas. The survey shall be drawn to scale, with two (2) foot contours, and shall note the distance from Top-of-bank to the improvements on the site;
3. Where base flood elevation data is provided through the City’s Flood Insurance Study, or by other means as permitted in this Chapter, the developer shall obtain and record the actual elevation of the lowest floor (including basement) of all new or substantially improved structures, including the placement of a manufactured dwelling, and whether or not the structure contains a basement. This information shall be based upon NAVD 88 and provided on a City Floodplain Development Permit form, and should include the following, as applicable:
 - a. For all new or substantially improved, elevated, or floodproofed structures, verify and record the actual elevation.
 - b. Where development occurs within Zone A of the Flood Management Area and the Base Flood Elevation (BFE) data is not available either through the Flood Insurance Study or from another authoritative source as authorized in Subsection 14.020(C) of this Chapter, the Floodplain Development Permit shall be reviewed for compliance with FEMA Publication 265 issued July 1995 “Managing Floodplain Development in Approximate Zone A Areas”, adopted herein for reference, and applicable State of Oregon Building Codes.
4. Hydrology and soils report. Where ground disturbance or vegetation removal is proposed that exposes the soil, this report shall be required. This report shall include information on the hydrological activities of the site, the effect of hydrologic conditions on the proposed development, and any hydrological or erosion hazards. This report shall also include characteristics of the soils on the site, suitability for development, its carrying capacity, and erosion or slumping characteristics that might present a hazard to life and property, or adversely affect the function or stability of a public use or facility. This report shall also include information on the nature, distribution, and strength of existing soils; the

adequacy of the site for development purposes; and an assessment of grading procedures required to impose the minimum disturbance to the natural state. The report shall be prepared by a professional engineer registered in Oregon. In Oregon Department of Geology and Mineral Industries (DOGAMI) inventory of landslide hazard areas, on hillsides where grading will lessen stability, or in areas where historic or prehistoric mudflows have occurred, a soils engineer and/or engineering geologist registered in Oregon shall certify the development will not negatively impact public safety, adjacent properties, or water quality.

5. Grading plan. If grading is to occur, a grading plan shall be required that shows existing and finished contours (two-foot contour intervals), drainage, all cut and fill slopes and proposed drainage channels, direction of drainage flow, location of proposed structures and existing structures which may be affected by the proposed grading operations, and water quality facilities .
6. Vegetation report. Where vegetation is to be removed or other impacts to the onsite vegetation is to be expected as a result of development, this report shall be required. This report shall consist of a survey of existing vegetation, whether it is native or introduced, and how it will be altered by the proposed development. Measures for enhancement of the site, including revegetation with approved plant species, will be clearly stated, as well as methods for immediate and long-term stabilization of slopes and control of soil erosion. The vegetation report shall be prepared by a landscape architect, landscape designer, botanist, arborist, or other authority as determined by the Floodplain Manager with specific knowledge of approved plant species, planting and maintenance methods, survival rates, and their ability to control erosion and sedimentation. The contractor for installation and maintenance will be responsible for replacing any approved plant species that do not survive the first two (2) years after planting.
7. A “No-Rise” certification and a Letter of Map Change (LOMC) shall be submitted with the land use application for the following activities within the floodway as mapped by FEMA:
 - a. Permanent bank stabilization that occurs in the floodway.
 - b. Development, alterations, or relocations of the floodway, including any permanent fill within the floodway.
8. Building and structure elevations. For all existing and proposed, relocated, or expanded buildings and structures, elevation in relation to the Highest Adjacent Grade, the North American Vertical Datum 1988 (NAVD88), and the base flood elevation as applicable, of the:
 - a. Lowest enclosed area of all existing and proposed, relocated, or expanded buildings and structures. This includes crawlspaces, basement floors, and attached garages, electrical equipment (except utility meters), heating and

ventilation equipment, plumbing, air conditioning equipment, and/or other service facilities (including ductwork); top of proposed garage slabs; and next highest floor situated above the items herein.

- b. Elevation to which any existing building or structure has been or is proposed to be flood-proofed; and certification by a registered professional engineer that the flood-proofing methods for any nonresidential structure meet the floodproofing criteria in this Chapter.
- c. The locations and sizes of all flood openings in any proposed buildings and structures.

9. Infrastructure. Location of all proposed infrastructure necessary to serve the proposed development shall be required when such new development is proposed by the applicant. Such infrastructure includes, but is not limited to, streets, driveways, water, sanitary sewer, and storm drainage.

10. Floodplain or watercourse alterations. Where floodplain or watercourse alterations are proposed, a description of the extent to which any floodplain or watercourse is proposed to be altered or affected as a result of proposed development shall be required.

11. All federally-mandated or state-mandated permits issued by other governmental agencies shall be obtained, or obtaining such permits shall be a Condition of Approval to be satisfied prior to issuance of any construction permit. Such permits include but are not limited to Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334, 16 U.S.C. 1531-1544, and State of Oregon Removal-Fill permits, as amended.

E. Application for Floodplain Development Permit. A Floodplain Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 14.010 of this Chapter. The permit shall be for all structures including manufactured dwellings, as set forth in Section 1.040 and for all development including fill and other activities, also as set forth in Section 1.040. Applications for a Floodplain Development Permit shall be made on forms furnished by the Community Development Department and may include, but not be limited to, plans drawn to scale showing the nature, location, dimensions, elevations of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing.

1. A Type I Floodplain Development Permit is required for the following:

- a. Construction of a single-family dwelling, including the placement of a manufactured dwelling or repair or alteration of existing single-family dwellings and manufactured dwellings. Single-family dwellings and manufactured dwellings shall be built in compliance with the applicable

development standards in Section 14.040 of this Chapter.

- b. Bank stabilization or tree and vegetation removal necessary to preserve an existing structure during an emergency. During the flood emergency or other emergency the permit is not required; however, as immediately as possible following the emergency a Floodplain Development Permit shall be obtained that documents the bank stabilization and tree and vegetation removal measures taken during the emergency; the schedule and procedure that will be used to remove any temporary fill, including sand bags, and the schedule and procedure to replant tree and vegetation where required according to the standards in Section 4.300. If the stabilization measures will not be removed, a Type II Floodplain Development Permit will be required as well as a “No-Rise” certification and LOMC as applicable. The required Floodplain Development Permit shall also show that the long-term stability of the site is in compliance with all other relevant Development Standards identified in Section 14.040 as applicable.
- c. Wildfire mitigation projects as identified in this Chapter.

2. A Type II Floodplain Development Permit is required for:

- a. Any use in the underlying zoning district requiring a Type II Site Development review.
- b. New or expanded streets or bridges.
- c. New or expanded railroads or trestles.
- d. Permanent bank stabilization or fill within the floodplain or floodway.
- e. Balanced cut and fill activity within the floodplain, with a Letter of Map Change, as required in this Code.
- f. Fill of wetlands. If the wetland is outside of the floodplain and not hydrologically connected, a Floodplain Development Permit is not required, only the Site Development Review.
- g. Other uses similar in nature to those listed above.

3. A Type III procedure and Floodplain Development Permit shall be processed for uses requiring a Type III review in the underlying zoning district, for all special variances requested from the standards of this Chapter, and for any proposed alteration of a watercourse of any perennial or intermittent streams.

F. Review Criteria - Requests for approval of a Floodplain Development Permit shall be

reviewed by the Floodplain Administrator or designee to ensure:

1. Consistency with the standards from Sections 1.040, Chapter 2, and Section 14.040 of this Code, as applicable;
 2. Consistency with other applicable standards of this Code and all other applicable policies and standards adopted by the City.
- G. Mandatory Conditions of Approval - The following Conditions of Approval are mandatory and shall be imposed on every approved Floodplain Development Permit:
1. Required During Construction Elevation Certificate. For all new construction, development, and substantial improvements, the permit holder shall provide to the Floodplain Administrator or designee an as-built certification of the floor elevation or flood-proofing elevation immediately after the lowest floor or flood-proofing is placed and prior to further vertical construction. Any deficiencies identified by the Floodplain Administrator or designee shall be corrected by the permit holder immediately and prior to work proceeding. Failure to submit certification or failure to make the corrections shall be cause for the Floodplain Administrator or designee or the Building Official to issue a stop-work order for the project.
 2. Required Documentation Prior to Issuance of Certificate of Occupancy
 - a. In addition to the requirements of the Building Codes pertaining to Certificate of Occupancy, prior to the final inspection the owner or authorized agent shall submit the following documentation to the Floodplain Administrator or designee and the documentation shall be prepared and sealed by a registered surveyor or engineer:
 - i. For elevated buildings and structures in Special Flood Hazard Areas, the as-built elevation of the lowest floor, including basement, or where no base flood elevation is available the height above highest adjacent grade of the lowest floor;
 - ii. For buildings and structures that have been floodproofed, the elevation to which the building or structure was floodproofed.
 - b. Failure to submit certification or failure to correct violations shall be cause for the Floodplain Administrator or designee or the Building Official to withhold a Certificate of Occupancy until such deficiencies are corrected.
 3. For applications for partitions and subdivisions, one of the following shall be required:
 - a. Protection of Flood Management Areas with a conservation easement;

- b. Platting Flood Management Areas as common open space; or
- c. Offer of sale or donation of Flood Management Area property to public agencies or private non-profits for preservation where feasible.

14.040 **Development Standards.** The land use application shall establish through the use of narrative, site plans, and professional reports, the following:

- A. Type II or III approval for new development, including additions or alterations to existing structures, except for single family dwellings, in the Flood Management Area may be allowed, provided that:
 1. The applicant shall demonstrate that there is no reasonable nor practical alternative design or method of development that would have a lesser impact on the Flood Management Area than the one proposed.
 2. If there is no reasonable nor practical alternative design or method of development the project shall be designed in compliance with applicable parts of Subsections (B) through (X) of this Section, so that the impacts on the Flood Management Area are limited and the plans shall include restoration, replacement, or rehabilitation of the vegetation within the Flood Management Area.
 3. The applicant shall provide mitigation to ensure that impacts to the functions and values of the vegetation corridor and integrity of the slope will be mitigated or restored to the extent practicable.
- B. A professional engineer registered in Oregon must certify that the development will not result in any increase in flood levels throughout the SFHA during the occurrence of the base flood discharge, and that water quality will not be adversely affected.
- C. As applicable, the development must be authorized by the Oregon Department of State Lands, U.S. Army Corps of Engineers, the Oregon Department of Fish and Wildlife, and the Sandy Drainage Improvement Company. The applicant shall obtain and submit a copy of all required state and federal permits for any proposed development in the Flood Management Area, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1334.
- D. Unless otherwise authorized under the provisions of this Chapter, the development shall comply with the underlying zoning district dimensional standards and the minimum vegetation corridor as established in Sections 4.316 and 4.317 of this Code. The applicant shall submit an exhibit that shows the location and provides a description of all actions to be provided to mitigate the impacts of permitted development as established in Section 4.314 of this Code.

E. Protect the water quality resource, and Flood Management Area functions and values from uncontained areas of hazardous materials as defined by the State of Oregon Department of Environmental Quality water quality standards.

F. Limit impervious surface areas in the Flood Management Area.

1. The impervious surface of the development may not exceed thirty percent (30%) of the flood plain area, provided the standards of this Code are met. Exception: Public roads necessary to serve the transportation needs of the City may exceed thirty percent (30%) of the Flood Management Area provided all other applicable standards of this Chapter have been met.
2. Clustering of houses and multiple-family units, zero lot line developments, and/or modifications to setbacks may be approved under the Type II procedure in order to accommodate the density permitted within the underlying zoning district and not exceed the impervious surface limitation of thirty percent (30%) of the Flood Management Area on the site.
3. The Director, or their designee, may grant an administrative variance of up to fifty percent (50%) of any dimensional standard in the underlying zoning district where necessary to avoid development within the Flood Management Area.

G. Maintain flood storage capacity. The developer is required to offset new fill placed in the floodplain by excavating an additional flood-able area to replace the lost flood storage area, preferably at hydrologically equivalent sites. All development proposals in the SFHA shall provide compensatory mitigation for impacts to flood storage, water infiltration, and riparian vegetation to ensure that new development does not increase flood hazards on other properties. A mitigation plan shall be submitted with the land use application. All required actions derived from that plan shall be completed prior to issuance of a Certificate of Occupancy, a Certificate of Completion for a subdivision, or the final building inspection, as applicable. Balanced cut and fill is required for permitted development in the Flood Management Area. Excavation and fill shall be performed in a manner to maintain or increase flood storage and conveyance capacity and not increase design flood elevations. A professional engineer registered in Oregon must certify that the development will not result in any increase in flood levels throughout the SFHA during the occurrence of the base flood discharge except as described in Section 14.040.G(8), and that water quality will not be adversely affected.

1. All fill placed at or below the design flood elevation in the Flood Management Area shall be balanced with at least an equal volume or amount of soil material removal. The development shall be designed to minimize development within the Flood Management Area and amount of fill necessary. Balanced cut and fill may be used to elevate structures but shall not be used for density transfer. Residential density must be calculated prior to changes to the floodplain as a result of balanced cut and fill.



2. Excavation shall not be counted as compensating for fill if such areas will be filled with water in non-storm winter conditions.
3. The cumulative effect of any proposed development shall not increase the water surface elevation of the base flood except as described in Section 14.040.G(8). Onsite flood storage capacity shall not decrease as a result of development, vegetation removal, or excavation except as described in Section 14.040.G(8).
4. A “No-Rise” certification is required for any fill or permitted development within the floodway pursuant to Section 60.3(d)(3) of the National Flood Insurance Program.
 - a. The “No-Rise” supporting data and a copy of the engineering certification must be submitted to, and reviewed by, the City prior to approval of development, and the data shall be submitted with the Floodplain Development Permit.
 - b. The “No-Rise” certification and supporting technical data must stipulate no impact on the 100-year flood elevations, floodway elevations, or floodway widths at the new cross-sections and at all existing cross-sections anywhere in the model.
 - c. A sample “No-Rise” certification is available in the Community Development Department.
5. All new buildings built on fill in the regulatory floodplain shall be constructed on fill:
 - a. Certified by a professional engineer registered in Oregon as suitably designed and compacted for the development (e.g. fill that meets the criteria of 1803.5.8 and Section 1804.4 of the International Building Code, Section 2.4 of ASCE 24, or their equivalent); and
 - b. Providing protection from erosion and scour.
6. When a project proposes development that will alter a watercourse, modify floodplain boundaries, or modify Base Flood Elevations, the application shall obtain a Conditional Letter of Map Change from FEMA prior to grading and filling the site and then obtain and submit the final Letter of Map Change prior to final inspections, or issuance of a certificate of completion, or issuance of the certificate of occupancy as required under this Section. When a project applicant has demonstrated through the Floodplain Development Permit that, in addition to the standards listed for Section 14.040.G, the following standards have been achieved, a Conditional Letter of Map Change/Letter of Map Change may not be required:

- a. Fill is not proposed in the floodway for the site to be impacted through development;
 - b. The project site is not being elevated to or above the base flood elevation (BFE);
 - c. The project is proposing to remove unsuitable existing material (topsoil) and backfilling with select structural material, not alter the existing (natural grade) elevation of the site;
 - d. The site to be impacted does not have US Fish and Wildlife Service (USFWS) designations for critical habitat for Threatened or Endangered; and
 - e. In areas where a regulatory floodway has not been designated, the new construction, substantial improvements, or other development (including fill) within A or AE Zones on the community's FIRM, has demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood at any point within the community.
7. All proposals that include engineering analysis for maintenance of flood storage capacity are subject to review by a qualified engineer licensed in the State of Oregon. The applicant shall be responsible for the cost of this independent review and will be advised at the time of application of this expectation.
8. As described in FEMA's "NFIP Guidebook - A Local Administrator's Guide to Floodplain Management and the National Flood Insurance Program, 5th Addition, Appendix E - Policy on Fish Enhancement Structures in the Floodway", projects that are specifically implemented to restore or enhance US Fish and Wildlife Service (USFWS) identified Threatened or Endangered anadromous fish species or habitat where such species have been determined to reside qualify to allow for minimal rises in the 100-year flood levels as a result of implementation. In addition to the Submission Standards identified in Section 14.035.D, applicants for such projects shall also provide statements from Rural Conservation and Development, the Natural Resource Conservation Service, or similarly qualified staff of fisheries, natural resource, or water resources agencies that less than the maximum hydraulic analyses may be allowed. A professional engineer registered in Oregon shall provide a feasibility analysis and certify that the project was designed to keep any rise in 100-year flood levels to as close to zero as practically possible and ensure that no structures would be impacted by a potential rise. Additionally, routine maintenance of any such project would be necessary to sustain conveyance over time. A plan that sets forth how long-term maintenance is to be maintained shall be required with the submittal of the Floodplain Development Permit. An additional mandatory condition of approval, as

recommended by FEMA, shall be attached to such projects that emphasize the dynamics of a river or creek, and, where the Floodplain Manager has deemed necessary, a requirement for further analysis.

- H. Residential Development, including accessory structures as referenced in Section 5.010 of this Code and not constructed in accordance with Section 14.040.V. Note: if more than fifty percent (50%) of the lot being developed is affected by the floodplain, then the minimum density standard of this Code does not apply.
1. Elevate structures. The minimum finished floor elevation, including basement floor, for all new or substantially improved residential structures in the Flood Management Area shall be at least two (2) feet above the base flood elevation, as established by Section 14.010.B in this Chapter, and as demonstrated through the Elevation Certificate submittals as established in this Section. Elevation Certificates shall be required for all residential development as required by the Community Rating System.
 - a. An Elevation Certificate shall be submitted with the construction plans. The Elevation Certificate shall include the elevation of the lowest floor (including basement). The Elevation Certificate shall be certified by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information for construction within specific flood hazard areas.
 - b. A second certified Elevation Certificate shall be submitted to the City of Troutdale prior to pouring the foundation.
 - c. A third certified Elevation Certificate shall be submitted after the structure is completed based upon finished construction.
 - d. The City shall maintain the Elevation Certificates for public inspection.
 2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:
 - a. A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
 - b. The bottom of all openings shall be no higher than one (1) foot above grade.
 - c. Openings may be equipped with screens, louvers, or other devices

provided that they permit the automatic entry and exit of floodwaters.

- d. Where possible, openings will be installed on at least two opposing sides of the enclosed area.

3. Below-grade crawlspaces are allowed only when in compliance with the design requirements of FEMA Technical Bulletin 11-01, “Crawlspace Construction for Buildings Located in Special Flood Hazard Areas.” Buildings that have below-grade crawlspaces will have higher flood insurance premiums than buildings that have the preferred crawlspace construction with an interior elevation at or above the lowest adjacent exterior grade.

- a. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings:

i. Openings that equalize hydrostatic pressures by allowing for the automatic entry and existence of floodwaters is required. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade. See FEMA Technical Bulletin 1-93, Opening in Foundation Walls, for guidance.

ii. All portions of the building below the base flood elevation must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE. Ductwork or other utility systems located below the insulation may pull away from their supports. See page 8 of Technical Bulletin 1-93 and FEMA Technical Bulletin 2-93 Flood Resistant Materials Requirements.

iii. Any building utility systems within the crawlspace must be elevated above the base flood elevation or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters. For further guidance, see FEMA 348, Protecting Building Utilities from Flood Damage.

- b. The interior grade of a crawlspace below the base flood elevation must not be more than two (2) feet below the lowest adjacent exterior grade.

- c. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building Code requirements for flood hazard areas. Crawlspaces may not be converted to basements.
 - d. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel, or crushed stone drainage by gravity or mechanical means.
 - e. Crawlspace construction is not permitted in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. For velocities in excess of five (5) feet per second, other foundation types should be used.
 - f. The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest immediate interior or exterior grade.
4. Substantial improvements will require elevation of any non-elevated structure to two (2) feet above the base flood elevation in compliance with this Section and in accordance with Section 1.040. Substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. Substantial improvements include:
- a. Any repair, reconstruction, or improvement of a structure, the cost of which exceeds forty-nine percent (49%) of the market value of the structure as established by the County appraiser or a licensed professional appraiser.
 - b. Reconstruction or repair of a structure that exceeds forty-nine percent (49%) of the market value of the building before it was damaged.
 - c. Additions to an existing structure when the addition increases the market value of the structure by more than forty-nine percent (49%) or the floor

area by more than twenty percent (20%).

5. Comply with other standards of this Section, as applicable.

I. Manufactured dwellings within the Special Flood Hazard Area.

1. All manufactured dwellings to be placed or substantially improved on sites that are outside of a manufactured dwelling park or subdivision; in a new manufactured dwelling park or subdivision; in an expansion to an existing manufactured dwelling park or subdivision, or in an existing manufactured dwelling park or subdivision on which a manufactured dwelling has incurred substantial damage shall be elevated on a permanent foundation such that the finished floor of the manufactured dwelling is elevated to a minimum eighteen (18) inches (46 cm) above the base flood elevation and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement.
 2. Manufactured dwellings to be placed or substantially improved on sites in an existing manufactured dwelling park or subdivision within the Special Flood Hazard Area on the community's FIRM that are not subject to the above manufactured dwelling provisions shall be elevated so that either:
 - a. The finished floor of the manufactured dwelling is elevated to a minimum of eighteen (18) inches (46 cm) above the base flood elevation; or
 - b. The manufactured dwelling chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above grade and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement. Anchoring shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).
 3. Manufactured dwellings shall have all electrical crossover connections installed at a minimum of twelve (12) inches above BFE.
 4. Manufactured dwellings supported on solid foundation walls shall be constructed with flood openings that comply with Section 14.040.H(2).
 5. Comply with the other standards of this Section as applicable.
- J. Recreational Vehicles (RV) within the Special Flood Hazard Area, whether in a park or on private property outside of a park, are required to:**

1. Be on the site for fewer than one hundred eighty (180) consecutive days, and
 2. Be fully licensed and ready for highway use. Highway use means on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
 3. Meet the permit requirements of Section 14.040.I and the elevation and anchoring requirements for manufactured dwellings.
 4. The RV “pads” shall be paved with asphaltic concrete or comparable, and have a special water quality facility for the collection of the stormwater from the site.
 5. The RV “pads” shall be wide enough to accommodate a trailer parked next to the towing vehicle or be long enough to accommodate both towing vehicle and trailer.
- K. Nonresidential Construction. New construction, development, and substantial improvement of any commercial, industrial, or other nonresidential structure shall have the lowest floor, including basement, elevated to **no less than two (2) feet above the base flood elevation**; or, together with attendant utility and sanitary facilities, shall:
1. Be dry floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water. A dry floodproofing certificate shall be filed with the City following the form and procedure established by the Federal Emergency Management Agency.
 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy, in accordance with standards established by the Federal Emergency Management Agency and the National Flood Insurance Program.
 3. Be certified by a registered professional engineer or architect that the design and methods of development are in accordance with accepted standards of practice for meeting provisions of National Flood Insurance Program regulations (CFR 60.3(c)(4) and (5)) based on their development and/or review of the structural design, specifications, and plans. Such certifications shall be provided to the City.
 4. Nonresidential structures that are elevated, not dry floodproofed, must meet the same standards for space below the lowest floor as described in Section 14.040.H. If elevated, an Elevation Certificate shall be submitted with the construction plans, prior to pouring the foundation, and after construction.
 5. Applicants dry floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the floodproofed level (e.g., a building floodproofed to the base flood elevation will be rated as one (1) foot below the base flood elevation).

6. Applicants that elect to utilize floodproofing instead of elevation shall supply a comprehensive Maintenance Plan at the time of building plan review for the entire structure to include but not limited to: exterior envelope of structure; all penetrations to the exterior of the structure; all shields, gates, barriers, or components designed to provide floodproofing protection to the structure; all seals or gaskets for shields, gates, barriers, or components; and, the location of all shields, gates, barriers, and components as well as all associated hardware, and any materials or specialized tools necessary to seal the structure.
7. Applicants may be required by the Floodplain Manager to supply an Emergency Action Plan (EAP) for the installation and sealing of the structure prior to a flooding event that clearly identifies what triggers the EAP and who is responsible for enacting the EAP.
8. Comply with other standards of this Section as applicable.
 - L. Remove temporary fills. Temporary fills permitted during construction or emergency bank stabilization shall be removed if not in compliance with the balanced cut and fill standard of this Code or prior to issuance of a Certificate of Occupancy or release of any bond issued for the development.
 - M. Preserve and/or restore the vegetation corridor within the disturbed areas, and retain the existing tree canopy as established in Sections 4.316, Width of Vegetation Corridor, and 4.317, Methods for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Chapter. An enhancement plan for disturbed areas shall be prepared and implemented to stabilize slopes to prevent landslides on slopes and sedimentation of water features. This plan shall provide for the replanting and maintenance of approved plant species designed to achieve pre-disturbance conditions.
 - N. Maintain or reduce stream temperatures.
 - O. Minimize erosive velocities, nutrient, and pollutant loading into water. Use filtering, infiltration, and natural water purification for stormwater runoff in compliance with the Erosion Control and Water Quality Standards of Section 5.600 of this Code. The applicant's engineering plans shall certify that runoff and sedimentation from the site will comply with the standards of Section 5.600 of this Code.
 - P. Anchoring. All new construction, development, and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
 - Q. Construction Materials and Methods. All new construction, development, and substantial improvements shall use flood-resistant materials in accordance with the requirements of FEMA Technical Bulletin 2-93 "Flood Resistant Materials Requirements" and utilities shall be designed and installed in accordance with FEMA Publication 348 "Protecting Building Utilities from Flood Damage." The following standards are only a summary of

those requirements:

1. All new construction, development, and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
2. All new construction, development, and substantial improvements shall be constructed using methods and practices that minimize flood damage and minimize impacts to natural floodplain functions, including flood storage, water infiltration, and riparian vegetation.
3. Electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
4. No construction materials or methods may be used within the floodplain that would impair or damage water quality or native vegetation.
5. All development shall have adequate drainage provided to reduce exposure to flood damage and maintain water quality.

R. Utilities and Roads.

1. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable, and comply with the Oregon Department of Fish and Wildlife construction standards.
2. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
3. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.
4. Onsite waste disposal systems shall be located to avoid impairment to them, or contamination from them, during flooding consistent with the State of Oregon Department of Environmental Quality.
5. Utility and road placement shall occur outside the floodway unless the utility or road is necessary to serve permitted development, and there is no reasonable alternative. Roads built in the floodplain shall be built at or above the base flood elevation to provide access to emergency vehicles during a flood.
6. Stormwater management and water quality facilities shall comply with the siting and construction standards of Section 5.700 of this Code.

S. For any alterations or relocations of a watercourse the developer shall be required to notify the Oregon Department of State Lands, the Oregon Department of Land Conservation and Development, and adjacent communities that will be impacted by the alteration or relocation. The developer shall be responsible for obtaining and submitting copies of any required project permits required by the Oregon Department of State Lands, U.S. Army Corps of Engineers, Oregon Department of Fish and Wildlife Service, Federal Emergency Management Agency, and other affected agencies, as applicable. The flood carrying capacity of the altered or relocated watercourse shall not be diminished and shall be maintained. Alterations will require a “No-Rise” certification for changes to the floodway, and changes that relocate the floodplain will require a Letter of Map Change (LOMC) from FEMA or may require a revised Flood Insurance Study and Flood Insurance Rate Map for the City. The burden for all engineering studies required to process these forms is the applicant’s, not the City’s.

T. Subdivision Proposals. In addition to compliance with the underlying zoning district standards of this Code and this Chapter, the development of the subdivision shall be subject to the following additional criteria:

1. All subdivision proposals shall be consistent with the need to minimize flood damage.
2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
4. Where the base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least fifty (50) lots or five (5) acres, whichever is less.
5. If more than fifty percent (50%) of the lot being partitioned or subdivided is affected by the floodplain, then the minimum density standard of this Code does not apply.

U. Critical Facilities.

1. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area.
2. Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available.
3. Critical facilities constructed within the SFHA shall have the lowest floor

elevated one foot above the height of the 500-year flood level. Submit Elevation Certificates with the construction plans, prior to pouring the foundation, and upon completion of the structure in accordance with Subsections H(1)(a - c) of this Section.

4. Access to and from the critical facility shall also be protected to the height utilized above.
5. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.
6. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.
7. Comply with the other standards of this Section as applicable.

V. Small Accessory Structure. Relief from elevation or floodproofing as required in this Section may be granted for small accessory structures that meet the following standards. The applicant shall be advised that this type of allowance will result in higher insurance rates for these structures, as applicable.

1. Less than two hundred (200) square feet, less than \$5,000 in valuation, and do not exceed one story;
2. Not temperature controlled;
3. Not used for human habitation and are used solely for parking of vehicles or storage of items having low damage potential when submerged;
4. Not used to store toxic material, oil or gasoline, or any priority persistent pollutant identified by the State of Oregon Department of Environmental Quality unless confined in a tank installed in compliance with this ordinance or stored at least two feet above base flood elevation;
5. Located and constructed to have low damage potential;
6. Constructed with materials resistant to flood damage as described in this Section;
7. Anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood;
8. Constructed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for complying with this requirement must be certified by a licensed professional engineer or architect or designed in compliance with Section 14.O.H(2): 

9. Constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.
- 14.045 Floodways.** Located within areas of special flood hazard established in Section 14.010.B of this Chapter are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:
- A. Except as provided in Section 14.045.C, encroachments, including fill, new construction, development, substantial improvements, and other development are prohibited unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- B. If Section 14.040.A is satisfied, all new construction, development, and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 14.040 of this Code.
- C. Floodways and other high hazard zones are extremely hazardous areas due to exceptionally high flood and erosion potential. In these areas, the development actions permitted in high hazard zones shall be limited to water-dependent uses; bridges and other location-dependent uses; habitat restoration activities consistent with Sections 14.035.C(2); low-intensity recreation; and bioengineered banks.
- 14.050 Before Regulatory Floodway.** In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.
- 14.055 Flood Management Area Variance Procedures.** Variances from dimensional standards of the underlying zoning district or other provisions of this Code not part of this Chapter shall be processed in accordance with Section 6.800 of this Code.

- A. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction, development, and substantial improvements to be erected on a lot of one-half (1/2) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing that the considerations of Section 14.055.A(1 - 11) have been fully reviewed. As the lot size increases the technical justification required for issuing the variance increases.

1. The danger that materials may be swept onto other lands to the injury of others;

2. The danger to life and property due to flooding or erosion damage;
 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 4. The importance of the services provided by the proposed facility to the community;
 5. The necessity to the facility of a waterfront location, where applicable;
 6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 7. The compatibility of the proposed use with existing and anticipated development;
 8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
 11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- B. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the Statewide Inventory of Historic Properties, without regard to the procedures set forth in this Section.
1. Is the minimum necessary to preserve the historic character and design of the site, building or structure;
 2. Will not result in the site, building or structure losing its historic designation; and
 3. Demonstrates consistency with all other local, state, or federal laws or ordinances, including documentation of any necessary consultations with state or federal agencies.
- C. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.



- D. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- E. The Director, or their designee, may grant a Type II variance of up to fifty percent (50%) of any dimensional standard in the underlying zoning district where necessary to avoid construction or development within the Flood Management Area. The Director or designee shall make a determination in accordance with the criteria established in Section 14.055.J of this Chapter.
- F. Applications for variances to dimensional standards in excess of that provided in Section 14.055.E shall be a Type III application.
- G. The Planning Commission or Director, or their designee, may attach conditions to the granting of variances as it deems necessary to further the purpose of this Chapter.
- H. As a participant in the National Flood Insurance Program, the City is not authorized to grant a variance from the requirement to elevate or floodproof structures in accordance with state and federal regulations, whichever is most restrictive. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except Section 14.055.A and otherwise complies with Sections 14.040.P - R of this Chapter.
- I. The City cannot grant a variance from the special flood hazard designation assigned by the Federal Insurance Administrator to a site. However, a property owner may request a Letter of Map Change (LOMC) from the Federal Emergency Management Agency.
- J. In reviewing a Type III Variance, the Planning Commission shall consider all technical evaluations, relevant factors, and standards specified in other Sections of this Chapter and other Chapters of this Code, and make affirmative findings, with or without conditions, for each of the following criteria:
1. A showing of good and sufficient cause that the need for the variance is not of the applicant's making and will not result in a use of the site that is not otherwise permitted in the underlying zoning district.
 2. A determination that failure to grant the variance would result in exceptional hardship to the applicant and is the minimum necessary to grant relief.
 3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in Section 14.055.A(1) – (11) or conflict with existing local, state, or federal laws or ordinances.
 4. The safety of access to the property in times of flood for ordinary and emergency

vehicles.

5. A determination that the development project cannot be located outside the Special Flood Hazard Area and/or high hazard area and that impacts to flood storage, water infiltration, and riparian vegetation have been minimized to the extent practicable.
6. A demonstration of consistency with all other local, state, or federal laws or ordinances, including documentation of any necessary consultations with state or federal agencies.

14.060 Prescribed Conditions for the Rehabilitation or Replacement of Pre-Existing Structures. The replacement of pre-existing structures or development damaged or destroyed accidentally is subject to following standards:

- A. The structure or development was in existence within the Flood Management Area prior to February 1, 2019.
- B. The use is allowed in the underlying zoning district at the time the application is made to rehabilitate or replace the structure.
- C. A Type I Floodplain Development Permit is approved prior to applying for building permits.
- D. The rehabilitation or replacement is rebuilt on the same footprint of the original structure and does not increase the impervious area within the Special Flood Hazard Area.
- E. The rehabilitated or replaced structure is elevated, if residential, or floodproofed or elevated, if non-residential, in accordance with the applicable standards of this Chapter, the definition found Section 1.040, and all additional relevant standards in this Code.

Exhibit E

12/11/18 Council Mtg. Item #6

Potential Amendments in Follow Up to Planning Commission held November 14, 2018 Public Hearing

Non-Substantive Changes

Section Reference	Proposal
1.040.20	Change “post” to “posts”
1.040.36	Change “ Or flood elevation study” to “Also known as the flood elevation study,”
1.040.42	Remove extra period
1.040.53	Add a period
1.040.62	Add a period
1.040.87	Change “, hat” to “that”
14.035.C	Fix spacing
14.035.C(5)	Change “for” to “from”
14.035.D(5)	Fix period spacing
14.040.G(6)(c)	Change “alter” to “altering”

Substantive Changes

Section Reference	Proposal
14.005.B	Change “Multnomah County Hazard Mitigation Plan” to “Multnomah County Natural Hazard Mitigation Plan”
14.010.B	Change “Floodplain Administrator” To “Floodplain Manager”
14.020.B(6)	Change “administrator” To “Floodplain Manager”
14.020.E	Change “floodplain administrator” To “Floodplain Manager”
14.025.B(9)	Change “Temporary bank stabilization or tree and vegetation removal necessitating immediate action during a flood emergency or other emergency to prevent the loss of an existing structure, or to repair a bank damaged during a flood. Following the flood emergency or other emergency, the owner shall submit a Floodplain Development Permit according to Section 14.035.E(1)(b).” To “Emergency temporary bank stabilization necessitating immediate action during a flood event to prevent the loss of an existing structure, or to repair a bank damaged during a natural flooding event.”
14.025.B(14)	Change “Removal of refuse as defined in the Troutdale Municipal Code” To “Removal of waste as defined in the Troutdale Municipal Code Section 8.40.015.”
14.030.B(9)	Change “Temporary bank stabilization or tree and vegetation removal necessitating immediate action during a flood emergency or other emergency to prevent the loss of an existing structure, or to repair a bank damaged during a flood. Following the flood emergency or other emergency, the owner shall submit a Floodplain Development Permit according to Section 14.035.E(1)(b).” To “Emergency temporary bank stabilization necessitating immediate action during a flood event to prevent the loss of an existing structure, or to repair a bank damaged during a natural flooding event.”
14.030.B(13)	Change “Removal of refuse as defined in the Troutdale Municipal Code” To “Removal of waste as defined in the Troutdale Municipal Code Section 8.40.015.”
14.035.D(6)	Change “or other authority as determined by the Floodplain Manager”

Potential Amendments in Follow Up to Planning Commission held November 14, 2018 Public Hearing

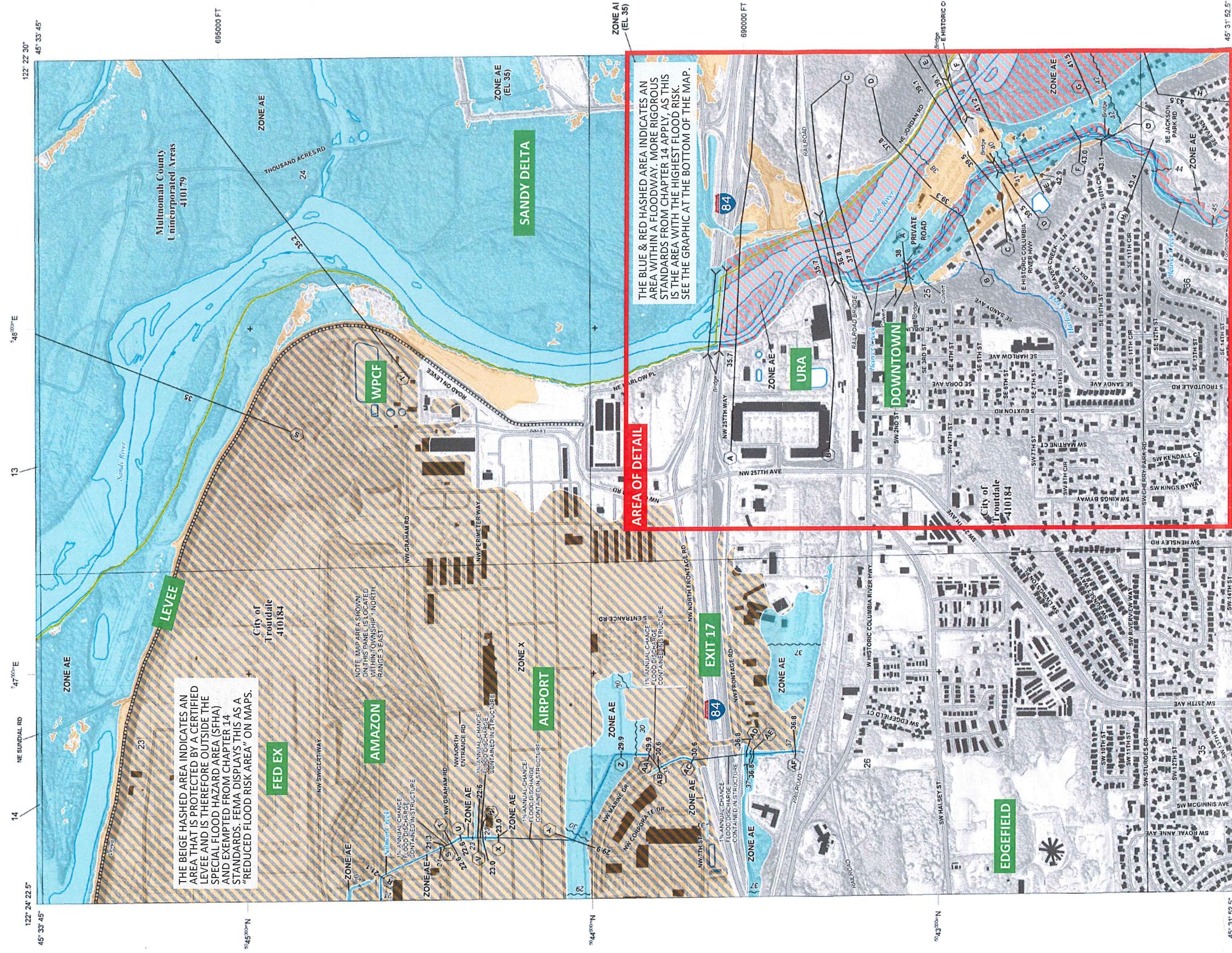
	To "wetland specialist, or other similar credentialed authority as determined by the Floodplain Manager"
14.035.E(1)(b)	<p>Change "Bank stabilization or tree and vegetation removal necessary to preserve an existing structure during an emergency. During the flood emergency or other emergency the permit is not required; however, as immediately as possible following the emergency a Floodplain Development Permit shall be obtained that documents the bank stabilization and tree and vegetation removal measures taken during the emergency; and the schedule and procedure that will be used to remove any temporary fill, including sand bags, and the schedule and procedure to replant tree and vegetation where required according to the standards in Section 4.300 . If the stabilization measures will not be removed, a Type II Floodplain Development Permit will be required as well as a "No-Rise" certification and LOMC as applicable. The required Floodplain Development Permit shall also show that the long-term stability of the site is in compliance with all other relevant Development Standards identified in Section 14.040 as applicable."</p> <p>To "Emergency bank stabilization necessary to preserve an existing structure during a flood emergency. During the flood event the permit is not required; however, within 90 days of the water receding a Floodplain Development Permit shall be obtained that documents the bank stabilization measures taken during the emergency and the schedule and procedure that will be used to remove any temporary fill, including sand bags. If the stabilization measures will not be removed, a Type II Floodplain Development Permit will be required as well as a "No-Rise" certification and LOMC as applicable."</p>
14.035.F	Change "Floodplain Administrator" To "Floodplain Manager"
14.035.G(1)	Change "Floodplain Administrator" To "Floodplain Manager"
14.035.G(2)(a)	Change "Floodplain Administrator" To "Floodplain Manager"
14.035.G(2)(b)	Change "Floodplain Administrator" To "Floodplain Manager"
14.040.G	Remove "except as described in Section 14.040.G(8)"
14.040.G(3)	<p>Change "The cumulative effect of any proposed development shall not increase the water surface elevation of the base flood except as described in Section 14.040.G(8). Onsite flood storage capacity shall not decrease as a result of development, vegetation removal, or excavation except as described in Section 14.040.G(8)."</p> <p>To "The cumulative effect of any proposed development shall not increase the water surface elevation of the base flood. Onsite flood storage capacity shall not decrease as a result of development, vegetation removal, or excavation."</p>
14.040.G(8)	<p>Remove "As described in FEMA's "NFIP Guidebook - A Local Administrator's Guide to Floodplain Management and the National Flood Insurance Program, 5th Addition, Appendix E - Policy on Fish Enhancement Structures in the Floodway", projects that are specifically implemented to restore or enhance US Fish and Wildlife Service (USFWS) identified Threatened or Endangered anadromous fish species or habitat where such species have been determined to reside qualify to allow for minimal rises in the 100-year flood levels as a result of implementation. In addition to the Submission Standards identified in Section 14.035.D, applicants for such projects shall also provide statements from Rural Conservation and Development, the Natural Resource Conservation Service, or similarly qualified staff of fisheries, natural resource, or water resources agencies that less than the maximum hydraulic analyses may be allowed. A professional engineer registered in Oregon shall provide a feasibility analysis and certify that the project was designed to keep any rise in 100-year flood levels to as close to zero as practically possible and ensure that no structures would be impacted by a potential rise. Additionally, routine maintenance of any such project would be necessary to sustain conveyance over time. A plan that sets forth how long-term maintenance is to be maintained shall be required with the submittal of the Floodplain Development Permit. An additional mandatory condition of approval, as recommended by FEMA, shall be</p>

Potential Amendments in Follow Up to Planning Commission held November 14, 2018 Public Hearing

	attached to such projects that emphasize the dynamics of a river or creek, and, where the Floodplain Manager has deemed necessary, a requirement for further analysis."
14.040.I(1)	<p>Change "All manufactured dwellings to be placed or substantially improved on sites that are outside of a manufactured dwelling park or subdivision; in a new manufactured dwelling park or subdivision; in an expansion to an existing manufactured dwelling park or subdivision, or in an existing manufactured dwelling park or subdivision on which a manufactured dwelling has incurred substantial damage shall be elevated on a permanent foundation such that the [] finished floor of the manufactured dwelling is elevated to a minimum eighteen (18) inches (46 cm) above the base flood elevation and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement."</p> <p>To "All manufactured dwellings to be placed or substantially improved on sites outside of or within a new, existing, or expansion to an existing manufactured dwelling park or subdivision shall be elevated so that the bottom of the longitudinal chassis frame beam is at or above the base flood elevation and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement."</p>
14.040.I(2)	<p>Change "Manufactured dwellings to be placed or substantially improved on sites in an existing manufactured dwelling park or subdivision within the Special Flood Hazard Area on the community's FIRM that are not subject to the above manufactured dwelling provisions shall be elevated so that either:"</p> <p>To "Anchoring shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques)."</p>
14.040.I(2)(a)	<p>Remove "The finished floor of the manufactured dwelling is elevated to a minimum of eighteen (18) inches (46 cm) above the base flood elevation; or"</p>
14.040.I(2)(b)	<p>Remove "The manufactured dwelling chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above grade and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement."</p>
14.040.J(3)	<p>Change "Meet the permit requirements of Section 14.040.I and the elevation and anchoring requirements for manufactured dwellings."</p> <p>To "Meet the permit requirements of Section 14.040.I and the requirements for manufactured dwellings."</p>

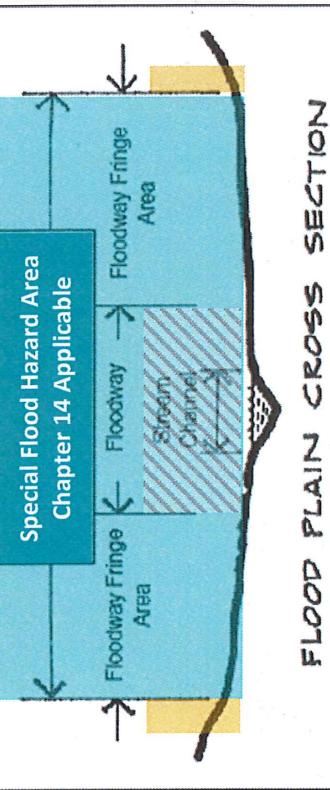
Snapshot of Flood Insurance Rate Map (Panel 217)

Effective February 1, 2019 | Produced for Troutdale City Council (12/11/18)



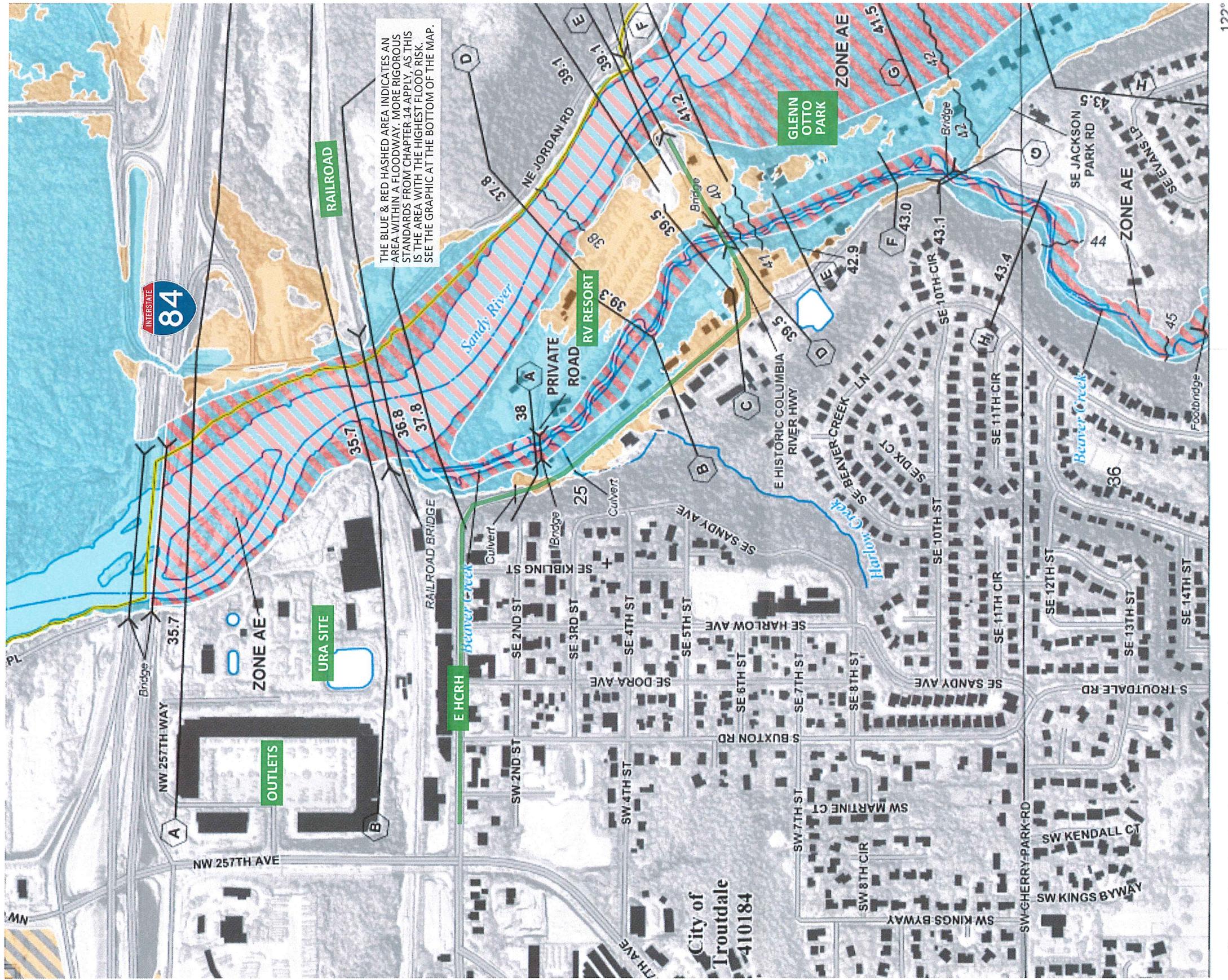
CHAPTER 14 APPLICABLE	Without Base Flood Elevation (BFE)
SPECIAL FLOOD HAZARD AREAS	Zone A, V, AE, AH, AO, AH, VE, AF
CHAPTER 14 IS NOT APPLICABLE	Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas
OTHER AREAS	Future Conditions 1% Annual Chance Flood Hazard
NO SCREEN	See Notes.
OTHER AREAS	Area with Reduced Flood Risk due to Levee
OTHER AREAS	Area with Undetermined Flood Hazard Zone D

This exhibit is a snapshot exhibit from the proposed Flood Insurance Rate Map (FIRM) for a portion of Troutdale, scheduled to be in effect on February 1, 2019. This map was produced for general information purposes only and shall not be used in an official capacity. Areas shaded in blue are areas where TDC Chapter 14 standards would apply. Beige & grey areas are not applicable for Chapter 14. See the graphic below for a cross-section that correlates with the map.



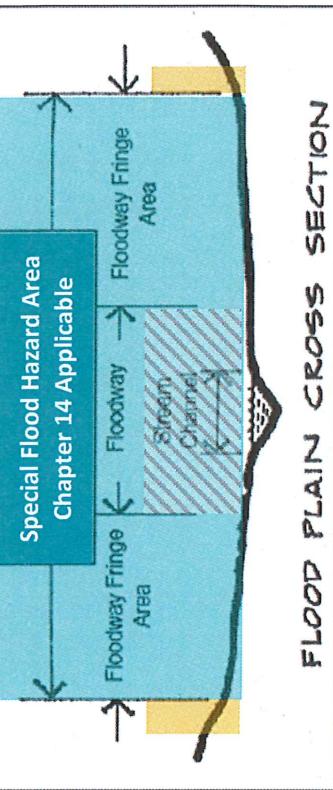
Area of Detail | Snapshot of Flood Insurance Rate Map (Panel 217)

Effective February 1, 2019 | Produced for Troutdale City Council (12/11/18)



CHAPTER 14 APPLICABLE	Without Base Flood Elevation (BFE) <i>Zone A, V, A9g</i>	
SPECIAL FLOOD HAZARD AREAS	With BFE or Depth Zone AE, AO, AH, VE, AR	
CHAPTER 14 IS NOT APPLICABLE	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>	
OTHER AREAS OF FLOOD HAZARD	Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>	
	Area with Reduced Flood Risk due to Levee See Notes. <i>Zone X</i>	
	Areas Determined to be Outside the 0.2% Annual Chance Floodplain <i>Zone X</i>	
	Area of Undetermined Flood Hazard <i>Zone D</i>	

This exhibit is a snapshot exhibit from the proposed Flood Insurance Rate Map (FIRM) for a portion of Troutdale, scheduled to be in effect on February 1, 2019. This map was produced for general information purposes only and shall not be used in an official capacity. Areas shaded in blue are areas where TDC Chapter 1 standards would apply. Beige & grey areas are not applicable for Chapter 14. See the graphic below for a cross-section that correlates with the map.



ORDINANCE NO.

AN ORDINANCE TO ADOPT TEXT AMENDMENTS TO CHAPTERS 1, 2, 4 AND TO ESTABLISH CHAPTER 14 OF THE TROUTDALE DEVELOPMENT CODE.

THE TROUTDALE CITY COUNCIL FINDS AS FOLLOWS:

1. The City of Troutdale recognizes the importance of flood management regulations in helping to ensure the protection of property and life.
2. The existing flood management regulations are required to be updated to secure compliance with federal, state, and regional standards.
3. New Flood Insurance Rate Maps and Flood Insurance Studies for the Sandy River basin are to be in effect on February 1, 2019, necessitating a text amendment action to update regulations prior to the effective date in order to maintain good standing in the National Flood Insurance Program.
4. The Planning Commission has reviewed proposed amendments at a public hearing during the November 14, 2018 meeting and voted 6-0 to forward a recommendation of approval.
5. The draft amendments have been reviewed and no additional testimony has been provided by the Federal Emergency Management Agency, Oregon Department of Land Conservation and Development, or Metro; as presented.
6. The City Council has adopted findings consistent with the provisions set forth in Troutdale Development Code Section 6.1100 as set forth in Attachment A.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF TROUTDALE

Section 1. Chapter 1 shall be amended as set forth in Attachment B.

Section 2. Chapter 2 shall be amended as set forth in Attachment C.

Section 3. Chapter 4 shall be amended as set forth in Attachment D

Section 4. Chapter 14 shall be newly established as set forth in Attachment E.

YEAS:
NAYS:
ABSTAINED:

Casey Ryan, Mayor

Date

Sarah Skroch, City Recorder
Adopted:

ATTACHMENT A

STAFF REPORT

TO: Troutdale Planning Commission

STAFF REPORT DATE: Wednesday, October 24, 2018

STAFF / APPLICANT: Ryan Krueger, CFM; Senior Planner & Floodplain Manager
Chris Damgen, Community Development Director

CASE FILE: **75-03 Text Amendments: Flood Management**

SUBJECT: **Proposed Text Amendments to the Troutdale Development Code**

APPLICABLE CRITERIA: TDC Sections 2.065 and 6.1100

HEARING DATE: Wednesday, November 14, 2018

RECOMMENDATION: Planning Commission to review proposal, open the public hearing, consider proposed testimony and amendments from all parties, and recommend approval of the proposed text amendments with any additional amendments proposed to the City Council.

1. BACKGROUND

The City of Troutdale is required to undergo a comprehensive update to its flood management standards. These standards are in need of update due to the following circumstances:

- The release of new Flood Insurance Rate Maps (FIRM) and Flood Insurance Studies (FIS) for Troutdale by the Federal Emergency Management Agency (FEMA), to go into effect on February 1, 2019. Communities that have updated FIRM and FIS must have flood management regulations that are in compliance with standards in the National Flood Insurance Program (NFIP) at the time of map and study adoption. A FEMA audit of the City's current regulations found areas where code amendments were necessary.
- The State of Oregon's Department of Land Conservation & Development (DLCD) performs "Community Assistance Visits" (CAV) which involve a review of a city's flood management regulations in coordination with both federal and state standards. In 2014, the results of a CAV compelled the City of Troutdale to update its regulations. The City and DLCD agreed to defer the update within six (6) months of an effective date for the adoption of new FIRM and FIS. This direction from DLCD was reaffirmed during the CAV in 2018.
- The City's voluntary participation in the NFIP Community Rating System (CRS).

2. REVIEW TIMELINE

The City was notified of the need to update flood management regulations in 2014 during the CAV performed by DLCD as described above. On August 1, 2018, FEMA and its contractor informed communities in the Sandy River basin that revised FIRM and FIS would be going into effect on February 1, 2019. This effectively started the clock for communities to update their regulations based on federal and state requirements in order to maintain compliance. Consistent with State law, properties directly affected received “Measure 56” notices (**Attachment I**).

3. IMPORTANT TERMINOLOGY

Floodplain management often uses terms or abbreviations that appear interchangeable, but carry distinct differences. Listed below are important terms that are used throughout the Code. Please consult with the definitions in Section 1.040 for the precise definition. **Attachment H** also provides a reference for typical abbreviated terms in floodplain management.

Special Flood Hazard Area (SFHA)

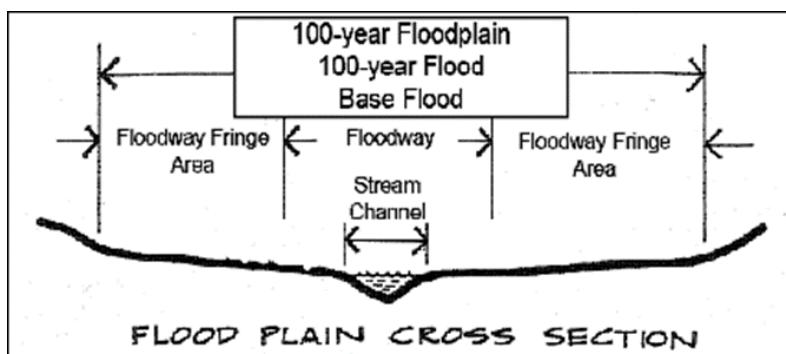
Also known as the “**100-year floodplain**”, these are areas that have an annual one percent (1%) chance of flooded conditions. In Troutdale, these areas are included in what is historically called the “**Flood Management Area**”. Properties and structures that are fully or partially affected by the SFHA are subject to the floodplain standards that are being reviewed.

Flood Zone

This is a term that is often misunderstood and misused. FEMA considers all properties to have flood zones. When most people think of flood zones, they are actually thinking of special flood hazard areas. Staff discourages the use of this term in a broad sense and utilizes it in conjunction with the actual flood zone assigned to a particular location (Flood Zone AE, Flood Zone X, etc.).

Floodway

This is a specific area within the Special Flood Hazard Area that has the greatest risk of regular flooding (see exhibit below). Floodways have more restrictive standards for development due to higher risk. See specifically Section 1.040.42 for the actual regulatory definition. See Sections 14.030, 14.045, and 14.050 for floodway-specific standards.



4. PROPOSED TEXT AMENDMENTS

The proposed text amendments would cover four (4) chapters in the Troutdale Development Code (TDC). This includes the transfer of flood management regulations from Section 4.500 to a new Chapter 14. Chapters 1, 2, and 4 are also amended.

Any required changes to the table of contents or sectional references in other chapters within the TDC would be made upon adoption and are deemed non-substantive. The following is a summary of the proposed amendments:

CHAPTER 1 – INTRODUCTORY PROVISIONS

There is one (1) section amendment proposed for this chapter:

1.040 Vegetation Corridor, Slope District, Water Quality and Flood Management Definitions

The definition section is updated with several new definitions and re-wordings, consistent with requirements and guidance from FEMA and DLCD. Please see **Attachment B** for the “clean” draft version and **Attachment F** for the “red-line” version.

CHAPTER 2 – PROCEDURES FOR DECISION-MAKING

There is one (1) section amendment proposed for this chapter.

2.220 Expiration of a Decision

The primary amendment is the inclusion of “flood development” permit land use decisions, which are to have a 180 day expiration period if no construction is occurring.

The additional amendments are the alphabetizing of the decisions currently listed so they are not listed without a specific sub-section reference. These amendments are non-substantive. Please see **Attachment C** for the “clean” draft version.

CHAPTER 4 – ZONING DISTRICT OVERLAYS

There is one (1) section amendment proposed for this chapter.

4.500 Flood Management Area

This section is proposed to be stricken in its entirety, with all flood management area regulations to be relocated to a new chapter in the TDC (Chapter 14). Section 4.500 would be reserved for a future zoning overlay district if needed. Please see **Attachment D** for the “clean” draft version.

CHAPTER 14 – FLOOD MANAGEMENT

This is a **proposed new chapter** that currently contains standards within Section 4.500. Because of the size of the section, coupled with the issue that the regulations contain not only overlay standards but also permitting and procedural standards, it was determined that a stand-alone chapter would be a more proper location within the Code.

Listed below is a **summary** of each section within the Chapter, along with a description of any major changes. Please also see ***Attachment E*** for the “clean” draft version (showing changes in a new Chapter 14) and ***Attachment G*** for the “red-line” version (showing changes in Section 4.500, the current location of standards).

14.005 Purpose (currently 4.510)

This section expands upon the provisions from the current TDC that flood management standards seek to govern. The purpose statement is generally the same.

14.010 Applicability (currently 4.512)

This section relocates the enumerated items needed for a flood development permit (shown in sub-section B) to another portion of the chapter where it is more logically located.

14.015 Severability (new)

This section is new and refers to the general severability standards in Chapter 17. This was requested by FEMA and DLCD.

14.020 Administration and Interpretation of FIRM Boundaries and Flood Management Area Standards (currently 4.513, [...] and Edge of Bankfull Stage or Two-Year Storm Level)

This section’s title was amended. Sub-section A has minor changes but now specifically calls out powers of determination and permit issuance. Sub-section B is new and effectively outlines the roles of the floodplain manager with enumerated responsibilities. The proposed Sub-section C is currently Sub-section B. The proposed Sub-section D is currently Sub-section C. Sub-section E is new and refers to inspections that can be made.

14.025 Uses within the Floodplain but Outside the Floodway and Outside Wetlands

(currently 4.514)

Sub-section A (Prohibited Uses) remains largely the same, with more specificity given to the prohibition of uncontained, outside storage areas of hazardous materials.

Sub-section B (Permitted Uses) is generally the same with a couple of notes.

- In Item 4, it refers to the City of Portland Plant List as a reference material. The City of Troutdale has no independent reference document for native plantings. In the current standards, a reference to a Metro Native Plant list is shown, but that document is not in existence. The Portland Plant List is the reference most often used in the area in lieu of other reference material and is the preferred standard for the draft.

- Item 13 is new, in that wildfire mitigation projects are now listed. This was a specific recommendation of the City's Hazard Mitigation Plan.

14.030 Uses within the Floodway or within Wetlands (currently 4.515)

Sub-section A (Prohibited Uses) remains largely the same, except greater clarity was given on vegetation removal, fill, or excavation with regards to wildfire mitigation projects and the addition of prohibiting uncontained outside storage areas of hazardous materials.

Sub-section B (Permitted Uses) remains largely the same, except it removes stream habitat restoration and vegetative removal/restoration projects that were currently permitted. Dead/dying trees may be removed.

14.035 Floodplain Development Permit (currently 4.516)

This section has been heavily modified, due mostly to FEMA, DLCD, and Metro requirements but also to eliminate ambiguity. The most basic change is the new title, which now refers to permits as Flood Development Permits (currently Flood Hazard Permits). In addition, the section better outlines submittal requirements and permit type differentiations based on the desired activity.

Sub-sections A and B are new and contain background and applicability information, respectively.

Sub-section C (currently A) list exemptions from permitting requirements. Several currently exempted activities were removed due to FEMA requirements. However, exemptions were maintained for the following activities:

- removal of refuse;
- vegetative removal/restoration work;
- emergency tree removal; placement of fill in residential zones (for certain circumstances);
- installation of certain fencing;
- certain landscape activities;
- preservation of wetlands; and
- certain activities performed by the Sandy Drainage Improvement Company (SDIC).

Sub-section D lists submission requirements for a Floodplain Development Permit. The list of items appears long, however much of the information in most circumstances can be readily obtained with assistance from the City. Ensuring these items are submitted also helps to keep record-keeping in order—an important task in Community Rating System scoring. Flood development permit applications would require the following:

- site plan
- topographic survey
- elevations of lowest floor (for structures)
- hydrology and soils report (for ground disturbance/vegetation removal that exposes soil)
- grading plan (if grading is occurring)

- vegetation report (if vegetation removal or similar impacts occur)
- “no-rise” certification and letter of map change (certain activities in floodway)
- building and structure elevations (if applicable)
- infrastructure exhibit
- floodplain or watercourse alterations (if applicable)
- any other permits issued (or applied for) related to project

Sub-section E is expanded from the current version and better outlines the need for Flood Development Permits, based on the typical decision-making system used elsewhere in the TDC.

A **Type I permit** (Staff decision) is required for construction, repair, and alteration of single-family residential dwellings and manufactured dwellings; emergency bank stabilizations; and wildfire mitigation projects. A **Type II permit** (Staff decision with notification) is required for any Type II site development reviews; new/expanded streets, bridges, railroads, or trestles; permanent bank stabilization or fill; balanced cut-and-fill; fill of wetlands; and similar activities. A **Type III permit** (Planning Commission decision with notification) is required for any uses requiring a Type III review, variances requested within Chapter 14, and proposed alterations of a watercourse.

Sub-section F attaches review criteria for decision-making to Flood Development Permits, similar to that of other procedures in the TDC.

Sub-section G includes mandatory conditions of approval that would be included in every approved Floodplain Development Permit. Item 3 is a mandatory addition from Metro Title 3 of the Functional Plan.

14.040 Development Standards (currently 4.517)

This section remains generally the same, with a few notable provisions that have been altered or added in this proposal. Some of the proposed changes are for Community Rating System bonus credits, which could allow the City to achieve a better score to further reduce flood insurance rates for those who carry flood insurance.

Sub-section G is more specific in maintaining flood storage capacity through the “balanced cut and fill” approach that is typical for developing in special flood hazard areas. Specifically, the following provisions are new:

- Development may not result in any increase in flood levels throughout the special flood hazard area (currently undefined on the extent that no increase situation could occur)
- **Item 5:** New buildings built on fill must have fill that is certified by a professional engineer, and offers protection from erosion and scour.
- Part of **Item 6:** Provides relief for some applications from requirements to submit Letters of Map Change
- **Item 7:** Allows for the City to outsource engineering analysis of flood storage capacity to consultants who have technical aptitude to review plans and advise on action.

Sub-section H (Residential Development) has proposed changes as described below..

- **Item 1:** Elevation Certificates to be required for all residential development (CRS bonus)
- **Item 2.d:** When possible, have two opposing side openings for enclosed areas for flood waters to pass through.
- **Item 3.f:** Flood vent opening placement standards now in place (avoids standing water).
- **Item 4:** Require elevation of non-elevated structures to two (2) feet above base flood elevation (currently one (1) foot above base flood elevation; CRS bonus)

Sub-section I (Manufactured Dwellings) and Sub-section J (Recreational Vehicles) have updated standards as required by FEMA.

Sub-section K (Nonresidential Construction) remains largely the same, though new standards are in place for those structures who utilize floodproofing techniques. Those standards include submitting a maintenance plan (Item 6) and an emergency action plan (Item 7) if required.

Sub-section R (Utilities and Roads) would require roads built in the floodplain to be built at or above base flood elevation for emergency access purposes. (CRS bonus)

Sub-section S requires additional state agency notification for applications with alterations or relocations of watercourses.

Sub-section U (Critical Facilities) contains the following changes of interest:

- The “definition” of critical facilities can be found in Section 1.040. The current version re-articulates the definition, so it is proposed to be removed.
- Critical facilities constructed in special flood hazard areas should have their lowest floor elevated to one foot above the 500-year flood level. (CRS bonus)

Sub-section V (Small Accessory Structures) is a new sub-section designed to provide relief for certain types of accessory structures under certain circumstances.

14.045 Floodways (new)

This section is new and provides clear guidance on approving development activity in the floodway, which is generally discouraged due to the hazards associated with these areas.

14.050 Before Regulatory Floodway (new)

This section is new and prohibits most development activities to occur in areas where a regulatory floodway has not been designated. This situation is likely not to occur in Troutdale but is required to be in the floodplain regulations for the City.

14.055 Flood Management Area Variance Procedures (currently 4.518)

This section has been expanded, primarily at the direction of FEMA and DLCD.

Sub-section A is new and provides guidance on requests to vary from elevation standards based on 11 considerations outlined therein.

Sub-section B allows for relief to be sought for historic structures, with three (3) approval criteria items to be considered.

Sub-section C prohibits variances from being issued within a designated floodway if increased flood levels during the base flood discharge would result.

Sub-section D is the “minimum necessary” clause for most variance applications.

Sub-section E (currently sub-section A) remains the same, with a process for determination now established elsewhere in the Chapter.

Sub-section F (currently sub-section B) remains the same.

Sub-section G (currently sub-section C) allows for conditions to be attached by the decision-making entity.

Sub-section H (currently sub-section D) remains the same but is also expanded to allow for nonresidential buildings in very limited circumstances to seek variances from floodproofing standards.

Sub-section I (currently sub-section E) is mostly the same, with a reference changes.

Sub-section J (currently sub-section F) is mostly the same with an additional code reference in decision criteria 3 and two new decision criteria:

- Item 5: Determination that project cannot be located outside SFHA and that any impacts have been minimized to the extent practicable.
- Item 6: Consistency with other laws and ordinances.

14.060 Prescribed Conditions for the Rehabilitation or Replacement of Pre-Existing Structures (currently 4.519)

This section remains mostly the same, with certain updates to references within the Code.

4. FACTS AND FINDINGS

TDC Section 2.065 specifies that the City Council is the decision-making body for text amendment applications after the Planning Commission forwards a recommendation for their consideration. Planning Commission is charged with making a finding for each applicable criterion point as listed in TDC Section 6.1120. Listed below are draft findings prepared by Staff for Planning Commission to review and amend as needed, upon the conclusion of the public hearing portion of the meeting and prior to a vote for a recommendation.

A. The proposed change to the Development Code does not conflict with applicable Comprehensive Land Use Plan goals or policies.

The Comprehensive Plan policies are in line with the proposed amendment. Goal 5, Policy 9 states that the City should “Notify and coordinate development proposals within natural resource areas with other local, state, and federal agencies”. Goal 7, Policy 1 speaks to “ensure that development in highly hazardous areas will be restricted or prohibited. Development may be allowed in areas of potential hazard if appropriate safeguards are taken in the design and construction to protect affected persons and property. Goal 7, Policy 3 seeks to restrict development within flood hazard areas to those uses which can be adequately floodproofed. The Code amendments are in line with these policies. **The criterion is met.**

B. The proposed change is consistent with the applicable Statewide Planning Goals.

The text amendments proposed are due in part to a State review of the existing regulations and required amendments to be made to come into compliance with Statewide Planning Goals in addition to federal standards. The state has performed a cursory review of the amendments as presented and have no additional comments. **The criterion is met.**

C. The proposed change is consistent with the applicable provisions of Metro Code.

The proposed text amendments are consistent with several Metro Code provisions and would be in conformance with Title 3 (Water Quality and Flood Management) of the Metro Growth Management Functional Plan. Of particular interest, the City was required to more specifically spell out required conditions of approval for flood development permits to ensure conformance with Title 3. **The criterion is met.**

D. Public need is best satisfied by this particular change.

Flood management is an exercise in protecting property and life from hazardous conditions. A primary responsibility of a local government is ensuring the safety of the community at large. The standards provide guidelines for responsible development in areas that are deemed to have flood risk, in order to minimize loss in case of a flood event. Furthermore, some of the regulations financially benefit the city residents, as they count toward a higher score on the Community Rating System, thus reducing insurance costs for all property owners. **The criterion is met.**

E. The change will not adversely affect the health, safety, and welfare of the community.

The existing flood management standards, along with the text amendments proposed are precisely in the spirit of protecting the health, safety, and general welfare of the community. do not weaken already existing standards that would suggest development activities would be more suitable in the flood management areas. The proposed amendments offer certain activities relief mechanisms in the forms of variances or in required submittal items, but in those situations, the applicants must demonstrate no negative impacts that would adversely affect public health, safety, or welfare. **The criterion is met.**

5. STAFF RECOMMENDATIONS

Staff offers the following recommendations for the conduct of the November 14, 2018 public hearing for the proposed amendments to the Troutdale Development Code.

- A. Conduct a public hearing and receive all public testimony relating to the proposal. Consider the public testimony and the facts and findings presented in the staff report and deliberate on policy issues, proposed amendments, and other issues identified by the Commission, Staff, other public entities, or the public.
- B. Recommend **approval** of the proposed text amendment application to the City Council for its consideration for its meeting and subsequent public hearings.

ATTACHMENTS

- A. This Staff Report
- B. TDC Section 1.040 (Definitions) – “Clean” Draft
- C. TDC Section 2.220 (Expiration of Decision) – “Clean” Draft
- D. TDC Section 4.500 (Flood Management Area) – “Clean” Draft
- E. TDC Chapter 14 – “Clean” Draft (formerly Section 4.500)
- F. TDC Section 1.040 (Definitions) – “Red-Line” Draft
- G. TDC Section 4.500 (Flood Management Area) – “Red-Line” Draft (to become Chapter 14)
- H. Common Floodplain Management Terms
- I. Measure 56 Notice & Map

1.040 Vegetation Corridor and Slope District, Water Quality, and Flood Management Definitions.

- .01 **100-Year Flood**. The flood that is equaled or exceeded once in one hundred (100) years on the average; equivalent to the one percent annual chance flood. Also called the Special Flood Hazard Area, Base Flood, and 100-year floodplain.
- .02 **Area of Shallow Flooding**. Means a designated AO, AH, AR/AO, AR/AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a one percent (1%) or greater annual chance of flooding to an average depth of one to three (1 - 3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.
- .03 **Area of Special Flood Hazard**. Means the land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the Flood Hazard Boundary Map (FHBM). After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".
- .04 **Bankfull Stage**. As defined in the Oregon Administrative Rules pertaining to removal/fill permits, the stage or elevation at which water overflows the natural banks of a stream or other waters of the state and begins to inundate upland areas. In the absence of physical evidence, the two-year recurrent flood elevation (storm level) may be used to approximate the bankfull stage. The bankfull stage is the starting point for measuring the width of a vegetation corridor from a protected water feature. In the absence of any data to establish the bankfull stage or two-year storm event, the starting point for measuring the vegetation corridor is determined by the following indicators:
 - a. Water marks on fixed objects (vegetation, rocks, buildings, etc.);
 - b. Drift lines (deposited waterborne twigs, litter, etc.); or
 - c. Waterborne sediment deposits on the soil surface or fixed objects (vegetation, rocks, buildings, etc.)
- .05 **Base Flood**. A flood having a one percent (1%) chance of being equaled or exceeded in any given year.
- .06 **Base Flood Elevation**. The water surface elevation during the Base Flood in relation to a specified datum. The Base Flood Elevation (BFE) is depicted on the Flood Insurance Rate Map to the nearest foot and in the Flood Insurance Study to the nearest one-tenth (0.1) foot. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the

Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Manager or designee is authorized through Section 14.020 to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas and the associated Base Flood Elevation as part of reviewing development proposals that affect the 100-year Floodplain. Such information shall be used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps.

- .07 **Basement**. Any area of the building having its floor subgrade (below ground level) on all sides.
- .08 **Below-Grade Crawl Space**. Means an enclosed area below the base flood elevation in which the interior grade is not more than two feet below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed four (4) feet at any point.
- .09 **Breakaway Wall**. Means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.
- .10 **Conservation Easement**. An easement applied to environmentally sensitive lands including, but not limited to, lands identified as hillsides, wetlands, floodplains, and floodways. The field verification shall be done by a licensed surveyor, engineer, hydrologist, or any other licensed specialist in the fields of engineering, hydrology, or botany. A conservation easement prohibits most forms of development and assures that native vegetation will be maintained or enhanced. Conservation easements usually affect privately owned land and are enforceable by the City. Trails and limited public facilities may be permitted under carefully controlled conditions within conservation easements.
- .11 **Construction, Start of**. (For other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the

building.

- .12 **Critical Facility.** A facility that is critical for the health and welfare of the population and is especially important to be located above the Base Flood Elevation following hazard events. The following is the list of Critical Facilities for the purposes of Chapter 14:
- a. Hospitals and other medical facilities having surgery and emergency treatment areas;
 - b. Fire and police stations;
 - c. Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures. These tanks or other structures do not include City water distribution facilities;
 - d. Emergency vehicle shelters and garages;
 - e. Structures and equipment in emergency-preparedness centers;
 - f. Standby power generating equipment for essential facilities;
 - g. Structures and equipment in government communication centers and other facilities required for emergency response; and
 - h. Other facilities as determined by the Floodplain Manager or designee.

Some types of facilities may be critical to a community, but require location within or partially within Special Flood Hazard Areas because of the nature of the facilities.

- .13 **Debris.** Debris includes discarded manmade objects and may include tires, vehicles, litter, scrap metal, construction waste, lumber, plastic, or styrofoam. Debris does not include objects necessary to a use allowed by this Code, or ornamental and recreational structures. Debris does not include existing natural plant materials or natural plant materials which are left after flooding, downed or standing dead trees, or trees which have fallen into protected water features.
- .14 **Department of Environmental Quality (DEQ) Water Quality Standards.** State of Oregon DEQ water quality standards are the numerical criteria or narrative condition needed in order to protect an identified beneficial use.
- .15 **Design Flood Elevation.** The elevation of the 100-year storm as defined in the Federal Emergency Management Agency Flood Insurance Studies or, in areas without Federal Emergency Management Agency floodplains, the elevation of the 25-year storm or the edge of mapped flood-prone soils or similar methodologies.

- .16 **Developer.** The owners of property, their agents or contractors, or their successors and assigns, who have undertaken or are proposing development which is regulated by Sections 4.300, 5.600, 5.700, and Chapter 14 of this Code.
- .17 **Development.** Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. 
- .18 **Digital Flood Insurance Rate Map.** Depicts flood risk and federal flood zones and flood risk information. The Digital Flood Insurance Rate Map (DFIRM) presents the flood risk information in a format suitable for electronic mapping applications.
- .19 **Disturb.** Any manmade changes to the existing physical status of the land which are made in connection with development.
- .20 **Elevated Building.** Means for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.
- .21 **Elevation Certificate.** A form supplied by the Federal Emergency Management Agency (FEMA) and used to document the lowest floor elevation of a building.
- .22 **Emergency.** Any manmade or natural event or circumstance causing or threatening loss of life, injury to person or property, and includes, but is not limited to, fire, explosion, flood, severe weather, drought, earthquake, volcanic activity, spills or releases of oil or hazardous material, contamination, utility or transportation disruptions, and disease.
- .23 **Engineer.** A registered professional engineer licensed by the State of Oregon.
- .24 **Enhancement.** The process of improving upon the natural functions and/or values of an area or feature which has been degraded by human activity. Enhancement activities may or may not return the site to a pre-disturbance condition, but create/recreate processes and features that occur naturally.
- .25 **Erosion.** Erosion is the detachment and movement of soil particles, rock fragments, or other material, organic or inorganic, resulting from actions of water, wind, human, or animal activity.
- .26 **Erosion Hazard Zone.** The area adjacent to a stream or river that is at risk of bank erosion from stream flow or mass wasting, as designated on the communities FIRM. 
- .27 **Erosion Prevention and Sediment Control Plans.** Plan requirements are specified in the City of Troutdale's Construction Standards for Public Works Facilities.
- .28 **Erosion, Visible or Measurable.** Visible or measurable erosion includes, but is not limited to:

- a. Deposits of mud, dirt sediment, or similar material exceeding one-half cubic foot in volume on public or private streets, adjacent property, or onto the storm and surface water system, either by direct deposit, dropping discharge, or as a result of the action of erosion.
 - b. Evidence of concentrated flows of water over bare soils, turbid or sediment laden flows, or evidence of onsite erosion such as rivulets on bare soil slopes where the flow of water is not filtered or captured on the site.
 - c. Earth slides, mudflows, earth sloughing, or other earth movement that leaves the property.
- .29 **Excavation.** Any act by which soil or rock is cut into, dug, quarried, uncovered, removed, displaced, or relocated.
- .30 **Existing Building or Structure.** A structure for which the Start of Construction commenced before February 1, 2019.
- .31 **Federal Emergency Management Agency (FEMA).** The agency with the overall responsibility for administering the National Flood Insurance Program.
- .32 **Fill.** Any material such as, but not limited to, sand, soil, rock, gravel, clay, or mud that is placed on a site for the purposes of development or redevelopment.
- .33 **FIRM.** See Flood Insurance Rate Map.
- .34 **Flood or Flooding.** Means:
- a. A general and temporary condition of partial or complete inundation of normally dry land areas from:
 1. The overflow of inland or tidal waters.
 2. The unusual and rapid accumulation or runoff of surface waters from any source.
 3. Mudsides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
 - b. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high

water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.

- .35 **Flood Insurance Rate Map (FIRM)**. An official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community.
- .36 **Flood Insurance Study (FIS)**. Or flood elevation study means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.
- .37 **Flood Management Area (FLMA)**. All lands contained within the 100-year floodplain and floodway as shown on the Flood Insurance Rate Map, and the area of inundation for the February 1996 flood. In addition, all lands which have documented evidence of flooding.
- .38 **Floodplain**. As shown below in Figure 1 - Floodplain Cross Section, the area adjacent to a stream or river channel that is covered by water when the river or stream overflows its banks.
- .39 **Floodplain Development Permit**. Federally required permit required prior to construction and other development in any Special Flood Hazard Area (100-yr. Floodplain). See Section 14.035 of this Code.
- .40 **Floodplain Functions**. Hydrological and ecological functions including conveyance and temporary storage of floodwater, depositions of sediments outside of the channel, ground water recharge, filtering of pollutants, and reduction of floodwater velocity and erosive forces. Also included, but to a lesser extent in previously urbanized areas, are such functions as nutrient exchange, refuges, and feeding areas for fish.
- .41 **Floodplain, 100-Year**. As shown below in Figure 1 - Floodplain Cross Section, land area adjacent to a river, stream, or other water body that is subject to a one percent or greater chance of flooding in any given year. It consists of land ranging from that which is subject to annual flooding to that which has a one percent (1%) or greater chance of flooding in any given year. The 100-year Floodplain consists of the Floodway and the Floodway Fringe. The 100-year Floodplain is mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRMs) and is the area subject to Base Flood regulations. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Manager or designee is authorized through Section 14.020 to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals

that affect the 100-year Floodplain. Such information shall be used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps and these areas are also subject to Base Flood regulations. See Base Flood.

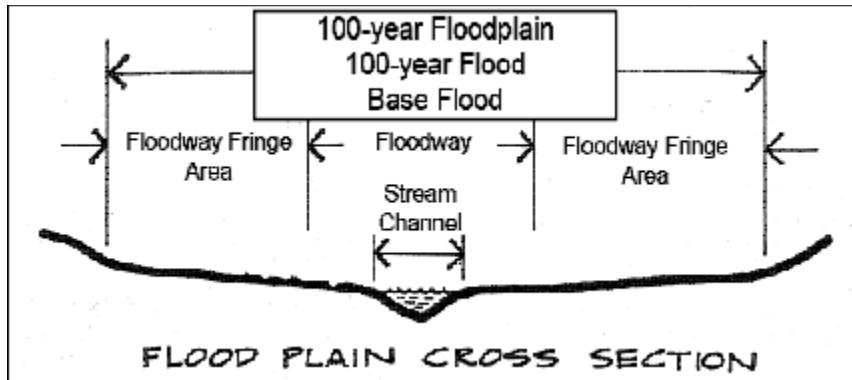


Figure 1 – Floodplain Cross Section

- .42 **Floodway (Regulatory Floodway).** Means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height..
- .43 **Flow-through Design.** Typically a structure that does not displace surface floodwater or hinder or obstruct the movement of surface floodwater.
- .44 **High Hazard Zone.** Lands within the furthest landward extent of the floodway and erosion hazard zone, as designated on the communities FIRM.
- .45 **Highest Adjacent Grade (HAG).** The highest natural elevation of the ground surface prior to construction, adjacent to the proposed walls of a structure. Refer to the Elevation Certificate, FEMA Form 81-31, for more information.
- .46 **Hydrodynamic Load.** Force of water in motion.
- .47 **Hydrostatic Load.** Force of water at rest.
- .48 **Invasive Non-native or Noxious Vegetation.** Plant species that are listed as nuisance plants or prohibited plants on the most recent Portland Plant List as adopted by the City of Portland by ordinance because they are plant species that have been introduced and, due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities.
- .49 **Joint Fill Permit/404 Removal/Fill Permit.** A permit issued jointly by the Oregon Department of State Lands and U.S. Army Corps of Engineers to allow, with conditions and mitigation, the removal or fill of wetlands determined to be of either local or state significance by the Oregon Department of State Lands.

- .50 **Letter of Map Change (LOMC)**. An official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and Flood Insurance Studies. LOMCs are issued in the following categories:
- a. Letter of Map Amendment (LOMA) - A revision based on technical data showing that a property was incorrectly included in a designated Special Flood Hazard Area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property is not located in a Special Flood Hazard Area.
 - b. Letter of Map Revision (LOMR) - A revision based on technical data showing, usually due to manmade changes, alterations to Federal Flood Zones, flood elevations floodplain and floodway delineations, and planimetric features. One common type of LOMR, a LOMR-F, is a determination that a structure has been elevated through the placement of fill above the Base Flood Elevation and is excluded from the Special Flood Hazard Area.
 - c. Conditional Letter of Map Revision (CLOMR) - A formal review and comment by FEMA as to whether a proposed project complies with the minimum National Flood Insurance Program floodplain management criteria. A CLOMR does NOT amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.
- .51 **Lowest Floor**. Means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor. Provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of CFR Sec. 60.3.
- .52 **Manufactured Dwelling**. Means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term “manufactured dwelling” does not include a “recreational vehicle.”
- .53 **Manufactured Dwelling Park or Subdivision**. Means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale
- .54 **Mean Sea Level**. For purposes of the National Flood Insurance Program, the North American Vertical Datum of 1988 or other Datum, to which Base Flood Elevations shown on a community's FIRM are referenced.
- .55 **Mitigation**. The reduction of adverse effects of a proposed project by considering, in this order:
- a. Avoiding the impact altogether by not taking a certain action or parts of an action;

- b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
 - c. Rectifying the impact by repairing, rehabilitating, or restoring the effected environment;
 - d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action by monitoring and taking appropriate measures; and
 - e. Compensating for the impact by replacing or providing comparable substitute water quality resource areas.
- .56 **Mulch.** Application of plant residue, netting, or other suitable materials to the land surface to conserve moisture, hold soil in place, and aid in establishing plant cover.
- .57 **NAVD 88.** The North American Vertical Datum of 1988 (NAVD 88) is the vertical control datum established in 1991 by the minimum-constraint adjustment of the Canadian-Mexican-U.S. leveling observations. This is the data used on FIRMs and in flood insurance studies adopted in 2009.
- .58 **NGVD 29.** “The National Geodetic Vertical Datum of 1929: The name, after May 10, 1973, of (the) Sea Level Datum of 1929.” (Vertical control datum established for vertical control in the United States by the general adjustment of 1929.) This is the datum used on FIRMs and in flood insurance studies prior to 2009.
- .59 **National Flood Insurance Program (NFIP).** A federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for state and community floodplain management regulations that reduce future flood damages.
- .60 **Native Vegetation or Native Plant.** Vegetation listed as a native plant on the most recent Portland Plant List as adopted by the City of Portland by ordinance and any other vegetation native to the Portland metropolitan area provided that it is not listed as a nuisance plant or a prohibited plant on the Portland Plant List.
- .61 **National Wetland Inventory (NWI) Map.** The City is mapped on the Camas and Washougal, Washington-Oregon wetland maps prepared by the U.S. Department of the Interior, Fish and Wildlife Service.
- .62 **New Construction.** A structure for which the Start of Construction commenced after February 1, 2019, and includes subsequent Substantial Improvements to the structure
- .63 **NPDES Permit.** The National Pollutant Discharge Elimination System 1200-C Permit is a State of Oregon Department of Environmental Quality permit that covers federal stormwater regulations as they pertain to construction activities in Oregon. The permit is

- administered by the City.
- .64 **ODFW Construction Standards**. The Oregon Department of Fish and Wildlife construction guidelines for building roads, bridges, and culverts, or any transportation structure within a waterway.
- .65 **One Percent Annual Chance Flood**. The flood that has a one percent (1%) chance of being equaled or exceeded on the average in any given year; equivalent to the 100-year flood.
- .66 **Open Space**. Land that is undeveloped and that is planned to remain so indefinitely. The term encompasses parks, forests, and farmland. It may also refer only to land zoned as being available to the public, including playgrounds, watershed preserves, and parks.
- .67 **Perennial Streams**. All primary and secondary perennial waterways mapped by the U.S. Geological Survey, having year-round flow.
- .68 **Practicable**. Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose.
- .69 **Pre-FIRM Structures**. Buildings that were built before the flood risk was known and identified on the community's FIRM.
- .70 **Protected Water Features, Primary**. Includes:
- a. Title 3 wetlands.
 - b. Rivers, streams (creeks or brooks) and drainages downstream from the point at which one hundred (100) acres or more are drained to that water feature (regardless of whether it carries year-round flow).
 - c. Streams carrying year-round flow.
 - d. Springs which feed streams and wetlands and have perennial (year-round) flow.
 - e. Natural lakes.
- .71 **Protected Water Features, Secondary**. Includes intermittent streams and seeps downstream of the point at which fifty (50) acres are drained and upstream of the point at which one hundred (100) acres are drained to that water feature.
- .72 **Restoration**. The process of returning a disturbed or altered area or feature to a previously existing natural condition. Restoration activities reestablish the structure, function, and/or diversity to that which occurred prior to impacts caused by human activity.
- .73 **Recreational Vehicle (RV)**. A vehicle which is:

- a. Built on a single chassis;
 - b. Four hundred (400) square feet or less when measured at the largest horizontal projection;
 - c. Designed to be self-propelled or permanently towable by a light duty truck; and
 - d. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- .74 **Resource**. A functioning natural system such as a wetland or stream.
- .75 **Riparian**. Those areas associated with streams, lakes, and wetlands where vegetation communities are predominately influenced by their association with water.
- .76 **Routine Repair and Maintenance**. Activities directed at preserving an existing allowed use or facility, or nonconforming use, without expanding the development footprint or site use.
- .77 **Sediment**. Any material that is in suspension, is being transported, or has been moved from its site of origin by water, wind, or gravity as a result of erosion.
- .78 **Site**. The lot, or contiguous lots, under the same ownership that are subject to a development permit or erosion control plan.
- .79 **Slope District**. Slopes of twenty-five percent (25%) or greater throughout the City that have a minimum horizontal distance of fifty (50) feet. Engineered slopes associated with public streets or roads are not included.
- .80 **Special Flood Hazard Area (SFHA)**. The land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM (Flood Hazard Boundary Map). After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term “special flood hazard area” is synonymous in meaning with the phrase “area of special flood hazard”.
- .81 **Statewide Planning Goal 5**. Oregon’s statewide planning goal that addresses open space, scenic and historic areas, and natural resources. The purpose of the goal is to conserve open space and protect natural and scenic resources.
- .82 **Statewide Planning Goal 6**. Oregon’s statewide planning goal that addresses air, water, and land resources quality to “maintain and improve the quality of the air, water, and land resources of the state” as implemented by the Land Conservation and Development

Commission (LCDC).

- .83 **Statewide Planning Goal 7.** Oregon's statewide planning goal that addresses areas subject to natural disasters and hazards to "protect life and property from natural disasters and hazards" as implemented by the Land Conservation and Development Commission.
- .84 **Stockpile.** Onsite storage of any soil, sand, gravel, clay, mud, debris, vegetation, refuse, or any other material, organic or inorganic, in a concentrated state.
- .85 **Stream.** A body of running water moving over the earth's surface in a channel or bed, such as a creek, rivulet, or river, that flows at least part of the year, including perennial and intermittent streams. Streams are dynamic in nature and their structure is maintained through build-up and loss of sediment.
- .86 **Stream Bank, Top of.** See Bankfull Stage.
- .87 **Structure.** Means, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. Structure, for insurance purposes, means:
- a. A building with two or more outside rigid walls and a fully secured roof that is affixed to a permanent site;
 - b. A manufactured dwelling; or
 - c. A travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws.
- For the latter purpose, structure does not mean a recreational vehicle or a park trailer or other similar vehicle, except as described in Section 1.040.87(c), or a gas or liquid storage tank.
- .88 **Substantial Damage.** Damage of any origin sustained by a structure located within the 100-year Floodplain, whereby the cost of restoring the structure to its prior condition would equal or exceed fifty percent (50%) of the structure's market value before the damage occurred.
- .89 **Substantial Improvement.** Means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds forty-nine percent (49%) of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:
- a. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified

- by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or,
- b. Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.
- .90 **Surface Water Management System**. All natural and constructed facilities used to regulate the quantity and quality of surface water, including drainage easements, culverts, storm drains, catch basins, drainage ditches, natural drainageways, stream corridors, rivers, ponds, wetlands, and impoundments.
- .91 **Title 3**. Title 3 is part of the Metro Urban Growth Management Functional Plan pertaining to water quality, flood management, and fish and wildlife conservation, and directly pertains to Statewide Planning Goals 5, Open Spaces, Scenic and Historic Areas, and Natural Resources; 6, Air, Water, and Land Resources Quality; and 7, Areas Subject to Natural Disasters and Hazards.
- .92 **Variance**. Means a grant of relief by a community from the terms of a floodplain management regulation.
- .93 **Vegetation, Approved**. Vegetation which typically does not require irrigation or fertilization because it is adapted to natural soil, water, and climatic conditions. The list of approved vegetation species is based on the most recent Portland Plant List as adopted by the City of Portland by ordinance, and is on file in the Community Development Department.
- .94 **Vegetation Corridor**. The undisturbed area between a development and a protected water feature as designated in Sections 4.316, Width of Vegetation Corridor, and 4.317, Method for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Code, or slopes of twenty-five percent (25%) or greater throughout the City, except engineered slopes associated with public streets or roads.
- .95 **Vegetation, Invasive, Non-Native, or Noxious**. Plant species that have been introduced and due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities, or which are not listed on the most recent Portland Plant List as adopted by the City of Portland by ordinance.
- .96 **Vegetation, Native**. Any vegetation native to the Portland Metropolitan Area or listed on the Portland Plant List as adopted by the City of Portland by ordinance.
- .97 **Water-dependent**. A structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.
- .98 **Water Features**. See Protected Water Features, primary and secondary.
- .99 **Water Quality Facility**. A created or constructed structure or drainageway that is

designed, constructed, and maintained to collect, filter, retain, or detain surface water runoff during and after a storm event for the purpose of stormwater management and water quality improvement. The facility may take on characteristics of a wetland, but it does not become a resource.

- .100 **Watershed**. A geographic unit defined by the flows of rainwater or snowmelt. All land in a watershed drains to a common outlet, such as a stream, lake, or wetland.
- .101 **Water Surface Elevation**. The height, in relation to a specific datum, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.
- .102 **Wetlands**. Areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands are those areas identified and delineated by qualified wetland specialists as set forth in the 1987 Corps of Engineers Wetland Delineation Manual.
 - a. Wetland determinations. The identification of an area as either wetland or non-wetland.
 - b. Wetlands, constructed. Wetlands developed as a water quality or quantity facility, subject to change and maintenance as such. These areas must be clearly defined and/or separated from naturally occurring or created wetlands.
 - c. Wetlands, created. Those wetlands developed in an area previously identified as a non-wetland to replace or mitigate wetland destruction or displacement. A created wetland shall be regulated and managed the same as an existing wetland.
 - d. Wetlands, Title 3. Wetlands of metropolitan concern as shown on the Metro Water Quality and Flood Management Overlay District Map and other wetlands not mapped but determined significant by the Oregon Department of State Lands, consistent with the criteria in Title 3, Section 7.C. of the Metro Urban Growth Management Functional Plan. Title 3 wetlands include created wetlands approved and monitored by the Oregon Department of State Lands and U.S. Army Corps of Engineers. Title 3 wetlands do not include artificially constructed and managed stormwater and water quality treatment facilities.

2.220 Expiration of a Decision.

A. Except as otherwise specifically provided in a specific decision or in this Code, a final decision on a Type I, II or III application made pursuant to this Code shall expire automatically on the following schedule unless the approval is enacted either through construction, establishment of use, or recordation of plat or survey within the specified time period.

1. No expiration date:

- a. Comprehensive Plan Text Amendment (6.100)
- b. Comprehensive Plan Map Amendment (6.200)
- c. Director's Interpretation (Section 6.400)
- d. Text Amendment (Section 6.1100)
- e. Vacation (Section 6.1200)
- f. Zoning Map Amendment (Section 6.1400)

2. Five (5) years from the effective date of decision where phasing of the development is proposed.

- a. Planned Unit Development (Section 6.700)
- b. Preliminary Subdivision (Section 7.030.B)

3. Two (2) years from the effective date of decision:

- a. Alteration to a Historic Landmark (Section 6.515.C.)
- b. Conditional Use (Section 6.300)
- c. Demolition or Relocation of a Historic Landmark (Section 6.515.D.)
- d. Expansion of a Non-Conforming Structure or Development (Section 6.615.C.)
- e. Expansion of a Non-Conforming Use - Major (Section 6.615.B.)
- f. Expansion of a Non-Conforming Use - Minor (Section 6.615.A.)
- g. Historic Landmark Designation (Section 6.515.A.)
- h. Planned Unit Development (Section 6.700), when there is no phasing to the development.
- i. Preliminary Partition (Section 7.030.A)
- j. Property Line Adjustment (Section 7.180)
- k. Removal of a Historic Landmark Designation (Section 6.515.B.)
- l. Site Development Review (Section 6.900)
- m. Variance (Section 6.1300)

4. One (1) year from the effective date of the decision:

- a. Temporary Structure (Section 6.1000)

5. One hundred eighty (180) days from the effective date of the decision:
 - a. Floodplain Development (Section 14.035), if construction has not started.
 6. Any final decision that is not listed herein shall expire within two (2) years from the effective date of the decision.
- B. The effective date of the decision for Type I, Type II, or Type III applications shall be the date that the signed land use order is dated and mailed, unless appealed. If a Type I, Type II, or Type III application is appealed, the effective date of the decision shall be the date of the appellate decision making authority's signed land use order is dated and mailed. The effective date of decision for a Type IV application is thirty (30) days after the Mayor signs the ordinance, unless an emergency is declared in which case the ordinance is effective immediately upon signature of the Mayor.
- C. A decision shall expire according to Section 2.220.A. unless one of the following occurs prior to the date of expiration:
1. An application for an extension is filed pursuant to Section 2.225; or
 2. The development authorized by the decision has commenced as defined herein.
 - a. The use of the subject property has changed as allowed by the approval; or
 - b. In the case of development requiring construction, a construction permit has been issued and substantial construction pursuant thereto has taken place.
 - c. The approval time begins from the effective date of a decision. Appeal of a decision to LUBA does not extend the time.

2.225 Extension of a Decision.

- A. An application to extend the expiration date of a decision made pursuant to this Code may be filed only before the decision expires as provided in Section 2.220.
- B. A land use decision may be extended no more than two (2) times.
- C. Requests for extension of a decision shall be as follows:
 1. The first request for extension shall follow the Type II process.
 2. The second request for extension shall follow the Type III process.
- D. Extension requests shall provide mailed public notice to those parties identified in Section 2.085. In addition, the notice shall be mailed to the parties of record contained in the initial land use decision and any prior extension of time decision.

4.500 FLOOD MANAGEMENT AREA**FLMA**

4.500 Repeal. Ordinance 851 repealed this Section in its entirety and relocated the Flood Management Area standards previously contained in this Section to Chapter 14 of this Code.

Chapter 14 – Flood Management

14.005 **Purpose.** Without establishing any priority, the purpose of this Chapter is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions or degradation of water quality in specific areas by provisions designed to:

- A. Protect human life, health, and property in areas subject to periodic flooding;
- B. Implement the Floodplain requirements of Statewide Planning Goal 7 - which relates to areas subject to natural disasters and hazards;
- C. Through floodplain regulation, contribute to the properly functioning condition of streams and rivers and address, in part, the water quality aspects of Statewide Planning Goal 6;
- D. Implement requirements for the City's participation in the National Flood Insurance Program, and voluntary participation in the Community Rating System;
- E. Implement the actions derived from the Multnomah County Hazard Mitigation Plan to minimize the risk of natural hazards, such as flooding, to people and property;
- F. Ensure continuity of City services, access to City facilities, and minimal prolonged business interruptions during times of flood;
- G. Manage stormwater drainage in a manner that:
 - 1. Maintains the properly functioning conditions of waterways;
 - 2. Provides for the conveyance and temporary storage of floodwater;
 - 3. Reduces floodwater velocity;
 - 4. Facilitates sediment deposition in the floodplain;
 - 5. Provides an opportunity for groundwater recharge; and
 - 6. Promotes other stormwater and floodplain functions.

These provisions are also intended to minimize maintenance costs, eliminate potential hazards before they occur, and protect properties and persons adjacent to drainageways and to other natural hazard areas;

- H. Minimize damage to public facilities and utilities, such as water purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets, and bridges located in floodplains;

- I. Help maintain a stable tax base by providing for sound use and development;
- J. Ensure that potential buyers are notified that property is in an area of special flood hazard;
- K. Compel those who occupy the areas of special flood hazard assume responsibility for their actions;
- L. Maintain and improve water quality;
- M. Minimize erosion and loss of native vegetation;
- N. Maintain wetlands, including swamps, marshes, bogs, and similar areas within the City, because wetlands help to maintain water quality and flood storage capacities;
- O. Avoid any increase in base flood elevations as a result of development;
- P. Minimize expenditure of public money for costly flood control projects;
- Q. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- R. Reduce flood losses and maintain water quality. In order to accomplish its purpose, this Chapter includes methods and provisions to:
 - 1. Require that development that is vulnerable to floods, including buildings, structures, and facilities necessary for the general health, safety and welfare of citizens, be protected against flood damage at the time of initial construction;
 - 2. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;
 - 3. Control filling, grading, dredging and other development which may increase flood damage or erosion;
 - 4. Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or that may increase flood hazards on other lands;
 - 5. Preserve and restore natural floodplains, stream channels, and natural protective barriers which carry and store flood waters, and;
 - 6. Coordinate with and supplement provisions of Oregon Building Codes.
- S. To advance these purposes, where not required, creation of open space tracts is encouraged within areas designated as natural hazards on the Comprehensive Plan and official zoning maps.

14.010 Applicability.

- A. These provisions shall apply to public and private properties in the one percent (1%) annual chance of flood floodplain (100-year floodplain or Special Flood Hazard Area) as mapped by the Federal Insurance Administrator of rivers and local streams within the planning jurisdiction of the City of Troutdale, which includes land in unincorporated Multnomah County within the City's Urban Planning Area.
- B. The areas of special flood hazard identified by the Federal Insurance Administrator in a scientific and engineering report entitled "The Flood Insurance Study for Multnomah County, Oregon and Incorporated Areas of Multnomah County", with accompanying Flood Insurance Rate Maps, are hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study is on file at the Community Development Department located at 2200 SW 18th Way, Troutdale, OR 97060 (storage location subject to change, consult the Floodplain Manager for current file storage location). Metro, a regional metropolitan planning agency representing portions of Clackamas, Multnomah, and Washington Counties, mapped the flood hazard areas from areas inundated by flooding in 1996 on the Title 3 map. The Title 3 maps are adopted for reference only. Not every Special Flood Hazard Area has been mapped by the Federal Insurance Agency through the Flood Insurance Study and Flood Insurance Rate Maps cited above. The Floodplain Administrator or designee is authorized through Sections 14.020 to obtain from applicants the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals that affect the floodplain. Once approved by the Floodplain Administrator or designee, such information shall be incorporated into the Natural Hazards Map and used by the City of Troutdale to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps cited above to ensure consistency with the floodplain regulations contained in this Chapter. Contested base flood elevations are to be reviewed under the provisions of Subsection 14.020.D of this Chapter. The City will keep a record of all surveys, delineations, and any Letter of Map Change (LOMC) approved by the Federal Emergency Management Agency, as revisions to the local copy of the Title 3 map. The City will submit this information to Metro for future updates of the Title 3 map.
- C. Warning and Disclaimer of Liability. The degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This Code does not imply that land or uses will be free from flooding or flood damage. This Code shall not create liability on the part of the City, any officer or employee thereof, or the Federal Insurance Administrator, for any damages that result from reliance on this Code or any administrative decision lawfully made hereunder.

14.015 Severability. The standards of this Chapter are subject to the severability standards as described in Section 17.100 of this Code.

14.020 Administration and Interpretation of Flood Insurance Rate Map Boundaries and Flood Management Area Standards.

- A. The Community Development Director shall designate a Floodplain Manager to be the Local Administrator of this Chapter. The Floodplain Manager shall implement the provisions and standards of the National Flood Insurance Program, the standards of this Chapter, and make interpretations, where needed, including determinations regarding the exact location of the boundaries of the Special Flood Hazard Area (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) by granting or denying Floodplain Development Permit applications in accordance with its provisions. In the interpretation and application of this Chapter, all provisions shall be:
 1. Considered as minimum requirements;
 2. Liberally construed in favor of the governing body;
 3. Judged by established historical facts of flooding as known by, or made known to, the governing body;
 4. Deemed neither to limit nor repeal any other powers granted under State statutes; and
 5. Defined in Section 1.040 of this Code.
- B. Duties and Responsibilities of the Floodplain Manager. Duties of the Floodplain Manager shall include, but not be limited to:
 1. Review all Floodplain Development Permits to determine that the permit requirements of this ordinance have been satisfied.
 2. Review all Floodplain Development Permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.
 3. Review all Floodplain Development Permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of this Chapter are met.
 4. When base flood elevation data has not been provided (A Zones) in accordance with Section 14.010 of this Chapter, the Floodplain Manager shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer Section 14.040 of this Chapter.
 5. Where base flood elevation data is provided through the Flood Insurance Study, FIRM, or required as in Section 14.020.C, obtain and record the actual elevation

(in relation to mean sea level) of the lowest floor (including basements and below-grade crawlspaces) of all new or substantially improved structures, and whether or not the structure contains a basement.

6. For all new or substantially improved floodproofed structures where base flood elevation data is provided through the Flood Insurance Study, FIRM, or as required in Section 14.020.C, the administrator shall:
 - a. Verify and record the actual elevation (in relation to mean sea level), and
 - b. Maintain the floodproofing certifications required in Section 14.040 of this Chapter.
7. Maintain for public inspection all records pertaining to the provisions of this ordinance.
8. Notify adjacent communities, the Oregon Department of Land Conservation and Development, and other appropriate state and federal agencies, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administrator.
9. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.
10. Notify FEMA within six (6) months of project completion when an applicant had obtained a Conditional Letter of Map Change from FEMA, or when development altered a watercourse, modified floodplain boundaries, or modified Base Flood Elevations. This notification shall be provided as a Letter of Map Change. The property owner shall be responsible for preparing technical data to support the Letter of Map Change application and paying any processing or application fees to FEMA. The Floodplain Manager shall be under no obligation to sign the Community Acknowledgement Form, which is part of the Conditional Letter of Map Change and Letter of Map Change application, until the applicant demonstrates that the project will or has met the requirements of this Code and all applicable State and Federal laws.
11. Report to FEMA on each development permit issued in the SFHA, including:
 - a. Amount of fill or structural displacement of flood storage, and the amount (in volume and area) of compensatory storage provided;
 - b. Amount of new impervious surface and types and amounts of compensatory mitigation provided;
 - c. The number of trees equal to or greater than six (6) inches in diameter at

- breast height removed, and the types and amounts of compensatory mitigation provided;
- d. The area in which clearing and/or grading occurred;
 - e. For any project that disconnects or reconnects land to the floodplain, the type of project and amount of land disconnected or reconnected; and
 - f. Location of the project and of the corresponding mitigation.
14. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 14.055 of this Chapter.
- C. Use of Other Base Flood Data for Permit Review. When base flood elevation data is not available through the Flood Insurance Study, FIRM, or has not been provided in accordance with Section 14.010 of this Chapter, the City may obtain, review, and utilize any reasonable base flood elevation and floodway data available from a federal, state, or other source, in order to assure that proposed development will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two (2) feet above grade in these zones may result in higher insurance rates.
- D. Contested Boundaries. A person contesting the location of the boundary has the opportunity to submit a Letter of Map Change (LOMC) directly to the Federal Emergency Management Agency to change the Flood Insurance Rate Map mapping of their property. If a land use application is submitted before a LOMC is approved by the Federal Emergency Management Agency, the application will be processed under the standards of this Chapter.
- E. Inspections. The Floodplain Manager shall inspect development that is subject to the permit requirements of this Chapter, including buildings and structures exempt from the Building Code. The floodplain administrator shall inspect Special Flood Hazard Areas to determine if development is being undertaken without the issuance of a permit. Annual inspection logs shall be maintained by the Floodplain Manager.

14.025 Uses within the Floodplain but Outside the Floodway and Outside Wetlands.

- A. Prohibited Uses.
1. Any prohibited use in the underlying zoning district.
 2. Excavation, fill, or vegetation removal without an approved land use permit.

3. Expansion of legal nonconforming uses.
 4. Uncontained, outside storage areas of hazardous materials for hazardous materials as defined by the State of Oregon Department of Environmental Quality.
 5. No new land divisions will be approved for properties exclusively within the floodplain or that propose to create a buildable lot that is exclusively within the floodplain.
- B. Permitted Uses.
1. Any use permitted in the underlying zoning district, subject to the standards for development outlined in Section 14.040 of this Chapter, including stormwater management facilities developed in accordance with the standards of Section 5.700 of this Code.
 2. Open space, trails, walkways, and bike paths as designated by the Troutdale Parks Plan, or as approved with a land use application and constructed in compliance with Section 4.315.D.
 3. Removal of unauthorized fill.
 4. Removal of nuisance or invasive plant species, and/or the restoration of approved plant species on the City of Portland Plant List as defined in Section 1.040 of this Code.
 5. Removal of dead or dying trees that are an imminent danger to public safety as determined by a certified arborist or the equivalent.
 6. Construction of new roadways and utilities necessary to support permitted development within and outside the Flood Management Area, subject to the standards of Section 14.040 of this Chapter and the Construction Standards on file in the Public Works Department or the applicable jurisdiction of the roadway.
 7. New culverts, stream crossings, and transportation projects may be permitted if designed as balanced cut and fill projects, and in compliance with the standards of Section 14.040 of this Chapter. Such projects shall be designed to minimize the area of fill in Flood Management Areas and to minimize erosive velocities. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable.
 8. Excavation and fill required for the construction of detention facilities or structures, and other facilities such as levees specifically designed to reduce or mitigate flood impacts. Levees shall not be used to create vacant buildable land.

9. Temporary bank stabilization or tree and vegetation removal necessitating immediate action during a flood emergency or other emergency to prevent the loss of an existing structure, or to repair a bank damaged during a flood. Following the flood emergency or other emergency, the owner shall submit a Floodplain Development Permit according to Section 14.035.E(1)(b)..
10. Routine repair and maintenance of existing structures (conforming and nonconforming uses), streets, driveways, utilities, culverts, drainageways and levees constructed for flood control, accessory uses, and other existing development on the site (including landscaped yards, decks, patios, boat ramps, etc.).
11. Rehabilitation or replacement of a structure that is damaged or destroyed to any extent, whether it is partially or fully within the Flood Management Area, and in compliance with Section 4.521 of this Chapter. Any structure or use deliberately removed or demolished may not be restored, replaced, or rebuilt, except in compliance with all applicable provisions of this Code, federal, state, and county regulations.
12. Any development that must implement a Federal Aviation Administration (FAA) compliant wildlife hazard management plan on property owned by the Port of Portland or within ten thousand (10,000) feet of an Aircraft Operating Area, as defined by the FAA, and removal of trees that interfere with the landing or takeoff flight path of aircraft at the Troutdale Airport or otherwise interferes with the safe operation of the airport as determined by the Port of Portland. The removal of trees that interfere with the operation of the Troutdale Airport are permitted outright.
13. Wildfire mitigation projects, such as fuels reduction or the creation of defensible space.
14. Removal of refuse as defined in the Troutdale Municipal Code.

14.030 Uses within the Floodway or within Wetlands.

- A. Prohibited Uses within the Floodway or within Wetlands. Unless specifically permitted under this Section, the following uses are prohibited within floodways and wetlands:
 1. Manmade structures.
 2. Vegetation removal, fill, or excavation. Vegetation removal in the floodway in concert with an approved wildfire mitigation project may be permitted subject to review under the standards for development of Section 14.040 of this Chapter.
 3. Private road construction.

4. Alterations and relocations of the watercourses of Arata, Salmon, or Beaver Creeks, the Sandy and Columbia Rivers, or the watercourse of any unnamed perennial or intermittent stream except as provided for in Subsection B(11) of this Section and Section 14.040.O of this Chapter.
 5. Fill of wetlands without both an approved land use application and an approved Joint Fill Permit issued by the Oregon Department of State Lands and the U.S. Army Corps of Engineers.
 6. Uncontained, outside storage areas of hazardous materials for hazardous materials as defined by the State of Oregon Department of Environmental Quality.
 7. Expansion of nonconforming uses.
 8. New installation of manufactured dwellings.
- B. Permitted Uses within the Floodway or within Wetlands. The following uses are permitted subject to review under the standards for development of Section 14.040 of this Chapter:
1. Open space, trails, walkways, and bike paths, as designated by the Troutdale Parks Plan, or as approved with a land use application.
 2. Removal of unauthorized fill.
 3. Removal of dead or dying trees that are an imminent danger to public safety as determined by a certified arborist or the equivalent.
 4. Routine repair and maintenance of existing structures (conforming and nonconforming uses), streets, driveways, utilities, culverts, drainageways and levees constructed for flood control by the Sandy Drainage Improvement Company or its successor, accessory uses, and other existing development on the site (including landscaped yards, decks, patios, boat ramps, and the operation, maintenance, and repair of manmade water control facilities such as irrigation and drainage ditches, constructed ponds or lakes, wastewater facilities, and stormwater quality facilities, and similar development).
 5. Construction, expansion, and/or maintenance of public roadways and public utility facilities necessary to support permitted development. A “No-Rise” Certification for construction or expansion of public roadways and public utilities shall be required consistent with Section 14.040.G(4) for all approved projects.
 6. Balanced excavation and fill required for the construction of detention facilities or structures and other facilities such as levees specifically designed to reduce or mitigate flood impacts. Levees shall not be used to create vacant buildable lands.

7. New culverts, stream crossings, and transportation projects necessary to implement the City, County, or State Transportation System Plans or other development permitted under this Chapter, and as applicable, meets the specifications of the Oregon Department of State Lands, Oregon Department of Fish and Wildlife, and federal regulations.
8. Permanent bank stabilization necessary to preserve an existing structure provided the balanced cut and fill standard is met if the work is in the floodplain or a “No-Rise” certification if the work is within the floodway. Exception: Bank stabilization is not permitted for development on a vacant lot of record.
9. Temporary bank stabilization or tree and vegetation removal necessitating immediate action during a flood emergency or other emergency to prevent the loss of an existing structure, or to repair a bank damaged during a flood. Following the flood emergency or other emergency, the owner shall submit a Floodplain Development Permit according to Section 14.035.E(1)(b).
10. Fill of wetlands when there is no other practicable way to build on the site as established through Section 14.040 of this Chapter, and provided fill of wetlands within the floodplain is balanced with cut elsewhere within the floodplain, and a Fill/Removal Permit is issued from the Oregon Department of State Lands (DSL) and U.S. Army Corps of Engineers (Corps), as applicable. The application to DSL and the Corps may be processed concurrently with a land use application for site and design review, land division, a planned development application, or a conditional use. A joint fill permit may be applied for prior to application for a land use permit. However, if a joint fill permit is approved by the Oregon Department of State Lands and the U.S. Army Corps of Engineers prior to applying for the land use application, fill may not proceed until the final decision for the land use application has been made by the City. Mitigation for fill of wetlands and the location of the mitigation shall be as prescribed by the DSL/Corps permit.
11. New drainageways, levees, or alteration of watercourses to accommodate public projects administered by the Sandy Drainage Improvement Company or its successor, the City, Multnomah County, the state, or a federal agency, provided it is in compliance with Sections 14.035(C), and 14.040(R) and (S) of this Chapter.
12. Any development that must implement a Federal Aviation Administration (FAA) compliant wildlife hazard management plan on property owned by the Port of Portland or within ten thousand (10,000) feet of an Aircraft Operating Area, as defined by the FAA, and removal of trees that interfere with the landing or takeoff flight path of aircraft at the Troutdale Airport or otherwise interferes with the safe operation of the airport as determined by the Port of Portland. The removal of trees that interfere with the operation of the Troutdale Airport are permitted outright.

13. Removal of refuse as defined in the City of Troutdale Municipal Code.

14.035 Floodplain Development Permit

- A. **Background.** To participate in the National Flood Insurance Program (NFIP), a community must adopt and enforce a floodplain management ordinance that regulates development in the floodplain. This floodplain management ordinance is housed primarily in Chapter 14 of this Code, but is in part addressed in other Chapters of this Code. One of the basic Federal requirements for regulating Development in the Floodplain is a requirement for a Floodplain Development Permit (locally, a Floodplain Development Permit) before construction or other development begins within any Special Flood Hazard Area. In this context, the term "development" is defined in Section 1.040. This chapter contains provisions for the federally required Floodplain Development Permit and is consistent with the National Flood Insurance Program (NFIP) regulations. A Floodplain Development Permit is required for development within the Flood Management Area except as noted in Section 14.035.C of this Chapter.
- B. **Applicability.** Unless exempt per Section 14.035.C, below, approval of a Floodplain Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 14.010.B of this Chapter. The permit shall be for all structures including manufactured dwellings, as set forth in the Section 1.040 and for all development including fill and other activities, also as set forth in the Section 1.040.
- C. **Exemptions.** The following activities do not require a Floodplain Development Permit:
 - 1. Removal of invasive, nuisance, or prohibited plant species that exposes the ground, provided a revegetation plan approved or prepared by the City, state, a federal agency, Metro, SOLV, the East Multnomah Soil & Water Conservation District, or other similar organizations as determined by the Floodplain Manager, is carried out to provide shade and habitat, prevent erosion of steep slopes and/or sedimentation into the protected water feature. A copy of the plan shall be provided to the Community Development Department prior to beginning the work.

 - 2. Placement of fill in residential zones, provided it is consistent with other applicable provisions of this Code, and provided the fill is used solely for the purpose of constructing a sandbox, a raised gardening bed, or other similar landscape feature.
 - 3. Installation of three strand, on bendable pole, wire farm type fencing that is constructed consistent with the provisions in Section 14.040 of this Chapter.

4. Landscape maintenance activities consistent with the standards identified in this Section.
 5. Wetlands not subject to flooding as described Section 14.010.B of this Chapter, nor identified as designated habitat covered under the Endangered Species Act, and are not exempt for review under Section 4.300 of this Code.
- D. Submission Requirements. An application for a Floodplain Development Permit within the Flood Management Area shall include the following, and these requirements apply to all applicants for development approval unless otherwise noted below:
1. A site plan showing the proposed development on the site, drawn to a standard scale, and including an illustrated scale for use in reductions. A site plan shall also consist of the following:
 - a. SFHA boundaries, and the base flood elevations based upon the North American Vertical Datum of 1988 (NAVD 88);
 - b. The 1996 flood boundaries established by Metro;
 - c. Floodway boundaries as determined by datum available from the FIRM and Flood Insurance Study;
 - d. The name, location, and dimensions of affected streams or rivers, and the bankfull stage or the two-year storm level.
 - e. The area comprising the vegetation corridor as established by Sections 4.316 and 4.317 of this Code;
 - f. Wetlands that are determined significant by the Oregon Department of State Lands or have the following characteristics. All wetland determinations made prior to development must be reviewed and acknowledged by the Oregon Department of State Lands prior to issuance of City permits. The characteristics shall be determined by a qualified scientist.
 - i. The wetland is fed by surface flows, sheet flows, or precipitation; has evidence of flooding during the growing season; at least sixty percent (60%) of the area is vegetation; and is over one-half acre in size; or, the wetland qualifies as having “intact water quality function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or
 - ii. The wetland is in the Flood Management Area; has evidence of flooding during the growing season; is five (5) acres or more in size; and has a restricted outlet or no outlet; or, the wetland qualifies as

- having “intact hydrologic control function” under the 1996 Oregon Freshwater Wetland Assessment Methodology; or
- iii. The wetland, or a portion of the wetland, is within a horizontal distance of less than one-fourth (1/4) mile from a water body which meets the State of Oregon Department of Environmental Quality definition of “water quality limited water body” in OAR Chapter 340, Division 41 (1996).
2. Topographic survey. The survey shall show the floodway and floodplain. The survey shall also show the location of existing and proposed improvements on the site, trees or tree clusters (including those to be removed), existing roads, utilities, and structures, buildings, structures, fencing, walls, landscaping, storage of materials or equipment, drainage facilities, parking areas, and other impervious surface areas. The survey shall be drawn to scale, with two (2) foot contours, and shall note the distance from Top-of-bank to the improvements on the site;
3. Where base flood elevation data is provided through the City’s Flood Insurance Study, or by other means as permitted in this Chapter, the developer shall obtain and record the actual elevation of the lowest floor (including basement) of all new or substantially improved structures, including the placement of a manufactured dwelling, and whether or not the structure contains a basement. This information shall be based upon NAVD 88 and provided on a City Floodplain Development Permit form, and should include the following, as applicable:
- a. For all new or substantially improved, elevated, or floodproofed structures, verify and record the actual elevation.
- b. Where development occurs within Zone A of the Flood Management Area and the Base Flood Elevation (BFE) data is not available either through the Flood Insurance Study or from another authoritative source as authorized in Subsection 14.020(C) of this Chapter, the Floodplain Development Permit shall be reviewed for compliance with FEMA Publication 265 issued July 1995 “Managing Floodplain Development in Approximate Zone A Areas”, adopted herein for reference, and applicable State of Oregon Building Codes.
4. Hydrology and soils report. Where ground disturbance or vegetation removal is proposed that exposes the soil, this report shall be required. This report shall include information on the hydrological activities of the site, the effect of hydrologic conditions on the proposed development, and any hydrological or erosion hazards. This report shall also include characteristics of the soils on the site, suitability for development, its carrying capacity, and erosion or slumping characteristics that might present a hazard to life and property, or adversely affect the function or stability of a public use or facility. This report shall also include information on the nature, distribution, and strength of existing soils; the

adequacy of the site for development purposes; and an assessment of grading procedures required to impose the minimum disturbance to the natural state. The report shall be prepared by a professional engineer registered in Oregon. In Oregon Department of Geology and Mineral Industries (DOGAMI) inventory of landslide hazard areas, on hillsides where grading will lessen stability, or in areas where historic or prehistoric mudflows have occurred, a soils engineer and/or engineering geologist registered in Oregon shall certify the development will not negatively impact public safety, adjacent properties, or water quality.

5. Grading plan. If grading is to occur, a grading plan shall be required that shows existing and finished contours (two-foot contour intervals), drainage, all cut and fill slopes and proposed drainage channels, direction of drainage flow, location of proposed structures and existing structures which may be affected by the proposed grading operations, and water quality facilities .
6. Vegetation report. Where vegetation is to be removed or other impacts to the onsite vegetation is to be expected as a result of development, this report shall be required. This report shall consist of a survey of existing vegetation, whether it is native or introduced, and how it will be altered by the proposed development. Measures for enhancement of the site, including revegetation with approved plant species, will be clearly stated, as well as methods for immediate and long-term stabilization of slopes and control of soil erosion. The vegetation report shall be prepared by a landscape architect, landscape designer, botanist, arborist, or other authority as determined by the Floodplain Manager with specific knowledge of approved plant species, planting and maintenance methods, survival rates, and their ability to control erosion and sedimentation. The contractor for installation and maintenance will be responsible for replacing any approved plant species that do not survive the first two (2) years after planting.
7. A “No-Rise” certification and a Letter of Map Change (LOMC) shall be submitted with the land use application for the following activities within the floodway as mapped by FEMA:
 - a. Permanent bank stabilization that occurs in the floodway.
 - b. Development, alterations, or relocations of the floodway, including any permanent fill within the floodway.
8. Building and structure elevations. For all existing and proposed, relocated, or expanded buildings and structures, elevation in relation to the Highest Adjacent Grade, the North American Vertical Datum 1988 (NAVD88), and the base flood elevation as applicable, of the:
 - a. Lowest enclosed area of all existing and proposed, relocated, or expanded buildings and structures. This includes crawlspaces, basement floors, and attached garages, electrical equipment (except utility meters), heating and

ventilation equipment, plumbing, air conditioning equipment, and/or other service facilities (including ductwork); top of proposed garage slabs; and next highest floor situated above the items herein.

- b. Elevation to which any existing building or structure has been or is proposed to be flood-proofed; and certification by a registered professional engineer that the flood-proofing methods for any nonresidential structure meet the floodproofing criteria in this Chapter.
 - c. The locations and sizes of all flood openings in any proposed buildings and structures.
9. Infrastructure. Location of all proposed infrastructure necessary to serve the proposed development shall be required when such new development is proposed by the applicant. Such infrastructure includes, but is not limited to, streets, driveways, water, sanitary sewer, and storm drainage.
10. Floodplain or watercourse alterations. Where floodplain or watercourse alterations are proposed, a description of the extent to which any floodplain or watercourse is proposed to be altered or affected as a result of proposed development shall be required.
11. All federally-mandated or state-mandated permits issued by other governmental agencies shall be obtained, or obtaining such permits shall be a Condition of Approval to be satisfied prior to issuance of any construction permit. Such permits include but are not limited to Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334, 16 U.S.C. 1531-1544, and State of Oregon Removal-Fill permits, as amended.
- E. Application for Floodplain Development Permit. A Floodplain Development Permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 14.010 of this Chapter. The permit shall be for all structures including manufactured dwellings, as set forth in Section 1.040 and for all development including fill and other activities, also as set forth in Section 1.040. Applications for a Floodplain Development Permit shall be made on forms furnished by the Community Development Department and may include, but not be limited to, plans drawn to scale showing the nature, location, dimensions, elevations of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing.
1. A Type I Floodplain Development Permit is required for the following:
 - a. Construction of a single-family dwelling, including the placement of a manufactured dwelling or repair or alteration of existing single-family dwellings and manufactured dwellings. Single-family dwellings and manufactured dwellings shall be built in compliance with the applicable

development standards in Section 14.040 of this Chapter.

- b. Bank stabilization or tree and vegetation removal necessary to preserve an existing structure during an emergency. During the flood emergency or other emergency the permit is not required; however, as immediately as possible following the emergency a Floodplain Development Permit shall be obtained that documents the bank stabilization and tree and vegetation removal measures taken during the emergency; the schedule and procedure that will be used to remove any temporary fill, including sand bags, and the schedule and procedure to replant tree and vegetation where required according to the standards in Section 4.300. If the stabilization measures will not be removed, a Type II Floodplain Development Permit will be required as well as a “No-Rise” certification and LOMC as applicable. The required Floodplain Development Permit shall also show that the long-term stability of the site is in compliance with all other relevant Development Standards identified in Section 14.040 as applicable.
 - c. Wildfire mitigation projects as identified in this Chapter.
2. A Type II Floodplain Development Permit is required for:
- a. Any use in the underlying zoning district requiring a Type II Site Development review.
 - b. New or expanded streets or bridges.
 - c. New or expanded railroads or trestles.
 - d. Permanent bank stabilization or fill within the floodplain or floodway.
 - e. Balanced cut and fill activity within the floodplain, with a Letter of Map Change, as required in this Code.
 - f. Fill of wetlands. If the wetland is outside of the floodplain and not hydrologically connected, a Floodplain Development Permit is not required, only the Site Development Review.
 - g. Other uses similar in nature to those listed above.
3. A Type III procedure and Floodplain Development Permit shall be processed for uses requiring a Type III review in the underlying zoning district, for all special variances requested from the standards of this Chapter, and for any proposed alteration of a watercourse of any perennial or intermittent streams.

F. Review Criteria - Requests for approval of a Floodplain Development Permit shall be

reviewed by the Floodplain Administrator or designee to ensure:

1. Consistency with the standards from Sections 1.040, Chapter 2, and Section 14.040 of this Code, as applicable;
 2. Consistency with other applicable standards of this Code and all other applicable policies and standards adopted by the City.
- G. Mandatory Conditions of Approval - The following Conditions of Approval are mandatory and shall be imposed on every approved Floodplain Development Permit:
1. Required During Construction Elevation Certificate. For all new construction, development, and substantial improvements, the permit holder shall provide to the Floodplain Administrator or designee an as-built certification of the floor elevation or flood-proofing elevation immediately after the lowest floor or flood-proofing is placed and prior to further vertical construction. Any deficiencies identified by the Floodplain Administrator or designee shall be corrected by the permit holder immediately and prior to work proceeding. Failure to submit certification or failure to make the corrections shall be cause for the Floodplain Administrator or designee or the Building Official to issue a stop-work order for the project.
 2. Required Documentation Prior to Issuance of Certificate of Occupancy
 - a. In addition to the requirements of the Building Codes pertaining to Certificate of Occupancy, prior to the final inspection the owner or authorized agent shall submit the following documentation to the Floodplain Administrator or designee and the documentation shall be prepared and sealed by a registered surveyor or engineer:
 - i. For elevated buildings and structures in Special Flood Hazard Areas, the as-built elevation of the lowest floor, including basement, or where no base flood elevation is available the height above highest adjacent grade of the lowest floor;
 - ii. For buildings and structures that have been floodproofed, the elevation to which the building or structure was floodproofed.
 - b. Failure to submit certification or failure to correct violations shall be cause for the Floodplain Administrator or designee or the Building Official to withhold a Certificate of Occupancy until such deficiencies are corrected.
 3. For applications for partitions and subdivisions, one of the following shall be required:
 - a. Protection of Flood Management Areas with a conservation easement;

- b. Platting Flood Management Areas as common open space; or
- c. Offer of sale or donation of Flood Management Area property to public agencies or private non-profits for preservation where feasible.

14.040 **Development Standards.** The land use application shall establish through the use of narrative, site plans, and professional reports, the following:

- A. Type II or III approval for new development, including additions or alterations to existing structures, except for single family dwellings, in the Flood Management Area may be allowed, provided that:
 1. The applicant shall demonstrate that there is no reasonable nor practical alternative design or method of development that would have a lesser impact on the Flood Management Area than the one proposed.
 2. If there is no reasonable nor practical alternative design or method of development the project shall be designed in compliance with applicable parts of Subsections (B) through (X) of this Section, so that the impacts on the Flood Management Area are limited and the plans shall include restoration, replacement, or rehabilitation of the vegetation within the Flood Management Area.
 3. The applicant shall provide mitigation to ensure that impacts to the functions and values of the vegetation corridor and integrity of the slope will be mitigated or restored to the extent practicable.
- B. A professional engineer registered in Oregon must certify that the development will not result in any increase in flood levels throughout the SFHA during the occurrence of the base flood discharge, and that water quality will not be adversely affected.
- C. As applicable, the development must be authorized by the Oregon Department of State Lands, U.S. Army Corps of Engineers, the Oregon Department of Fish and Wildlife, and the Sandy Drainage Improvement Company. The applicant shall obtain and submit a copy of all required state and federal permits for any proposed development in the Flood Management Area, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1334.
- D. Unless otherwise authorized under the provisions of this Chapter, the development shall comply with the underlying zoning district dimensional standards and the minimum vegetation corridor as established in Sections 4.316 and 4.317 of this Code. The applicant shall submit an exhibit that shows the location and provides a description of all actions to be provided to mitigate the impacts of permitted development as established in Section 4.314 of this Code.

- E. Protect the water quality resource, and Flood Management Area functions and values from uncontained areas of hazardous materials as defined by the State of Oregon Department of Environmental Quality water quality standards.
- F. Limit impervious surface areas in the Flood Management Area.
 - 1. The impervious surface of the development may not exceed thirty percent (30%) of the flood plain area, provided the standards of this Code are met. Exception: Public roads necessary to serve the transportation needs of the City may exceed thirty percent (30%) of the Flood Management Area provided all other applicable standards of this Chapter have been met.
 - 2. Clustering of houses and multiple-family units, zero lot line developments, and/or modifications to setbacks may be approved under the Type II procedure in order to accommodate the density permitted within the underlying zoning district and not exceed the impervious surface limitation of thirty percent (30%) of the Flood Management Area on the site.
 - 3. The Director, or their designee, may grant an administrative variance of up to fifty percent (50%) of any dimensional standard in the underlying zoning district where necessary to avoid development within the Flood Management Area.
- G. Maintain flood storage capacity. The developer is required to offset new fill placed in the floodplain by excavating an additional flood-able area to replace the lost flood storage area, preferably at hydrologically equivalent sites. All development proposals in the SFHA shall provide compensatory mitigation for impacts to flood storage, water infiltration, and riparian vegetation to ensure that new development does not increase flood hazards on other properties. A mitigation plan shall be submitted with the land use application. All required actions derived from that plan shall be completed prior to issuance of a Certificate of Occupancy, a Certificate of Completion for a subdivision, or the final building inspection, as applicable. Balanced cut and fill is required for permitted development in the Flood Management Area. Excavation and fill shall be performed in a manner to maintain or increase flood storage and conveyance capacity and not increase design flood elevations. A professional engineer registered in Oregon must certify that the development will not result in any increase in flood levels throughout the SFHA during the occurrence of the base flood discharge except as described in Section 14.040.G(8), and that water quality will not be adversely affected.
 - 1. All fill placed at or below the design flood elevation in the Flood Management Area shall be balanced with at least an equal volume or amount of soil material removal. The development shall be designed to minimize development within the Flood Management Area and amount of fill necessary. Balanced cut and fill may be used to elevate structures but shall not be used for density transfer. Residential density must be calculated prior to changes to the floodplain as a result of balanced cut and fill.

2. Excavation shall not be counted as compensating for fill if such areas will be filled with water in non-storm winter conditions.
3. The cumulative effect of any proposed development shall not increase the water surface elevation of the base flood except as described in Section 14.040.G(8). Onsite flood storage capacity shall not decrease as a result of development, vegetation removal, or excavation except as described in Section 14.040.G(8).
4. A “No-Rise” certification is required for any fill or permitted development within the floodway pursuant to Section 60.3(d)(3) of the National Flood Insurance Program.
 - a. The “No-Rise” supporting data and a copy of the engineering certification must be submitted to, and reviewed by, the City prior to approval of development, and the data shall be submitted with the Floodplain Development Permit.
 - b. The “No-Rise” certification and supporting technical data must stipulate no impact on the 100-year flood elevations, floodway elevations, or floodway widths at the new cross-sections and at all existing cross-sections anywhere in the model.
 - c. A sample “No-Rise” certification is available in the Community Development Department.

5.

All new buildings built on fill in the regulatory floodplain shall be constructed on fill:

- a. Certified by a professional engineer registered in Oregon as suitably designed and compacted for the development (e.g. fill that meets the criteria of 1803.5.8 and Section 1804.4 of the International Building Code, Section 2.4 of ASCE 24, or their equivalent); and
 - b. Providing protection from erosion and scour.
6. When a project proposes development that will alter a watercourse, modify floodplain boundaries, or modify Base Flood Elevations, the application shall obtain a Conditional Letter of Map Change from FEMA prior to grading and filling the site and then obtain and submit the final Letter of Map Change prior to final inspections, or issuance of a certificate of completion, or issuance of the certificate of occupancy as required under this Section. When a project applicant has demonstrated through the Floodplain Development Permit that, in addition to the standards listed for Section 14.040.G, the following standards have been achieved, a Conditional Letter of Map Change/Letter of Map Change may not be required:

- a. Fill is not proposed in the floodway for the site to be impacted through development;
 - b. The project site is not being elevated to or above the base flood elevation (BFE);
 - c. The project is proposing to remove unsuitable existing material (topsoil) and backfilling with select structural material, not alter the existing (natural grade) elevation of the site;
 - d. The site to be impacted does not have US Fish and Wildlife Service (USFWS) designations for critical habitat for Threatened or Endangered; and
 - e. In areas where a regulatory floodway has not been designated, the new construction, substantial improvements, or other development (including fill) within A or AE Zones on the community's FIRM, has demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood at any point within the community.
7. All proposals that include engineering analysis for maintenance of flood storage capacity are subject to review by a qualified engineer licensed in the State of Oregon. The applicant shall be responsible for the cost of this independent review and will be advised at the time of application of this expectation.
 8. As described in FEMA's "NFIP Guidebook - A Local Administrator's Guide to Floodplain Management and the National Flood Insurance Program, 5th Addition, Appendix E - Policy on Fish Enhancement Structures in the Floodway", projects that are specifically implemented to restore or enhance US Fish and Wildlife Service (USFWS) identified Threatened or Endangered anadromous fish species or habitat where such species have been determined to reside qualify to allow for minimal rises in the 100-year flood levels as a result of implementation. In addition to the Submission Standards identified in Section 14.035.D, applicants for such projects shall also provide statements from Rural Conservation and Development, the Natural Resource Conservation Service, or similarly qualified staff of fisheries, natural resource, or water resources agencies that less than the maximum hydraulic analyses may be allowed. A professional engineer registered in Oregon shall provide a feasibility analysis and certify that the project was designed to keep any rise in 100-year flood levels to as close to zero as practically possible and ensure that no structures would be impacted by a potential rise. Additionally, routine maintenance of any such project would be necessary to sustain conveyance over time. A plan that sets forth how long-term maintenance is to be maintained shall be required with the submittal of the Floodplain Development Permit. An additional mandatory condition of approval, as

recommended by FEMA, shall be attached to such projects that emphasize the dynamics of a river or creek, and, where the Floodplain Manager has deemed necessary, a requirement for further analysis.

- H. Residential Development, including accessory structures as referenced in Section 5.010 of this Code and not constructed in accordance with Section 14.040.V. Note: if more than fifty percent (50%) of the lot being developed is affected by the floodplain, then the minimum density standard of this Code does not apply.
1. Elevate structures. The minimum finished floor elevation, including basement floor, for all new or substantially improved residential structures in the Flood Management Area shall be at least two (2) feet above the base flood elevation, as established by Section 14.010.B in this Chapter, and as demonstrated through the Elevation Certificate submittals as established in this Section. Elevation Certificates shall be required for all residential development as required by the Community Rating System.
 - a. An Elevation Certificate shall be submitted with the construction plans. The Elevation Certificate shall include the elevation of the lowest floor (including basement). The Elevation Certificate shall be certified by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information for construction within specific flood hazard areas.
 - b. A second certified Elevation Certificate shall be submitted to the City of Troutdale prior to pouring the foundation.
 - c. A third certified Elevation Certificate shall be submitted after the structure is completed based upon finished construction.
 - d. The City shall maintain the Elevation Certificates for public inspection.
 2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:
 - a. A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
 - b. The bottom of all openings shall be no higher than one (1) foot above grade.
 - c. Openings may be equipped with screens, louvers, or other devices

provided that they permit the automatic entry and exit of floodwaters.

- d. Where possible, openings will be installed on at least two opposing sides of the enclosed area.
3. Below-grade crawlspaces are allowed only when in compliance with the design requirements of FEMA Technical Bulletin 11-01, “Crawlspac Construction for Buildings Located in Special Flood Hazard Areas.” Buildings that have below-grade crawlspaces will have higher flood insurance premiums than buildings that have the preferred crawlspace construction with an interior elevation at or above the lowest adjacent exterior grade.
 - a. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings:
 - i. Openings that equalize hydrostatic pressures by allowing for the automatic entry and existence of floodwaters is required. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade. See FEMA Technical Bulletin 1-93, Opening in Foundation Walls, for guidance.
 - ii. All portions of the building below the base flood elevation must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE. Ductwork or other utility systems located below the insulation may pull away from their supports. See page 8 of Technical Bulleting 1-93 and FEMA Technical Bulletin 2-93 Flood Resistant Materials Requirements.
 - iii. Any building utility systems within the crawlspace must be elevated above the base flood elevation or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters. For further guidance, see FEMA 348, Protecting Building Utilities from Flood Damage.
 - b. The interior grade of a crawlspace below the base flood elevation must not be more than two (2) feet below the lowest adjacent exterior grade.

- c. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building Code requirements for flood hazard areas. Crawlspaces may not be converted to basements.
 - d. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel, or crushed stone drainage by gravity or mechanical means.
 - e. Crawlspace construction is not permitted in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. For velocities in excess of five (5) feet per second, other foundation types should be used.
 - f. The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest immediate interior or exterior grade.
4. Substantial improvements will require elevation of any non-elevated structure to two (2) feet above the base flood elevation in compliance with this Section and in accordance with Section 1.040. Substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. Substantial improvements include:
 - a. Any repair, reconstruction, or improvement of a structure, the cost of which exceeds forty-nine percent (49%) of the market value of the structure as established by the County appraiser or a licensed professional appraiser.
 - b. Reconstruction or repair of a structure that exceeds forty-nine percent (49%) of the market value of the building before it was damaged.
 - c. Additions to an existing structure when the addition increases the market value of the structure by more than forty-nine percent (49%) or the floor

area by more than twenty percent (20%).

5. Comply with other standards of this Section, as applicable.
- I. Manufactured dwellings within the Special Flood Hazard Area.
1. All manufactured dwellings to be placed or substantially improved on sites that are outside of a manufactured dwelling park or subdivision; in a new manufactured dwelling park or subdivision; in an expansion to an existing manufactured dwelling park or subdivision, or in an existing manufactured dwelling park or subdivision on which a manufactured dwelling has incurred substantial damage shall be elevated on a permanent foundation such that the finished floor of the manufactured dwelling is elevated to a minimum eighteen (18) inches (46 cm) above the base flood elevation and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement.
 2. Manufactured dwellings to be placed or substantially improved on sites in an existing manufactured dwelling park or subdivision within the Special Flood Hazard Area on the community's FIRM that are not subject to the above manufactured dwelling provisions shall be elevated so that either:
 - a. The finished floor of the manufactured dwelling is elevated to a minimum of eighteen (18) inches (46 cm) above the base flood elevation; or
 - b. The manufactured dwelling chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above grade and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement. Anchoring shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).
 3. Manufactured dwellings shall have all electrical crossover connections installed at a minimum of twelve (12) inches above BFE.
 4. Manufactured dwellings supported on solid foundation walls shall be constructed with flood openings that comply with Section 14.040.H(2).
 5. Comply with the other standards of this Section as applicable.
- J. Recreational Vehicles (RV) within the Special Flood Hazard Area, whether in a park or on private property outside of a park, are required to:

1. Be on the site for fewer than one hundred eighty (180) consecutive days, and
 2. Be fully licensed and ready for highway use. Highway use means on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
 3. Meet the permit requirements of Section 14.040.I and the elevation and anchoring requirements for manufactured dwellings.
 4. The RV “pads” shall be paved with asphaltic concrete or comparable, and have a special water quality facility for the collection of the stormwater from the site.
 5. The RV “pads” shall be wide enough to accommodate a trailer parked next to the towing vehicle or be long enough to accommodate both towing vehicle and trailer.
- K. Nonresidential Construction. New construction, development, and substantial improvement of any commercial, industrial, or other nonresidential structure shall have the lowest floor, including basement, elevated to no less than two (2) feet above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:
1. Be dry floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water. A dry floodproofing certificate shall be filed with the City following the form and procedure established by the Federal Emergency Management Agency.
 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy, in accordance with standards established by the Federal Emergency Management Agency and the National Flood Insurance Program.
 3. Be certified by a registered professional engineer or architect that the design and methods of development are in accordance with accepted standards of practice for meeting provisions of National Flood Insurance Program regulations (CFR 60.3(c)(4) and (5)) based on their development and/or review of the structural design, specifications, and plans. Such certifications shall be provided to the City.
 4. Nonresidential structures that are elevated, not dry floodproofed, must meet the same standards for space below the lowest floor as described in Section 14.040.H. If elevated, an Elevation Certificate shall be submitted with the construction plans, prior to pouring the foundation, and after construction.
 5. Applicants dry floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the floodproofed level (e.g., a building floodproofed to the base flood elevation will be rated as one (1) foot below the base flood elevation).

6. Applicants that elect to utilize floodproofing instead of elevation shall supply a comprehensive Maintenance Plan at the time of building plan review for the entire structure to include but not limited to: exterior envelope of structure; all penetrations to the exterior of the structure; all shields, gates, barriers, or components designed to provide floodproofing protection to the structure; all seals or gaskets for shields, gates, barriers, or components; and, the location of all shields, gates, barriers, and components as well as all associated hardware, and any materials or specialized tools necessary to seal the structure.
 7. Applicants may be required by the Floodplain Manager to supply an Emergency Action Plan (EAP) for the installation and sealing of the structure prior to a flooding event that clearly identifies what triggers the EAP and who is responsible for enacting the EAP.
 8. Comply with other standards of this Section as applicable.
- L. Remove temporary fills. Temporary fills permitted during construction or emergency bank stabilization shall be removed if not in compliance with the balanced cut and fill standard of this Code or prior to issuance of a Certificate of Occupancy or release of any bond issued for the development.
- M. Preserve and/or restore the vegetation corridor within the disturbed areas, and retain the existing tree canopy as established in Sections 4.316, Width of Vegetation Corridor, and 4.317, Methods for Determining Vegetation Corridors Next to Primary Protected Water Features, of this Chapter. An enhancement plan for disturbed areas shall be prepared and implemented to stabilize slopes to prevent landslides on slopes and sedimentation of water features. This plan shall provide for the replanting and maintenance of approved plant species designed to achieve pre-disturbance conditions.
- N. Maintain or reduce stream temperatures.
- O. Minimize erosive velocities, nutrient, and pollutant loading into water. Use filtering, infiltration, and natural water purification for stormwater runoff in compliance with the Erosion Control and Water Quality Standards of Section 5.600 of this Code. The applicant's engineering plans shall certify that runoff and sedimentation from the site will comply with the standards of Section 5.600 of this Code.
- P. Anchoring. All new construction, development, and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- Q. Construction Materials and Methods. All new construction, development, and substantial improvements shall use flood-resistant materials in accordance with the requirements of FEMA Technical Bulletin 2-93 "Flood Resistant Materials Requirements" and utilities shall be designed and installed in accordance with FEMA Publication 348 "Protecting Building Utilities from Flood Damage." The following standards are only a summary of

those requirements:

1. All new construction, development, and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
2. All new construction, development, and substantial improvements shall be constructed using methods and practices that minimize flood damage and minimize impacts to natural floodplain functions, including flood storage, water infiltration, and riparian vegetation.
3. Electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
4. No construction materials or methods may be used within the floodplain that would impair or damage water quality or native vegetation.
5. All development shall have adequate drainage provided to reduce exposure to flood damage and maintain water quality.

R. Utilities and Roads.

1. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable, and comply with the Oregon Department of Fish and Wildlife construction standards.
2. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
3. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.
4. Onsite waste disposal systems shall be located to avoid impairment to them, or contamination from them, during flooding consistent with the State of Oregon Department of Environmental Quality.
5. Utility and road placement shall occur outside the floodway unless the utility or road is necessary to serve permitted development, and there is no reasonable alternative. Roads built in the floodplain shall be built at or above the base flood elevation to provide access to emergency vehicles during a flood.
6. Stormwater management and water quality facilities shall comply with the siting and construction standards of Section 5.700 of this Code.



For any alterations or relocations of a watercourse the developer shall be required to notify the Oregon Department of State Lands, the Oregon Department of Land Conservation and Development, and adjacent communities that will be impacted by the alteration or relocation. The developer shall be responsible for obtaining and submitting copies of any required project permits required by the Oregon Department of State Lands, U.S. Army Corps of Engineers, Oregon Department of Fish and Wildlife Service, Federal Emergency Management Agency, and other affected agencies, as applicable. The flood carrying capacity of the altered or relocated watercourse shall not be diminished and shall be maintained. Alterations will require a “No-Rise” certification for changes to the floodway, and changes that relocate the floodplain will require a Letter of Map Change (LOMC) from FEMA or may require a revised Flood Insurance Study and Flood Insurance Rate Map for the City. The burden for all engineering studies required to process these forms is the applicant’s, not the City’s.

T. Subdivision Proposals. In addition to compliance with the underlying zoning district standards of this Code and this Chapter, the development of the subdivision shall be subject to the following additional criteria:

1. All subdivision proposals shall be consistent with the need to minimize flood damage.
2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
4. Where the base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least fifty (50) lots or five (5) acres, whichever is less.
5. If more than fifty percent (50%) of the lot being partitioned or subdivided is affected by the floodplain, then the minimum density standard of this Code does not apply.

U. Critical Facilities.

1. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area.
2. Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available.
3. Critical facilities constructed within the SFHA shall have the lowest floor

elevated one foot above the height of the 500-year flood level. Submit Elevation Certificates with the construction plans, prior to pouring the foundation, and upon completion of the structure in accordance with Subsections H(1)(a - c) of this Section.

4. Access to and from the critical facility shall also be protected to the height utilized above.
 5. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.
 6. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.
 7. Comply with the other standards of this Section as applicable.
- V. Small Accessory Structure. Relief from elevation or floodproofing as required in this Section may be granted for small accessory structures that meet the following standards. The applicant shall be advised that this type of allowance will result in higher insurance rates for these structures, as applicable.
1. **Less** than two hundred (200) square feet, less than \$5,000 in valuation, and do not exceed one story;
 2. Not temperature controlled;
 3. Not used for human habitation and are used solely for parking of vehicles or storage of items having low damage potential when submerged;
 4. Not used to store toxic material, oil or gasoline, or any priority persistent pollutant identified by the State of Oregon Department of Environmental Quality unless confined in a tank installed in compliance with this ordinance or stored at least two feet above base flood elevation;
 5. Located and constructed to have low damage potential;
 6. Constructed with materials resistant to flood damage as described in this Section;
 7. Anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood;
 8. Constructed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for complying with this requirement must be certified by a licensed professional engineer or architect or **designed** in compliance with Section 14.040.H(2);

9. Constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.
- 14.045 **Floodways.** Located within areas of special flood hazard established in Section 14.010.B of this Chapter are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:
- A. Except as provided in Section 14.045.C, encroachments, including fill, new construction, development, substantial improvements, and other development are prohibited unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
 - B. If Section 14.040.A is satisfied, all new construction, development, and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 14.040 of this Code.
 - C.  Floodways and other high hazard zones are extremely hazardous areas due to exceptionally high flood and erosion potential. In these areas, the development actions permitted in high hazard zones shall be limited to water-dependent uses; bridges and other location-dependent uses; habitat restoration activities consistent with Sections 14.035.C(2); low-intensity recreation; and bioengineered banks.
- 14.050 **Before Regulatory Floodway.** In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.
- 14.055 **Flood Management Area Variance Procedures.** Variances from dimensional standards of the underlying zoning district or other provisions of this Code not part of this Chapter shall be processed in accordance with Section 6.800 of this Code.
- A. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction, development, and substantial improvements to be erected on a lot of one-half (1/2) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing that the considerations of Section 14.055.A(1 - 11) have been fully reviewed. As the lot size increases the technical justification required for issuing the variance increases.
 - 1. The danger that materials may be swept onto other lands to the injury of others;

2. The danger to life and property due to flooding or erosion damage;
 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 4. The importance of the services provided by the proposed facility to the community;
 5. The necessity to the facility of a waterfront location, where applicable;
 6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 7. The compatibility of the proposed use with existing and anticipated development;
 8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
 11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- B. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the Statewide Inventory of Historic Properties, without regard to the procedures set forth in this Section.
1.  Is the minimum necessary to preserve the historic character and design of the site, building or structure;
 2. Will not result in the site, building or structure losing its historic designation; and
 3. Demonstrates consistency with all other local, state, or federal laws or ordinances, including documentation of any necessary consultations with state or federal agencies.
- C. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.

- D. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- E. The Director, or their designee, may grant a Type II variance of up to fifty percent (50%) of any dimensional standard in the underlying zoning district where necessary to avoid construction or development within the Flood Management Area. The Director or designee shall make a determination in accordance with the criteria established in Section 14.055.J of this Chapter.
- F. Applications for variances to dimensional standards in excess of that provided in Section 14.055.E shall be a Type III application.
- G. The Planning Commission or Director, or their designee, may attach conditions to the granting of variances as it deems necessary to further the purpose of this Chapter.
- H. As a participant in the National Flood Insurance Program, the City is not authorized to grant a variance from the requirement to elevate or floodproof structures in accordance with state and federal regulations, whichever is most restrictive. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except Section 14.055.A and otherwise complies with Sections 14.040.P - R of this Chapter.
- I. The City cannot grant a variance from the special flood hazard designation assigned by the Federal Insurance Administrator to a site. However, a property owner may request a Letter of Map Change (LOMC) from the Federal Emergency Management Agency.
- J. In reviewing a Type III Variance, the Planning Commission shall consider all technical evaluations, relevant factors, and standards specified in other Sections of this Chapter and other Chapters of this Code, and make affirmative findings, with or without conditions, for each of the following criteria:
 - 1. A showing of good and sufficient cause that the need for the variance is not of the applicant's making and will not result in a use of the site that is not otherwise permitted in the underlying zoning district.
 - 2. A determination that failure to grant the variance would result in exceptional hardship to the applicant and is the minimum necessary to grant relief.
 - 3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in Section 14.055.A(1) – (11) or conflict with existing local, state, or federal laws or ordinances.
 - 4. The safety of access to the property in times of flood for ordinary and emergency

vehicles.

5.  A determination that the development project cannot be located outside the Special Flood Hazard Area and/or high hazard area and that impacts to flood storage, water infiltration, and riparian vegetation have been minimized to the extent practicable.
6.  A demonstration of consistency with all other local, state, or federal laws or ordinances, including documentation of any necessary consultations with state or federal agencies.

14.060 **Prescribed Conditions for the Rehabilitation or Replacement of Pre-Existing Structures.** The replacement of pre-existing structures or development damaged or destroyed accidentally is subject to following standards:

- A. The structure or development was in existence within the Flood Management Area prior to February 1, 2019.
- B. The use is allowed in the underlying zoning district at the time the application is made to rehabilitate or replace the structure.
- C. A Type I Floodplain Development Permit is approved prior to applying for building permits.
- D. The rehabilitation or replacement is rebuilt on the same footprint of the original structure and does not increase the impervious area within the Special Flood Hazard Area.
- E. The rehabilitated or replaced structure is elevated, if residential, or floodproofed or elevated, if non-residential, in accordance with the applicable standards of this Chapter, the definition found Section 1.040, and all additional relevant standards in this Code.



CITY OF TROUTDALE



STAFF REPORT

SUBJECT / ISSUE: Presentation on Housing Needs Analysis and Associated Studies

MEETING TYPE:
City Council Regular Mtg.

MEETING DATE:
December 11, 2018

ACTION REQUIRED:
Information / Discussion

PUBLIC HEARING:
No

STAFF MEMBER:
Chris Damgen

DEPARTMENT:
Planning

ADVISORY COMMITTEE/COMMISSION RECOMMENDATION:

N/A

Comments:

STAFF RECOMMENDATION: Consider supporting a future mid-year budget amendment

EXHIBITS:

None [Click here to enter text.](#)

SUBJECT / ISSUE RELATES TO:

Council Goals Legislative Other (describe)

ISSUE / COUNCIL DECISION & DISCUSSION POINTS:

- ◆ Consider the information in the presentation on the benefits of having an updated Housing Needs Analysis
- ◆ No action required for this meeting, but Staff would seek direction to prepare for a potential budget amendment to be considered in January, with the ability to select an identified consultant and execute a contract with that consultant in 2019.

Reviewed and Approved by City Manager:

A blue ink signature of the City Manager's name, which appears to be "R. Damgen".

BACKGROUND:

A Housing Needs Analysis (HNA) is an important tool that communities in Oregon use to justify land use planning decisions when it comes to residential development. An HNA gives up-to-date data on existing housing while highlighting future housing needs to respond to development pressures. An HNA also provides legal justification when communities evaluate changes to zoning districts, review residential development projects, apply for urban reserve areas, or seek to expand urban growth boundaries.

Historically, HNAs are performed when communities are required to go through “periodic review” when a City’s comprehensive plan is updated. The last time an HNA was conducted for Troutdale was in 2009. However, the extreme growth of the metro region in the past decade suggests that Troutdale may need to have an updated HNA as housing pressures and affordability become major issues for our community.

The most effective HNAs contain several associated studies, including a Buildable Lands Inventory (BLI). Recently, cities have also sought to have input on future policy decisions as they relate to housing. The City’s preferred consultant for an HNA will bundle those additional studies as part of an HNA proposal.

PROS & CONS:

Pros:

- Updates data to reflect 2018/2019 housing stock and growth pressures.
- Provides staff, Planning Commission, and City Council better information to evaluate land use decisions on residential development proposals or zoning changes
- Advises the city on future policy strategies related to housing and land use

Cons:

- Funding for a Housing Needs Analysis was not immediately identified in the 2018-19 budget, thus potentially requiring a budget amendment.

Current Year Budget Impacts: Yes (describe) N/A

Potential for a mid-year budget amendment (Under \$50,000)

Future Fiscal Impacts: Yes (describe) N/A

The period of work would likely stretch into next fiscal year

City Attorney Approved: Yes N/A

Community Involvement Process: Yes (describe) N/A

The Budget Committee was briefed about the potential for a Housing Needs Analysis on 12/4/18. Discussions were also had at the Rent Burdened Meeting on 12/5/18. Planning Commission and Citizen Advisory Committee members have expressed support.