

GROUP LETTER submitted July 22, 2021, to Planning and Sustainability Commission, [PSC@portlandoregon.gov](mailto:PSC@portlandoregon.gov)

UPDATED GROUP LETTER for written testimony resubmitted August 23, 2021, Planning and Sustainability Commission's public hearing via map app, 25 signatures

FOLLOW UP GROUP LETTER for written testimony submitted September 10, 2021, Planning and Sustainability Commission's public hearing via map app, 38 signatures

GROUP LETTER for written testimony submitted February 16, 2022, Portland City Council's public hearing via map app, 34 signatures

GROUP LETTER for written testimony re-submitted February 18, 2022, Portland City Council's public hearing via [cctestimony@portlandoregon.gov](mailto:cctestimony@portlandoregon.gov), with additional signatures, total of 37 signatures. Addendum to testimony.

Group LETTER for written testimony submitted April 13, 2022, Portland City Council's public hearing via map app, 32 signatures

Group LETTER RESUBMITTED for written testimony submitted April 14, 2022, Portland City Council's public hearing via map app, 32 signatures  
DATA CORRECTION: LiDAR data is 8-18 years old

To: Portland's City Council  
Mayor Ted Wheeler  
Commissioner Mingus Mapps  
Commissioner Jo Ann Hardesty  
Commissioner Dan Ryan  
Commissioner Carmen Rubio

From:

Barrett Streu, owner of 3608 SW Hillside Dr, Portland OR 97221  
Rachel Streu, owner of 3608 SW Hillside Dr, Portland OR 97221  
Yoann Foucher, owner of 3616 SW Hillside Dr, Portland OR 97221  
Laurence Juthy, owner of 3616 SW Hillside Dr, Portland OR 97221  
Mike Kutter, owner of 3586 SW Hillside Dr, Portland OR 97221  
Marti Kutter, owner of 3586 SW Hillside Dr, Portland OR 97221  
Hugh Givens, owner of 3612 SW Hillside Dr, Portland OR 97221  
Marilyn Cover, owner of 3707 SW Sweetbriar Dr, Portland OR 97221  
Kathy Prosser, owner 3819 SW Sweetbriar Dr, Portland OR 97221  
Steve Prosser, owner 3819 SW Sweetbriar Dr, Portland OR 97221  
Kevin Pendergast, owner of 3835 SW Sweetbriar Dr, Portland OR 97221  
Eugene Yeboah, 2944 SE Tibbetts St, Portland Oregon 97202  
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Tiffany Rohani, owner of 10425 SW 43rd Ave, Portland, OR 97219  
Reyaz Rohani, owner of 10425 SW 43rd Ave, Portland, OR 97219  
Lynne Chao, owner of 3702 SW Sweetbriar Dr, Portland OR 97221  
Katie Cooley, owner of 3718 SW Sweetbriar Dr, Portland OR 97221  
Andrew Markell, owner of 3921 SW Sweetbriar Dr, Portland OR 97221  
Kate Markell, owner of 3921 SW Sweetbriar Dr, Portland OR 97221  
Chris Baier, owner of 3052 NE 66th Ave, Portland, OR 97213  
Russ Black, owner of 3852 SW Greenleaf Dr, Portland OR 97221  
Joan Black, owner of 3852 SW Greenleaf Dr, Portland OR 97221  
Keph Sherin, 5300 Parkview Dr, # 1031, Lake Oswego, OR 97035  
Dave Fitzpatrick, owner of 6423 SE 74th Ave. Portland, OR 97206  
Joseph F. Kovar, owner of 3829 SW Sweetbriar Dr, Portland OR 97221  
Shih-ling Kovar, owner of 3829 SW Sweetbriar Dr, Portland OR 97221  
Laura Swingen, owner of 2420 NW 119th Ave, Portland, OR 97229  
Carole Bertrand, owner of 2420 NW 119th Ave, Portland, OR 97229  
Laurali Hudgins, 11434 NE Fremont Ct, Portland, OR 97220  
Jill McAllister, owner of 2387 NW Quimby Street, Portland OR 97210

Scott McAllister, owner of 2387 NW Quimby Street, Portland OR 97210  
Audra Oakley, 333 NW 4th Ave, #517, Portland OR 97209

Re: Environmental Concerns regarding the Environmental Overlay Zone Map Correction Project.  
Portland City Council's Public Hearing #2

**Attachments:**

MarquamPark.pdf (70% mapping error in Marquam Park, north side SW9)  
EzoneMaps\_061621 (32-page map analysis of shrinking protection P zones in headwater and tributary areas, citywide analysis (any updates after June 2021 are not reflected)

**Note: \***

Resubmitting testimony 4/14/22. DATA CORRECTION to 4/13/22 testimony. LiDAR data is 8-18 years old, (underline show change)

Dear Mayor and Commissioners,

**We, the 32 of us**, thank you for the opportunity to testify in Portland City Council's Environmental Overlay Map Correction Project's public hearing April 14, 2022.

We request the following:

**Request 1:** Keep the current existing adopted policies for the protection of the watershed, headwater, and tributary areas WITHOUT the "MANUAL CONVERSION" being applied. Protect the source of our water system with the current existing protections and policies.

**Request 2:** Specifically, keep the existing adopted plan of Metro Title 3 to protect steep slopes up to 200 feet of protection P zone to protect the watershed, headwater, and tributary areas of the Southwest Hills and Northwest Hills.

**Request 3:** At minimum, provide at least 50 feet of "FULL HORIZONTAL" protection P zone buffers for every waterway.

The Environmental Overlay Map Correction Project is far greater than a map correction project as the name implies, it is a CHANGE IN POLICY. The Environmental Overlay Map Correction Project has applied a MANUAL ADJUSTMENT to the mapping to reduce up to 87% of protection P zones in the watershed, headwater, and tributary areas.

The Ezones "manual conversion" and change of policy explained:  
Planning and Sustainability Commission's Ezone work session 6/22/21 (start :46:56)  
Ezone Staffer, Daniel Soebbing:

"We've done an analysis citywide for the Ezones and looking for sites that were highly constrained by protection zones and looking at sites that have 60 to 70 percent coverage of protection zones... So, on the sites..., we've gone in and we've done a **manual conversion** to convert Protection zones to Conservation zones... And we've done for undeveloped sites that are heavily forested with streams on them and we also done it for sites that are developed and dividable... We did that as an automatic process citywide."  
(See documentation AB for links to work sessions and hearings)

**This "MANUAL CONVERSION" and CHANGE OF POLICY directly affect, change, and compromise other existing adopted policies that are in place to protect Portland's watershed, headwater, and tributary areas of the Southwest Hills and Northwest Hills.** This "MANUAL CONVERSION" and CHANGE OF POLICY alter the existing adopted plan of Metro Title 3 (adopted in 1998) which requires a minimum buffer of 50 to 200 feet

protection to primary water features along riparian areas contingent to slope and flow. Metro Title 3 currently applies protection P zones up to 200 feet in steep ravines next to streams. The steeper the slope, the more unstable the slope is, the more protection is applied. The steeper the slope, the closer the land is to the stream so Metro Title 3 accounts for three-dimensional land protection with additional buffers given for a FULL HORIZONTAL PROTECTION. Metro Title 3 factors in a three-dimensional protection because land is, obviously, three dimensional.

(See documentation D – Metro Title 3. See **Table 3.03-3** for how slope determine protection)

**The Environmental Overlay Map Correction Project is protecting streams with LESS THAN 25 feet or 50 feet protection P zone buffer because it does not have slope assessment data needed in its computer algorithm to calculate slopes to give a FULL HORIZONTAL 25 to 50 feet buffer. The computer model is incomplete.** The Ezone proposed mapping is using outdated LiDAR maps that are 8–18 years old for riparian areas (with Portland Hills LiDAR mapping from 2004) without complete slope data needed to give a three-dimensional protection of streams and water features. Without the ability to factor slopes data and to map three-dimensionally, the Ezone’s proposed policy, is protecting streams with LESS than 25-50 feet of protection P zones when slopes are next to streams. 25 feet is the length of a driveway, so protection of some streams can be less than the bare minimum of 25 feet.

(See documentation X-3 – Ezone Staffers response to testimonies for PSC’s August 24, 2021, hearing that “slope maps will be updated”)

(See documentation X-4 – Ezone Staffer Mindy Brooks response that Geotechnical technical” would be needed to determine slopes in our neighborhood forest)

(See documentation A – LiDAR outdated maps)

#### **Request 4: Transparency to the Public**

There needs to be transparency to the public. **This proposed Ezone mapping is remapping Portland’s vital natural resources with outdated mapping data.** The Environmental Overlay Map Correction Project is remapping natural resource and water features, reducing the protection P zones by up to 87% in the watershed, headwater and tributary areas of the Southwest Hills and Northwest Hills while applying outdated maps that do not reflect nature resource and water feature growths for the last 8-18 years from 2005 to 2022 in riparian areas. Any new growth especially forest perimeter growth and tree canopy within the last 8-18 years is not inventoried, updated, or accounted for unless individual site visits are initiated. The foundation of the mapping inventory is not solid.

(See documentation A – LiDAR outdated maps)

#### **Request 5: The Project name needs to be reflective of the CHANGE IN POLICY that is being proposed.**

The Environmental Overlay Map Correction Project has not been transparent to the public and to approximately 17,000 private property owners whose properties and property values are affected. The name of the project needs to accurately reflect the proposed policy change; for example, be renamed: **the Environmental Overlay Map Correction and Policy Change Project.**

The Environmental Overlay Map Correction Project’s name does not reflect the CHANGE IN POLICY

1. of using a MANUAL CONVERSION for reducing large areas of protection P zones to conservation C zones in the watershed, headwater and tributary areas of the Southwest Hills and Northwest Hills.
2. of not adopting the “existing adopted” plan of Metro Title 3 (1998) and not keeping the protection P zones buffers of up to 200 feet in riparian corridors protecting our watershed, headwaters, and tributary areas.
3. of replacing Metro Title 3’s three-dimensional algorithm of protecting streams and riparian areas (based on slope steepness) and substituting it with the Ezone’s proposed computer mapping algorithm (with outdated LiDAR mapping data that is 8-18 years old) that cannot factor three-dimensional terrain because the computer inventory lacks slope data.

4. Because of the lack of slope inventory data, the Ezone proposed mapping can ONLY apply a “standard” 25 to 50 feet protection P zone buffer along streams because the computer model cannot determine if 25 feet from streams is 25 feet straight up a ravine or on flat land. The steeper the slope, the closer the terrain is to the stream; so, to fully protect streams, a FULL HORIZONTAL protection is needed. Slopes need to be factored into the algorithm. The proposed Ezone mapping is not protecting streams with a minimum of 25 or 50 feet FULL HORIZONTAL protection P zones when slopes are present. If a vertical slope is right next to a stream, it would protect 25 feet straight up, and the protection P zone may only be one foot away from the stream.

Since the success of this project is reliant on property owners self-reporting missing water features, streams, wetlands, and forests on their properties, the name of the project needs to coherently reflect the CHANGE OF POLICY so that property owners can understand CLEARLY that this is a CHANGE IN POLICY that may affect their properties.

The Ezone Map Correction Project is not map correcting in vulnerable population areas but what happens in the watershed and headwater areas of the Southwest Hills and Northwest Hills affect **vulnerable populations downstream since streams flow for miles.**

Notifications needed to reflect the CHANGE IN POLICY and sent NEIGHBORHOOD WIDE as natural resources and water features are on public areas and public rights-of-way, not just on private properties. Ezone notifications were only sent to affected property owners and those within 50 feet of impacted properties.

Mailing notifications in 2020–2021 needed to detail the project in writing on the mailers itself and not depend mainly on QR codes thereby adding an extra step to understanding the project with sensitive response deadlines during the time of a worldwide pandemic. Listing long website addresses on the mailer made it difficult as property owners needed to hand type web addresses if they do not have QR code readers. Many property owners are not tech savvy so relying heavily on QR codes to relay information was not sufficient notification.

(See documentation AA – mailings 6/30/20 and 11/5/21 sent to affected property owners)

The City did not create an open dialog of communication and partnership when the City defunded Southwest’s umbrella neighborhood association, Southwest Neighborhood Inc (SWNI), and in so doing also defunded the 17 Southwest neighborhood associations who relied on the City for the majority of their funding. The neighborhood associations are having difficulties financially and outreach has been challenging; instead, they are distracted by financially trying to survive. Effective communication with all neighborhoods has been severely effected due to changes in leadership and internal challenges at the Office of Communication and Civic Life which oversees ALL the 95 neighborhood associations throughout Portland. In so doing, the City is not giving affected property owners the means to be properly represented when approximately 17,000 properties and property values are effected by the Environmental Overlay Map Correction Project.

**Request 6: The Ezone project needs to be more transparent to the Public in its communications.** The project has been stated repeatedly that there is no change in policy. The communication has not been transparent.

Below are statements stating there are no policy change to the Ezone Map Correction Project.

(See documentation AB for links to work sessions and hearings)

In Planning and Sustainability’s Open Public Hearing, August 24, 2021 (start 1:05:04)

Ezone Staffer, Daniel Soebbing:

“as proposed, our proposal really is a map correction project, and we’re not proposing any changes in policy.”

In City Council's Open Hearing February 16, 2022 (start 17:16)

Ezone Staffer, Daniel Soebbing:

"Portland has had Ezones for a long time starting in 1989 and up to 2003. Thirteen different areas specific natural resources protection plans were adopted to protect resources in different parts of the City. Each of these plans say which resources are intended to be protected and we've not trying to change that intent. We are only trying to correct the Ezone to match the existing adopted policy."

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Please look at the 32-page extensive mapping provided which shows "in red" all the areas of reduced protection P zones in the headwater and tributary areas.

File: EzoneMaps\_combined061621 (any updates after June 2021 is not reflected)

Below are the headwater and tributary areas affected with reduction of protection P zones.

**Map shows the extent of multiple areas affected.**

**Fanno Creek**

- Columbia and Sylvan Creek Headwaters NE FC2
- Lowell Creek FC3
- Bridlemile Creek
- Ivey Creek
- Fanno Creek and Tributaries FC5
- SW Kanan Drainages FC8
- Vermont Tributary FC9
- Woods Creek FC10

**Tryon Creek and Southwest Hills East**

- SW Burton & Skyline SW4
- Mt Sylvania SW9
- George Himes Park SW11
- Capitol Hills/Burlingame SW13
- Marshall Park / Capitol Hill SW16
- Riverview Natural Area SW17
- Tryon Creek State Park SW22
- Dunthorpe SW23

**Forest Park and Northwest District**

- Miller Creek West FP3
- Miller Creek South FP4
- Saltzman Creek FP20
- Mount Calvary Cemetery FP29
- Burnside Headwaters FP37
- Meridian Royal Manor FP35
- Cornell Headwaters FP26

**Skyline West**

- Rock Creek North SK1
- Bronson Creek SK4
- Forest Heights North SK5
- Cedar Mill Creek Headwaters SK9
- NW Skyline & Brynwood SK18
- NW Skyline & Brynwood SK19

Thank you, Mayor, and Commissioners, for your time listening to our concerns.  
It is easier to protect than to rehabilitate natural resources.

First, Protect the Best—the Source.

The watershed and headwaters, in the Southwest Hills and Northwest Hills, are the start of our entire water system. It is where the coolest, purest, and cleanest water starts. The water quality degrades further down the stream with less shade, more stormwater, and more water pollution.

If you weaken your heart, you weaken your entire body. The watershed is the heart, and the headwaters and tributaries are the arteries that pump blood throughout the entire body to keep the body alive.

Protect the heart.

Protect the Source of Our Entire Water System.

Sincerely,  
From the 32 of us.

Barrett Streu  
Rachel Streu  
Yoann Foucher  
Laurence Juthy  
Mike Kutter  
Marti Kutter  
Hugh Givens  
Marilyn Cover  
Kathy Prosser  
Steve Prosser  
Kevin Pendergast  
Eugene Yeboah  
Sarah Dandurand  
Tiffany Rohani  
Reyaz Rohani  
Lynne Chao  
Katie Cooley  
Andrew Markell  
Kate Markell  
Chris Baier  
Russ Black  
Joan Black  
Keph Sherin  
Dave Fitzpatrick  
Joseph F. Kovar  
Shih-ling Kovar  
Laura Swingen  
Carole Bertrand  
Laurali Hudgins  
Jill McAllister  
Scott McAllister  
Audra Oakley

JUNE 30, 2020

## NOTICE OF A PROPOSED ZONING MAP CHANGE THAT MAY AFFECT THE PERMISSIBLE USES OF YOUR PROPERTY

### What does this mean for me?

You are receiving this notice because the Planning and Sustainability Commission (PSC) is considering proposed Zoning Map changes which, if adopted, may affect the permissible uses of your property. These changes, in turn, may affect the value of your property.

One of the properties that may be affected is your property at:

State ID #:

The current overlay zone(s) for this property is (are):

The proposed overlay zone(s) for this property is (are):

The Environmental Overlay Zone Map Correction Project is adjusting the zones to align with existing rivers, streams, wetlands, flood area, vegetation, steep slopes and wildlife habitat across Portland. The changes may impact if, or where, development can occur on your property.

### How can I learn more about this proposed change?

1. Visit the Map App: [www.portlandmaps.com/bps/mapapp](http://www.portlandmaps.com/bps/mapapp)  
Click on "Ezone Project" and type in the property address to see proposed changes for your property.
2. Visit the Ezone Map Correction project website: [www.portland.gov/bps/ezones](http://www.portland.gov/bps/ezones)
3. Review the proposed draft project report:  
[www.portland.gov/bps/ezones/ezones-map-correction-project-documents](http://www.portland.gov/bps/ezones/ezones-map-correction-project-documents)  
Hard copies of the draft report available. Call 503-823-7700 to request a copy or confirm availability.
4. View a self-guided presentation about the project:  
[www.portland.gov/bps/ezones/ezones-map-correction-project-documents](http://www.portland.gov/bps/ezones/ezones-map-correction-project-documents)  
The presentation is listed under "Guides."
5. Attend an online one-on-one question and answer session:  
[www.signupgenius.com/go/9040E4EA2AA4F85-oneonone](http://www.signupgenius.com/go/9040E4EA2AA4F85-oneonone)  
Please sign up for one 30-minute time slot.
6. Ask City staff a question. Call 503-823-4225 or email [ezone@portlandoregon.gov](mailto:ezone@portlandoregon.gov).



### How can I comment on this proposal?

#### Submit written testimony to the PSC:

Because this meeting will be held virtually, we strongly encourage written testimony. Written testimony must be received by the end of the hearing and must include your full name and mailing address. Testify between now and July 28, 2020.

- **Use the Map App:**  
Testifying in the Map App is as easy as sending an email. Go to [www.portlandmaps.com/bps/mapapp](http://www.portlandmaps.com/bps/mapapp)  
Click on "Ezone Project" and then click the "Testify" button.
- **Use U.S. Mail:**  
Portland Planning and Sustainability Commission  
Ezone Map Correction Project Testimony  
1900 SW 4th Avenue, Suite 7100  
Portland, OR 97201

#### Testify at the PSC hearing:

**The hearing, on July 28 will be held virtually.** The meeting starts at 4 p.m. Please check the PSC calendar at [www.portland.gov/bps/psc/events](http://www.portland.gov/bps/psc/events) a week in advance to confirm the time of this agenda item. You can use a computer, mobile device or telephone to testify during the hearing. To testify during the hearing, please visit the project website to register: [www.portland.gov/bps/ezones](http://www.portland.gov/bps/ezones). You will receive a confirmation email containing information about joining the virtual hearing. **The deadline to sign up for the July 28 PSC hearing is Monday, July 27 at 4:00 p.m.** Individuals have two minutes to testify, unless otherwise stated by the Commission Chair at the meeting.

To confirm the date, time and location, check the PSC calendar at [www.portland.gov/bps/psc/events](http://www.portland.gov/bps/psc/events)

All testimony to the Planning and Sustainability Commission is considered public record, and testifiers' name, address and any other information included in the testimony may be posted on the website.





NOVEMBER 5, 2021

## NOTICE OF PROPOSED ZONING CODE AND ZONING MAP CHANGES THAT MAY AFFECT THE PERMISSIBLE USES OF YOUR PROPERTY

### What does this mean for me?

You are receiving this notice because the Planning and Sustainability Commission (PSC) is considering proposed Zoning Code, Zoning Map and, where applicable, Comprehensive Plan Map changes which, if adopted, may affect the permissible uses of your property. These changes, in turn, may affect the value of your property.

One of the properties that may be affected is your property at:

State ID #:

The current base zone(s) for this property is (are):

The current overlay zone(s) for this property is (are):

The proposed overlay zone(s) for this property is (are):


**A Summary of Residential Infill Project 2.** This project will bring Portland into compliance with Oregon House Bill (HB) 2001. Portland's zoning rules will change to allow duplexes on all lots where houses are allowed and allow other middle housing types such as triplexes, fourplexes, attached houses, and cottage clusters in many residential areas. Most of these housing types are already allowed in the R2.5, R5, and R7 single-dwelling zones. This project will allow them in the R10 and R20 zones. Only houses, accessory dwelling units (ADUs) and duplexes will be allowed in areas that have natural resources or natural hazards like flood, landslide, or wildfire risk. These areas are identified by the Constrained Sites Overlay Zone ("z" overlay zone, for short).

If your property is zoned **R2.5, R5, or R7**, you are receiving this notice because the "z" overlay zone is proposed on your property.

If your property is zoned **R10 or R20**, you are receiving this notice because your property is less than 10,000 sq ft and new building size limitations will apply. The "z" overlay zone may be applied to your property, too.

### How can I learn more about this proposed change?

- Visit the Map App:** [www.portlandmaps.com/bps/mapapp](http://www.portlandmaps.com/bps/mapapp)  
Click on "Residential Infill Part 2" and type in property address to see proposed changes for your property.
- Visit the RIP2 website:** [www.portland.gov/bps/rip2](http://www.portland.gov/bps/rip2)  
Additional information is available on the website. Hard copies of the draft report are available. Call 503-823-1105 to request a copy.
- Ask City staff a question.** Call project staff at 503-823-1105 or email [residential.infill@portlandoregon.gov](mailto:residential.infill@portlandoregon.gov)
- Attend a virtual info session.** November 17 (eastside) and November 18 (westside). For info on how to attend, visit the RIP 2 Calendar for upcoming events at [www.portland.gov/bps/rip2](http://www.portland.gov/bps/rip2)



### How can I comment on this proposal?

#### Submit written testimony:

Because the hearings will be held virtually, we strongly encourage written testimony. Written testimony must be received by the end of the hearing and must include your full name and mailing address. **Testify between now and December 14, 2021.**

#### • Use the Map App:

Testifying in the Map App is as easy as sending an email. Go to [www.portlandmaps.com/bps/mapapp](http://www.portlandmaps.com/bps/mapapp)  
Click on "Residential Infill Project - Part 2" and then click on the "Testify" button.

#### • Use U.S. Mail:

Portland Planning and Sustainability Commission  
RIP2 Testimony  
1810 SW 5th Ave, Suite 710  
Portland, Oregon 97201

#### Testify at a PSC hearing:

**The hearing, on December 14 will be held virtually.** The meeting starts at 5:00 p.m. Please check the PSC calendar at [www.portland.gov/bps/psc/events](http://www.portland.gov/bps/psc/events) a week in advance to confirm the time of this agenda item. You can use a computer, mobile device or telephone to testify during the hearing. To testify during the hearing, please visit the project website to register: [www.portland.gov/bps/rip2](http://www.portland.gov/bps/rip2). You will receive a confirmation email containing information about joining the virtual hearing. **The deadline to sign up for the December 14 PSC hearing is Monday, December 13 at 4:00 p.m.** Individuals have three minutes to testify, unless stated otherwise by the Commission Chair at the meeting.

To confirm the date, time and location, check the PSC calendar at [www.portland.gov/bps/psc/events](http://www.portland.gov/bps/psc/events)

All testimony to the Planning and Sustainability Commission is considered public record, and testifiers' name, address and any other information included in the testimony may be posted on the website.



M56-RIP2-2021



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## Documentation AB – Links to PSC Work Sessions, PSC open hearings, City Council open hearings

### Planning and Sustainability Commission (PSC) upcoming and past work sessions and open hearings:

<https://www.portland.gov/bps/psc>

7/14/20 PSC briefing

[https://www.youtube.com/watch?v=DuwC4Vb-XSs&list=PLfrETCbg3gsjbN6XeJJe\\_CS1tIRcX87k-&index=49](https://www.youtube.com/watch?v=DuwC4Vb-XSs&list=PLfrETCbg3gsjbN6XeJJe_CS1tIRcX87k-&index=49)

7/28/20 PSC open hearing #1

[https://www.youtube.com/watch?v=P-AkuaY-ijk&list=PLfrETCbg3gsjbN6XeJJe\\_CS1tIRcX87k-&index=55](https://www.youtube.com/watch?v=P-AkuaY-ijk&list=PLfrETCbg3gsjbN6XeJJe_CS1tIRcX87k-&index=55)

9/8/20 (Ezones start at 2:35) PSC briefing

<https://www.portland.gov/bps/psc/events/2020/9/8/planning-and-sustainability-commission-meeting>

2/9/21 (Ezones start at 41:49) PSC briefing

<https://www.portland.gov/bps/psc/events/2021/2/9/planning-and-sustainability-commission-meeting>

2/23/21 (Ezones start at 1:20:09) PSC open hearing #2

<https://www.portland.gov/bps/psc/events/2021/2/23/planning-and-sustainability-commission-meeting>

4/13/21 (Ezones start at 2:08:39) PSC work session

<https://www.portland.gov/bps/psc/events/2021/4/13/planning-and-sustainability-commission-meeting>

5/4/21 (Ezones start at 51:20) PSC work session

<https://www.portland.gov/bps/psc/events/2021/5/4/planning-and-sustainability-commission-meeting>

6/22/21 (Ezones start at 7:30) PSC work session

<https://www.portland.gov/bps/psc/events/2021/6/22/planning-and-sustainability-commission-meeting>

Daniel Soebbing, Ezone staffer:

(start at 46:56)

“We’ve done an analysis citywide for the Ezones and looking for sites that were highly constrained by protection zones and looking at sites that have 60 to 70 percent coverage of protection zones where it may be impossible to find a reasonable building site on the sites just because the standard constrained it so much. So on the sites that are like that, we’ve gone in and we’ve done a **manual conversion** to convert Protection Zones to Conservation Zones to at least preserve some developable space on their lots. And we’ve done for undeveloped sites that are heavily forested with streams on them and we also done it for sites that are developed and dividable so that we are trying to preserve some additional economic value that someone can extract from these sites by doing additional development on the sites. We done that. We did that as an automatic process citywide.”

7/27/21 (Ezones start at 38:57) PSC open public hearing #3

<https://www.portland.gov/bps/psc/events/2021/7/27/planning-and-sustainability-commission-meeting>

8/24/21 (Ezones start at 5:35) PSC open public hearing #3

<https://www.portland.gov/bps/psc/events/2021/8/24/planning-and-sustainability-commission-meeting>

In Planning and Sustainability's Open Public Hearing, August 24, 2021 (start 1:05:04)

Ezone Staffer, Daniel Soebbing:

"as proposed, our proposal really is a map correction project, and we're not proposing any changes in policy."

9/28/21 (Ezones start at 2:20:00) PSC work session. Conclusion of Ezone Project with PSC. APPROVED to move forward to City Council approval

<https://www.portland.gov/bps/psc/events/2021/9/28/planning-and-sustainability-commission-meeting>

2/16/21 (Ezones start at 6:00) Portland City Council's Open Public Hearing #1

<https://www.youtube.com/watch?v=sm0ZqKuBUNQ>

In City Council's Open Hearing February 16, 2022 (start 17:16)

Ezone Staffer, Daniel Soebbing:

"Portland has had Ezones for a long time starting in 1989 and up to 2003. Thirteen different areas specific natural resources protection plans were adopted to protect resources in different parts of the City. Each of these plans say which resources are intended to be protected and we've not trying to change that intent. We are only trying to correct the Ezone to match the existing adopted policy."

In City Council's Open Hearing February 16, 2022 (start 22:15)

Ezone Staffer, Daniel Soebbing:

Discussing vulnerability analysis or economic displacement analysis with map of Ezones areas

4/14/21 City Commissioner's open public hearing #2

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#### **Documentation A – LiDAR mapping dates**

Project	Dates Flown (LiDAR)
Portland Hills	July 2, 2004
Portland – Mt. Hood Study Area	Mar 16, 2007 – Apr 11, 2009
West Metro	Dec 29, 2012 – Jan 2, 2013
Metro	July 9 – Sep 7, 2014

<https://www.oregongeology.org/lidar/collectinglidar.htm>

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#### **Documentation B – Redactions of environmental reports and their maps**

##### **Environmental Overlay Zone Map Correction Project redacts six existing environmental reports (and corresponding maps):**

These are part of the adopted existing plans from 1989. (underlined words are added, redactions are strikethrough) **Environmental Overlay Zone Maps Correction Project Proposed Draft June 2020**

**VOLUME 1, PART B: Project Report, Zoning Code and Map Updates**

**33.430.020 Environmental Reports**

[Proposed Draft V1B Project Report Zoning Code and Map Amendments](#)

p. 6 (bottom page numbering)

**Environmental Overlay Zone Maps Correction Project Proposed Draft June 2020**

**VOLUME 1, PART B: Project Report, Zoning Code and Map Updates**

**33.430.020 Environmental Reports** (See documentation C—links to all redacted plans)

The application of the environmental zones is based on detailed studies that have been carried out within ~~five~~ten separate areas of the City. The City's policy objectives for these study areas are described in ~~the~~ reports. Each study ~~report~~ identifies the natural resources features and describes the functional values ~~of the~~ within resource sites. Functional values are the benefits provided by resources. The values for each resource site are described in the inventory section of these reports. The City has adopted the following ~~five~~ten environmental study reports:

- Environmental Overlay Zone Map Correction Project
- ~~Balch Creek Watershed Protection Plan~~
- Columbia Corridor Industrial and Environmental Mapping Project
- East Buttes, Terraces and Wetlands Conservation Plan
- ~~Fanno Creek and Tributaries Conservation Plan~~
- ~~Johnson Creek Basin Protection Plan~~
- Northwest Hills Natural Areas Protection Plan
- ~~Skyline West Conservation Plan~~
- ~~Southwest Hills Resource Protection Plan~~
- ~~ESEE Analysis and Recommendation for Natural, Scenic and Open Space Resources within Multnomah County Unincorporated Areas~~
- Middle Columbia Corridor/Airport Economic, Social, Environmental and Energy (ESEE) Analysis"

~~Map 430-1 Balch Creek Watershed Protection Plan Area~~

Map 430-1 Environmental Overlay Zone Map Correction Project Area

Map 430-2 Columbia Corridor Industrial and Environmental Mapping Project Area

Map 430-3 East Buttes, Terraces and Wetlands Conservation Plan Area

~~Map 430-4 Fanno Creek and Tributaries Conservation Plan Area~~

~~Map 430-5 Johnson Creek Basin Protection Plan Area~~

Map 430-64 Northwest Hills Natural Areas Protection Plan Area

~~Map 430-7 Skyline West Resource Protection Plan Area~~

~~Map 430-8 Southwest Hills Resource Protection Plan Area~~

Map 430-95 East Columbia Neighborhood Natural Resources Management Plan Area

~~Map 430-10 (Smith and Bybee Lakes Natural Resources Management Plan Area — repealed on 12/31/13)~~

Map 430-126 Peninsula One Natural Resources Management Plan Area

Map 430-117 Forest Park Natural Resources Management Plan Area

Map 430-138 Middle Columbia Corridor/Airport Natural Resource Inventory Environmental Mapping Project Area

Map 430-149 Bank Reconfiguration and Basking Features Area

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## **Documentation C – Link to redacted Natural Resource Conservation Plans**

Environmental Reports links (redacted plans)

**Balch Creek Watershed Protection Plan - 1991**

**Fanno Creek and Tributaries Conservation Plan - 1993**

**Johnson Creek Basin Protection Plan - 1991**

**Skyline West Conservation Plan - 1994**

**Southwest Hills Resource Protection Plan - 1992**

**ESEE Analysis and Recommendations for Natural, Scenic, and Open Space Resources within Multnomah County Unincorporated Urban Areas - 2002**

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**Documentation D – Metro Title 3: Criteria for Steep Slopes**

Metro Title 3 was adopted in 1998 addressing water quality, flood management, and wildlife habitat. Metro Title 3 extends the protection P zones up to 200 feet for steep slopes (if steepness is  $\geq 25\%$ , 150 feet or longer, and next to a primary protected water feature. For steep slopes  $\geq 25\%$ , slope is under 150 feet, next to a primary water feature, the protection P zone is calculated by the distance from starting point of measurement to top of ravine (break in  $\geq 25\%$  slope), plus 50 feet.

Urban Growth Management Functional Plan  
Metro Title 3

Table 3.07-3 Protected Water Features  
(Section 3.07.340(b)(2)(A))

p. 15 (bottom page numbering)

<https://www.oregonmetro.gov/sites/default/files/2018/04/16/urban-growth-management-functional-plan-04162018.pdf>

**Table 3.07-3 - Protected Water Features**

(Section 3.07.340(b)(2)(A))

Protected Water Feature Type (see definitions)	Slope Adjacent to Protected Water Feature	Starting Point for Measurements from Water Feature	Width of Vegetated Corridor
Primary Protected Water Features <sup>1</sup>	< 25%	<ul style="list-style-type: none"> <li>Edge of bankfull flow or 2-year storm level;</li> <li>Delineated edge of Title 3 wetland</li> </ul>	50 feet
Primary Protected Water Features <sup>1</sup>	$\geq 25\%$ for 150 feet or more <sup>5</sup>	<ul style="list-style-type: none"> <li>Edge of bankfull flow or 2-year storm level;</li> <li>Delineated edge of Title 3 wetland</li> </ul>	200 feet
Primary Protected Water Features <sup>1</sup>	$\geq 25\%$ for less than 150 feet <sup>5</sup>	<ul style="list-style-type: none"> <li>Edge of bankfull flow or 2-year storm level;</li> <li>Delineated edge of Title 3 wetland</li> </ul>	Distance from starting point of measurement to top of ravine (break in $\geq 25\%$ slope) <sup>3</sup> , plus 50 feet. <sup>4</sup>
Secondary Protected Water Features <sup>2</sup>	< 25%	<ul style="list-style-type: none"> <li>Edge of bankfull flow or 2-year storm level;</li> <li>Delineated edge of Title 3 wetland</li> </ul>	15 feet
Secondary Protected Water Features <sup>2</sup>	$\geq 25\%$ <sup>5</sup>	<ul style="list-style-type: none"> <li>Edge of bankfull flow or 2-year storm level;</li> <li>Delineated edge of Title 3 wetland</li> </ul>	50 feet

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**Documentation E – Link to additional Natural Resource Conservation Plans that were omitted**

**Boring Lava Domes - Supplement to the Johnson Creek Basin Plan - 1997**

**Fanno Creek Watershed - 1999**

**Johnson Creek Watershed Summaries of Resource Site Inventories - 1998**

**Johnson Creek Floodplain Zoning Code Maintenance - 2003**

**Northwest Hills Protection Plan - 1992**

**Northwest Hills Study - 1985**

**NW Hills Natural Areas Protection Plan - 1991**

**NW Hills Natural Areas Protection Plan - 1995**

**Terwilliger Parkway Corridor Plan - 1983**

Note: There is a confusion on what Northwest plan was adopted as the name is spelled differently and no adoption date is mentioned. Proposed policy adopts “Northwest Hills Natural Areas Protection Plan”

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**Documentation F – Link to resource sites’ written criteria (page numbering below)**

[Proposed Draft V1A Project Report Summary of Results](#)

VOLUME 1, PART A: Project Report, Summary of Results

Forest Park and Northwest Hills District (FP 1 – FP41) pp. 30-46 (bottom page numbering)

Skyline West (SK1 –SK10) pp. 47-52

Tryon Creek and Southwest Hills East (SW 1 - SW 23) pp. 53-61

Fanno Creek (FC1-FC13) p. 62-67

East Buttes and Terraces (EB1-EB16) pp. 68-71

Johnson Creek (JC1-JC27) pp. 72-83

Boring Lava Domes (BL1-BL15) pp. 84-91

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**Documentation F-1 – Five main plans of the Environmental Overlay Zone Map Correction Project**

**Environmental Overlay Zone Map Correction Project is based on these five main plans.**

1. Climate Action Plan
2. 2035 Comprehensive Plan
3. Climate Emergency Declaration
4. State Land Use Goal 5
5. Metro Title 13

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## **Documentation G – Steep slope defined in written report as 25% or greater slope**

### Steep slope definition of 25 or greater in main written Proposed Draft Summaries

10 ENVIRONMENTAL OVERLAY ZONE MAP CORRECTION PROJECT main reports that list the definition of steep slopes per resource sites:

Steep slopes in the Environmental Overlay Zone Map Correction Project reports are defined as land with a 25% or greater slope for these resource sites.

“Steep slopes: Land with a 25% or greater slope.”

ENVIRONMENTAL OVERLAY ZONE MAP CORRECTION PROJECT  
VOLUME 1, PART A: Project Report,  
Summary of Results, PROPOSED DRAFT, June 2020, p. 13 (bottom page numbering)  
[Proposed Draft V1A Project Report Summary of Results](#)

ENVIRONMENTAL OVERLAY ZONE MAP CORRECTION PROJECT  
VOLUME 2, PART A1:  
Forest Park and Northwest District, Natural Resources Inventory and Protection Decisions  
(Resource Sites 1-20)  
PROPOSED DRAFT, June 2020, p. 5 (bottom page numbering)  
[Proposed Draft Volume 2A1 Forest Park and Northwest Resource Sites 1 – 20](#)

ENVIRONMENTAL OVERLAY ZONE MAP CORRECTION PROJECT  
VOLUME 2, PART A2: Forest Park and Northwest  
District, Natural Resources Inventory and Protection Decisions, (Resource Sites 21-41)  
PROPOSED DRAFT, June 2020, p. 5 (bottom page numbering)  
[Proposed Draft Volume 2A2 Forest Park and Northwest Resource Sites 21-41](#)

ENVIRONMENTAL OVERLAY ZONE MAP CORRECTION PROJECT  
VOLUME 2, PART B:  
Skyline West, Natural Resources Inventory and Protection Decisions  
PROPOSED DRAFT, June 2020, p. 5 (bottom page numbering)  
[Proposed Draft Volume 2B Skyline West](#)

ENVIRONMENTAL OVERLAY ZONE MAP CORRECTION PROJECT  
VOLUME 2, PART C: Tryon Creek and Southwest Hills East, Natural Resources Inventory and  
Protection Decisions  
PROPOSED DRAFT, June 2020, p. 5 (bottom page numbering)  
[Proposed Draft Volume 2C Tryon Creek and Southwest Hills](#)

ENVIRONMENTAL OVERLAY ZONE MAP CORRECTION PROJECT  
VOLUME 2, PART D:  
Fanno Creek, Natural Resources Inventory and Protection Decisions  
PROPOSED DRAFT, June 2020, p. 5 (bottom page numbering)  
[Proposed Draft Volume 2D Fanno Creek](#)

ENVIRONMENTAL OVERLAY ZONE MAP CORRECTION PROJECT  
VOLUME 2, PART E:

East Buttes and Terraces, Natural Resources Inventory and and Protection Decisions  
PROPOSED DRAFT, June 2020, p. 5 (bottom page numbering)

[Proposed Draft Volume 2E East Buttes and Terraces](#)

ENVIRONMENTAL OVERLAY ZONE MAP CORRECTION PROJECT  
VOLUME 2, PART F:

Johnson Creek, Natural Resources Inventory and Protection Decisions  
PROPOSED DRAFT, June 2020, p. 5 (bottom page numbering)

[Proposed Draft Volume 2F Johnson Creek](#)

ENVIRONMENTAL OVERLAY ZONE MAP CORRECTION PROJECT  
VOLUME 2, PART G:

Boring Lava Domes, Natural Resources Inventory and Protection Decisions  
PROPOSED DRAFT, June 2020, p. 5 (bottom page numbering)

[Proposed Draft Volume 2G Boring Lava Domes](#)

ENVIRONMENTAL OVERLAY ZONE MAP CORRECTION PROJECT  
VOLUME 3: Natural Resources Inventory Summary

PROPOSED DRAFT, June 2020, p. 5 (bottom page numbering)

[Proposed Draft V3 Natural Resources Inventory](#)

“C.2. Verifying Habitat Areas

Steep slopes – land with greater than 25% slope upward from river, streams and open water.”

ENVIRONMENTAL OVERLAY ZONE MAP CORRECTION PROJECT  
VOLUME 4: Regulatory Compliance

PROPOSED DRAFT, June 2020, p. 5 (bottom page numbering)

[Proposed Draft V4 Compliance Report](#)

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**Documentation H-1 – Fanno Creek: the importance of protecting streams, steep slopes and unstable soil  
From Fanno Creek and Tributaries Conservation Plan -1993**

Fanno Creek and Tributaries Conservation Plan which has been redacted shows the importance of protection steep slopes due to unstable soil composition. This plan needs to be included.

[Fanno Creek and Tributaries Conservation Plan - 1993](#)

**Purpose of the Plan**

P 5 (upper page numbering) The Fanno Creek Plan has the following objectives:

1. To bring the City’s comprehensive plan, zoning code, and zoning maps into compliance with State Wide Planning Goal. 5;
2. To reduce the threat of public health safety and welfare from erosion, land slides, earthquakes, and flooding;
3. To help achieve compliance with state and federal water quality regulations; and
4. To facilitate development designed to maintain and enhance natural values provided by Fanno Creek and its tributaries.



## **Geology**

P 9-10 (upper corner numbering)

The Fanno Creek Watershed...known as the West Hills...are composed mostly of Columbia River Basalt. The mountains contain remnant volcanoes, and these are composed of Boring Basalt. Basalt is an igneous rock that begins as lava and fractures as it cools...In a tropical climate basalt can break down into a red clay called laterite. Red, brown, and black basalt flows are exposed in ravines. In other places the basalt is covered by about 25 feet of wind deposited silt. Because basalt fractures when it cools, it stores water in honey-combed shaped spaces between the rock. Underground streams flowing through these cracks are called aquifers. This is why springs are common in areas of exposed basalt. Fractures and faults in the West Hills are also identified as severe earthquakes hazards. Soil that is saturated, but not consolidated, amplifies the motion of earthquakes.

## **Soils**

P 10 (upper corner numbering)

Fanno Creek watershed soils are mostly silts and clays. The United States Soil Conservation Service has identified five soil types (Cascade, Cornelius, Delena, Goble, and Saum) in the watershed. Prior to urban development, almost 95 percent of Portland's portion of the Fanno Creek Watershed was composed of Cascade Silt-loam. This is a wind-deposited soil that erodes easily and does not soak-up storm water very quickly. This top soil is over a harder layer of soil called a "fragipan." Very little water can soak down through this fragipan: plant roots also have a hard time growing through this layer. When it rains, the top two to five feet of soil saturate because water can penetrate no lower. This situation causes aquifers to perch on fragipans during the winter. This is a naturally occurring but dangerous situation. Erosion potential is high; there is a lot of storm water run-off, and landslides result if vegetation is removed from slopes. In the steep headwater areas of Fanno Creek, forests hold soil to the sides of the hills. In fully vegetated sites, there is still a high natural rate of soil erosion. The rate is about three tons, per acre, per year.

Since Portland contains almost all the steep in the headwaters of Fanno Creek, the City is the only place where water runs fast enough to flush eroding soil from gravel stream beds at a rate faster than the natural rate of erosion can silt them up. Most of Fanno Creek has, and has always had, a mud bottom.

P 17

The balanced relationship between the Fanno Creek Watershed's geologic formations, soils, groundwater, and surface water is perpetuated by the extensive canopy cover and root system of the forest which shelters and stabilizes the hillside slopes. Activities that disturb this fragile relationship can substantially degrade resource values causing landslides, flooding, erosion, and sedimentation. Groundwater and precipitation feed the many creeks within the Fanno Creek Watershed. These creeks provide habitat for fish, amphibians, and other aquatic organisms and, which is in turn, provide a source of food for terrestrial wildlife. These creeks are also the most important source of water for terrestrial wildlife. The mosaic of Fanno Creek Watershed forest types provide a range of habitat for a diverse population of indigenous wildlife. These interacting and interdependent elements play vital roles in protecting the balance, health, and vitality of the Fanno Creek Watershed forest and of watershed ecology as a whole.

P 17

### **Authorities Guiding the Plan (of Fanno Creek and Tributaries Conservation – 1993**

Several authorities have guided the preparation of this plan. They include state, federal, and local authorities. Some of these authorities are advisory and others are mandatory."

### **Statewide Planning Goal 5 and Administrative Rule**

Statewide Planning Goal 5 requires all city and county governments to, "Conserve open space and protect natural and scenic resources." The Oregon Land Conservation and Development Commission adopted this Goal in 1974, and provided further guidance for carrying it out in 1981. Between 1974 and 1981 the City enacted a variety of land use regulations to meet Statewide Planning Goal 5. The State agreed that these regulations were sufficient, and approved the Portland Comprehensive Plan on May 1, 1981.

The State did not draft an administrative rule describing how local governments should apply Statewide Planning Goal 5 until after the Portland Plan had been submitted for approval. Land Conservation and Development Commission records show that the Goal 5 Administrative Rule was adopted during the same meeting in which the Portland Plan received state approval. The rule was not, however, applied to the Portland Plan because the rule was not effective until it was filed with the Secretary of State's office on May 8, 1981. The new rule established substantive and procedural requirements for the protection of resources that the City of Portland had not followed in formulating its Comprehensive Plan. Inventory methods, forms of analysis, and protective measures were the most obvious examples. The Oregon Legislative Assembly also enacted legislation in 1981 authorizing periodic review of all previously approved land use plans. The combined effect of the 1981 legislation and Goal 5 Administrative Rule was a requirement that the City bring its Comprehensive Plan, land use regulations, and zoning maps into compliance with the new rule before its first periodic review. The Portland City Council adopted ordinances in 1982 and 1988 correcting most deficiencies relating to Statewide Planning Goal 5 requirements, but the Goal 5 Administrative Rule has never been applied to natural resources in the Fanno Creek Watershed. Fanno Creek natural resources must, therefore, be identified, and in certain cases protected, before the State will allow the City to complete periodic review. The following paragraphs outline the content of the Fanno Creek Plan and describe process required by the 1981 administrative rule to identify, evaluate, and protect natural resources.

### **ENVIRONMENTAL CONSEQUENCES**

#### **Environmental Consequences of Resource Protection**

The construction of buildings and impervious surfaces and other human activities which disturb or remove natural resources such as forest vegetation and soils can affect watershed resources in the following ways:

- **Increases in erosion, sedimentation and landslides.** The unstable soils and steep slopes of the Fanno Creek Watershed can become highly susceptible to erosion, slumping, and failure when forest cover is removed or when cuts and fills are made for roads and buildings. These activities can result in public safety hazards and can degrade wildlife habitat and increase sediment transport, creek bed siltation and degradation or loss of fish spawning grounds.
- **Decreases in creek flows during dry months.** Reduced forest cover and increased impervious surfaces **reduce groundwater recharge and lower the volume of water in creeks contributed by groundwater during low flow periods.** This may alter stream characteristics by **causing portions of affected creeks to dry up earlier in the season, removing a local source of water and moisture essential to the survival of fish, amphibians and aquatic organisms, and preventing salmonids from reaching spawning grounds.**
- **Increases in peak runoffs.** Increase impervious surfaces can increase surface runoff, reduce vegetative detention functions, and compact soils, and all this can result in increased peak flows. Increased peak flows increase erosion, bank undercutting, creekside landslides, sediment transport, **siltation of spawning beds and flooding.**
- **Increases in creek temperature.** Heated runoffs from roads, roofs and compacted soils combined with reduced vegetative cover raise summer water temperatures. **Water temperatures in the high 60° and**

**70° can be lethal to salmonids and are likely to reduce fish runs...; high water temperatures can also degrade habit for amphibians and other aquatic organisms.**

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## **Documentation H-2 – Fanno Creek: Endangered Cutthroat Trout**

### **Fanno Creek and Tributaries Conservation Plan - 1993**

P 16 (upper corner numbering)

#### **Fish and Wildlife**

**Fanno Creek contains Cutthroat trout (*Oncorhynchus clarki*).** There are different types of these trout, and each type has a distinct life cycle. Some live in the ocean and spawn in streams; others live in lakes and spawn in streams; a third kind lives in larger streams and spawns in small streams, **and the last kind spends its entire life in small streams...These small fish are full year residents of Fanno Creek and may only migrated a few hundred yards in an entire life time.** Ocean and lake dwelling cutthroat do not visit Fanno Creek, but an occasional large trout will swim up the Willamette and Tualatin Rivers to spawn in Fanno Creek. The spawning beds for both these cutthroat types are in the faster, gravel-bottomed headwaters. The portion of the watershed within Portland contains almost all known spawning areas. This is because the small hillside tributaries north of Beaverton-Hillsdale Highway, and the Woods Creek tributary south of Beaverton-Hillsdale Highway, have gravel bottoms...These flat-land creeks have mud bottoms that are not suitable for spawning, but they are very important for rearing and feeding, especially during seasonal low water and droughts...

P 35

#### **Fish and Wildlife**

Every Fanno Creek Watershed resource site contains important habitat for fish and wildlife. Two species of special concern are the pileated woodpecker and the cutthroat trout. These species are becoming more rare, and will disappear entirely for the urban environment unless their habitat is maintained.

1. Provide for spawning, rearing, feeding and migration of fish. All water bodies in the Fanno Creek Watershed contain significant fish habitat because they provide for spawning, rearing, feeding, and migration of fish. Many drainage ways, seasonal streams, and stream segments where fish are not present, or not present year-round, are also significant because they provide the quantity and quality of water to support down-stream fisheries.

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## **Documentation H-3 – Fanno Creek: Endangered Pileated Woodpecker**

### **Fanno Creek and Tributaries Conservation Plan - 1993**

P 16 (upper corner numbering)

#### **Fish and Wildlife**

The Pileated woodpecker (*Dryocopus pileatus*) is a species dependent on standing dead and dying trees in older forests. The bird is a cavity nester and is disappearing from rural areas because of timber harvest and the use of agricultural chemicals. The woodpecker ...can be observed in the Fanno Creek Watershed. Protection of older forests in urban areas is an important conservation strategy for the survival of this species.

P 17

### **Fish and Wildlife**

The balanced relationship between the Fanno Creek Watershed’s geologic formations, soil, groundwater, and surface water is perpetuated by the extensive canopy cover and root system of the forest which shelters and stabilizes the hillside slopes. Activities that disturb this fragile relationship can substantially degrade resource values by causing landslides, flooding, erosion, and sedimentation. Groundwater and precipitation feed the many creeks within the Fanno Creek Watershed. These creeks provide habitat for fish, amphibians, and other aquatic organisms and, which in turn, provide a source of food for terrestrial wildlife. These creeks are also the most important source of water for terrestrial wildlife. The mosaic of Fanno Creek Watershed forest types provide a range of habitat for a diverse population of indigenous wildlife. These interaction and interdependent elements play vital roles in protecting the balance, health, and vitality of the Fanno Creek Watershed forest and of watershed ecology as a whole.

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### **Documentation H-4 – Fanno Creek Watershed environmental report**

#### **Fanno Creek Watershed - 1999**

P 8

The highest part of Fanno Creek basin is 1,060 feet above sea level at Council Crest. The upper portion of the Watershed contains streams in deep ravines. Some of the upper streams drop more than 400 feet in elevation per mile traveled.

P 9

### **Soils**

Fanno Creek watershed soils are mostly silts and clays. The United States Soil Conservation Service has identified five soil types (Cascade, Cornelius, Delena, Goble, and Saum) in the watershed. Prior to urban development, almost 95 percent of Portland’s portion of the Fanno Creek Watershed was composed of Cascade Silt-loam. This is a wind-deposited soil that erodes easily and does not soak-up storm water very quickly. This top soil is over a harder layer of soil called a “fragipan.” Very little water can soak down through this fragipan: plant roots also have a hard time growing through this layer. When it rains, the top two to five feet of soil saturate because water can penetrate no lower. This situation causes aquifers to perch on fragipans during the winter. This is a naturally occurring but dangerous situation. Erosion potential is high; there is a lot of storm water run-off, and landslides result if vegetation is removed from slopes. In the steep headwater areas of Fanno Creek, forests hold soil to the sides of the hills. In fully vegetated sites, there is still a high natural rate of soil erosion. The rate is about three tons, per acre, per year.

Since Portland contains almost all the steep headwaters of Fanno Creek, the City is the only place where water runs fast enough to flush eroding soil from gravel stream beds at a rate faster than the natural rate of erosion can silt them up. Most of Fanno Creek has, and has always had, a mud bottom.

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### **Documentation I – Missing two streams mapped in April 2021**

Missing two streams in Southwest Hills in April: one a tributary stream in the headwaters area of Fanno Creek.

April 13, 2021—PSC (closed work session) (starts at 2:09) notes the missing two streams and adds those streams to the maps.

[https://www.youtube.com/watch?v=y4y6FRyFfy8&list=PLfrETCbg3gsjbN6XejJe\\_CS1tIRcX87k-&index=11&t=10325s](https://www.youtube.com/watch?v=y4y6FRyFfy8&list=PLfrETCbg3gsjbN6XejJe_CS1tIRcX87k-&index=11&t=10325s)

Attached is documentation of the two streams from that meeting: ezone\_packet.PDF (pp. 4, 13-14 (map of tributary stream), 19 (map of second stream))

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### **Documentation J – Marquam Park incorrectly mapped**

Marquam Park incorrectly mapped:

See attachment MarquamPark.pdf which show errors in proposed ezones mapping of Marquam Park vs. Environmental Overlay Zone Maps Correction Project's written report for SW9 which says all of Marquam Park is protected with P zone.

Or see 32-page map attached, red circle #2

Environmental Overlay Zone Map Correction Project report stating all forest protection vegetation is protected in Marquam Hill Park in SW9.

Volume 1, Part A: Project Report, Summary of Results, Proposed Draft June 2020

[Proposed Draft V1A Project Report Summary of Results](#)

p. 56 shows criteria for for SW9 north side of Marquam Park and SW10 for south side of Marquam Park

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### **Documentation K – 2035 Comprehensive Plan and important roles of Neighborhood Associations**

2035 Comprehensive Plan

[https://www.portland.gov/sites/default/files/2019-08/comp\\_plan\\_intro.pdf](https://www.portland.gov/sites/default/files/2019-08/comp_plan_intro.pdf)

p. I-24

Include under-served and under-represented populations in decisions that affect them Portland has a long history of community involvement and a robust Neighborhood Association system. As the city grows, it is becoming more diverse. It is essential that the needs and interests of all community members are considered. Efforts must be made to improve services for groups that have not been well represented in past decision making — people of color, immigrants and refugee communities, people with disabilities, renters, low-income Portlanders, older adults, youth, and the lesbian, gay, bisexual, transgender and queer (LGBTQ) community. A new paradigm of community involvement and engagement — one that supports intercultural organizing, recognizes that diversity is an advantage and works to achieve equitable outcomes — must be embraced. This, paired with Portland's neighborhood organization network, can create a robust and more inclusive community involvement system informed by principles of environmental justice.

2035 Comprehensive Plan – Community Involvement

[https://www.portland.gov/sites/default/files/2019-08/02\\_community-involvement\\_0.pdf](https://www.portland.gov/sites/default/files/2019-08/02_community-involvement_0.pdf)

p. 2

It is the City's responsibility to promote deep and inclusive community involvement in planning and investment decisions. A new paradigm of community involvement and engagement — one that supports intercultural organizing, recognizes that diversity is an advantage, and works to achieve equitable outcomes

— must be embraced and paired with Portland’s neighborhood organizations to create a robust and inclusive community involvement system.

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**Documentation L – 2035 Comprehensive Plan and Goals and Policies for protection of environment and watersheds**

[https://www.portland.gov/sites/default/files/2019-08/07\\_environment.pdf](https://www.portland.gov/sites/default/files/2019-08/07_environment.pdf)

2035 Comprehensive Plan

ENVIRONMENT AND WATERSHED HEALTH

GOALS AND POLICIES

p. 15

**Fanno and Tryon Creek Watersheds**

Policy 7.50 **Stream connectivity.** Encourage the daylighting of piped portions of Tryon and Fanno creeks and their tributaries.

Policy 7.51 **Riparian and habitat corridors.** Protect and enhance riparian habitat quality and connectivity along Tryon and Fanno creeks and their tributaries. Enhance connections between riparian areas, parks, anchor habitats, and areas with significant tree canopy. Enhance in-stream and upland habitat connections between Tryon Creek State Natural Area and the Willamette River.

Policy 7.52 **Reduced hazard risks.** Reduce the risks of landslides and stream bank erosion by protecting trees and vegetation that absorb stormwater, especially in areas with steep slopes or limited access to stormwater infrastructure. Johnson Creek Watershed

**Johnson Creek and its tributaries.**

p. 15-16

Policy 7.53 **In-stream and riparian habitat.** Enhance in-stream and riparian habitat and improve fish passage for salmonids along

Policy 7.54 **Floodplain restoration.** Enhance Johnson Creek floodplain functions to increase flood-storage capacity, improve water quality, and enhance fish and wildlife habitat.

Policy 7.55 **Connected floodplains, springs, and wetlands.** Enhance hydrologic and habitat connectivity between the Johnson Creek floodplain and its springs and wetlands.

Policy 7.56 **Reduced natural hazards.** Reduce the risks of landslides, stream bank erosion and downstream flooding by protecting seeps, springs, trees, vegetation, and soils that absorb stormwater in the East Buttes.

Policy 7.57 **Green space network.** Enhance the network of parks, trails, and natural areas near the Springwater Corridor Trail and the East Buttes.

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**Documentation M – 2035 Comprehensive Plan’s adopted environmental plans**

[https://www.portland.gov/sites/default/files/2019-08/07\\_environment.pdf](https://www.portland.gov/sites/default/files/2019-08/07_environment.pdf)

P 18

ENVIRONMENT AND WATERSHED HEALTH

**Figure 7-2. Adopted Environmental Plans**

<b>Plan</b>	<b>Ordinance No.</b>	<b>Effective dates</b>
Columbia Corridor Industrial and Environmental Mapping Project	NA	1989
Balch Creek Watershed Protection Plan	163770	1990
Columbia South Shore Plan	163609, 167127	1990, 1993
Johnson Creek Basin Protection Plan	164472	1991
Northwest Hills Natural Areas Protection Plan	164517, 168699	1991, 1995
Southwest Hills Resource Protection Plan	165002	1992
East Buttes, Terraces and Wetlands Conservation Plan	166572	1993
Fanno Creek and Tributaries Conservation Plan	167293	1994
Skyline West Conservation Plan	168154	1994
Boring Lava Domes Supplement to the Johnson creek Basin Protection Plan	171740	1997
Portland International Raceway Plan	172978	1999
Multnomah County-Portland Unincorporated Urban Areas Functional Plan Compliance Project	County Ordinance No. 967	2001
Pleasant Valley Plan	178961	2004
Cascade Station/Portland International Center Plan	179076	2005
Portland International Airport Plan	184521	2011

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**Documentation N – Marquam Hill Ravine**

**Southwest Hills Resource Protection Plan - 1992**

P 109

**SITE LOCATION & DESCRIPTION**

Marquam Hill...The total site acreage is 499 acres and characterized by steep, **unstable slopes**. Marquam Nature Park forms the centerpiece for the site natural habitat and serves to protect its unstable hillsides from development. It is a 71-acre forested upland area bisected by multiple ravines.

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**Documentation P – Start and Spread of Wildfires: Wind and Slope are major factors**

Fire Management Study Unit  
Prepared by Rachel G. Schneider  
USDA Forest Service

[https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/fsm9\\_028958.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsm9_028958.pdf)



P3

### **Start and Spread of Wildland Fire**

Weather, fuel and topography are the three principal environmental elements that affect wildland fire behavior.

P4

Wind is the movement of air. The average person thinks of wind as the horizontal movement of air that can be felt, but **convection winds carry air upward**. Wind is one of the most important influences on fire behavior. Wind increases the supply of oxygen, influences the direction the fire will spread, dries fuels, carries sparks ahead of the main fire and moves air heated by convection to downwind fuels.

Winds change direction or intensity throughout the day and night with temperature fluctuations and local topography.

P5

Large fires can make their own weather. Large convection updrafts cause air currents along the ground toward the fire and sometimes cause down drafts beyond the fire perimeter. Smoke clouds may shade the sun and alter the temporary radiation of solar heat toward and away from the earth.

P7

### **Topography**

Topographic factors that affect the start and spread of wildland fire are *aspect, slope, shape of the area, elevation, and barriers*.

P8

Slope is the degree of incline of a hillside. Fires burn faster uphill than downhill because the fuels above the fire are brought into closer contact with upward moving flames. The steeper the slope, the faster the fire burns. Convective and radiant heat help the fuel catch on fire easily. A fire near the bottom of a slope will spread more rapidly during daytime conditions than a fire near the top of the slope because it has a greater uphill run. Burning material also can roll downhill and ignite fuel below the main fire.

**Shape of the country** influences the direction, intensity, and rate the fire will spread. Canyons, ridges and saddles are topographic shapes that influence weather especially wind direction.

**Box canyons** have steep walls and a generally flat floor. Air will be drawn in from the canyon bottom much like a wood burning stove or fireplace creating strong up slope drafts (the chimney effect) and rapid spread of fire. This can result in extreme fire behavior and be very dangerous.

**Narrow canyons** also have steep walls with a narrow floor that can best be described as "V" shaped. Wind direction will normally follow the direction of the canyon and fire can easily spread to fuels on the opposite side by radiation and spotting. Wind eddies and strong up slope air movement can be expected at sharp bends in a canyon.

**Wide canyons** have the same characteristics as box and narrow canyons except the floor is much wider so there is less danger of fire spotting across to a different slope. The prevailing wind will not be deflected by sharp up or down drafts. There will also be strong differences

between fire conditions on the north and south aspects of a wide canyon.

**Ridges** are the long narrow edges or the crest of a hill. Fires burning along lateral ridges may change direction when they reach a point where the ridge drops off into a canyon. This is caused by the flow of air coming from the canyon. Sometimes a whirling or eddying fire may result around the point of a ridge.

**Saddles** are the ridges connecting two higher elevations such as a mountain pass. Wind is channeled through narrow or constricted areas and spreads out on the leeward or downwind side with eddying action.

P17

### Effects of Fire

**Wildlife** is affected by the type of fire and type of vegetation being burned. Fire, where heavy fuels exist, tends to burn intensely and kill more animals, especially invertebrates and microorganisms. Generally, vertebrates are rarely killed in fires, but when a deer, rabbit, squirrel or other animal dies in a fire, it usually has little effect on the population of its species. Wildfires that burn hotter also tend to kill more vegetation including overstory trees. Fires are more damaging to wildlife if they occur during nesting and denning season when young animals have a harder time avoiding intense heat and smoke.

PP 17-18

Fire can have negative effects on aquatic life. Leaf packs are the source of energy for stream food chains. When a fire burns streamside vegetation, it reduces the amount of leaves that eventually reach the stream. This results in a reduction of the amount of aquatic life the stream can support. The loss of streamside vegetation removes the "buffer" that prevents eroding sediments from entering the stream. These sediments can reduce productivity for phytoplankton, reduce the size of fish spawning beds and resting places as sediment fills up pools, and can smother fish and aquatic insect eggs. Smothering prevents oxygenated water from reaching the egg surface and kills newly emerged fish fry by covering the gills with fine materials.

P18

Burning streamside vegetation also raises stream temperatures by removing overhanging canopy allowing more sunlight to penetrate the water surface. It can also increase turbidity (a measurement of the amount of suspended particles in water such as silt, clay, phytoplankton, zooplankton and organic matter). Increased turbidity causes fish to have trouble seeing their food and may crush or dislodge eggs. Higher stream temperatures will decrease oxygen content and increase incidence of fish disease and kill or drive away fish species that require cooler water temperatures. Less mobile insects may also die when water temperatures increase. Nutrient loading will proliferate algae production resulting in a more diverse population of insect larvae which is beneficial to fish if toxic levels are not reached.

Water quality responses to fire involve turbidity and sediment. Sediment is the soil that gets in the water of the stream and then settles in the stream bed. Concentrations of various nutrients often increase after a fire. **Some of these such as nitrogen often exceed drinking standards for short periods of time.** Streams usually return to pre-fire levels of these nutrients quickly. Concentrations of a particular nutrient are usually reduced as the stream mixes with tributaries and groundwater flow.

The effect of a fire on water quality is often unpredictable as a number of factors come into play. Site differences in topography, soil characteristics and moisture content, variation in fuel moisture and fuel loads, density of vegetation, microclimates associated with a given slope, aspect and topographic position, and variations in weather patterns before, during and after a fire effect turbidity and sedimentation. As a general rule, the volume of water in a stream increases after a fire due to a reduction in plant cover.

A reduction in plant cover increases the susceptibility of nutrients to erosional losses. Nutrient uptake by plants is then reduced, which further increases the potential for nutrient loss by leaching.

P19

**Air quality** is affected by fire. Smoke can reduce visibility on roads and airports as well as in the forest itself... These particles can be inhaled into the lungs and compound any respiratory problem. Smoke can irritate the eyes, nose, and throat, and make breathing difficult.

P20

Increased development in and around forests presents challenges to resource management and protection of human lives and property. House design, building material, site topography, landscaping, road design, accessibility for emergency vehicles, and availability of water are factors that should be considered when building a home in a wooded area. These factors greatly affect suppression efforts not only for defending homes but in controlling and conducting prescribed burns to achieve ecological objectives.

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#### **Documentation R-1a – Yarnell Hill Fire, Arizona (near Phoenix), June 2013**

Wall Street Journal: Sudden Turn in Flames Doomed Firefighters  
Officials Say 19 'Granite Mountain Hotshots' Were Killed in Burn Over; Arizona Blaze Still Raging  
By Erica E. Phillips  
Updated July 2, 2013 11:21 am ET  
<https://www.wsj.com/articles/SB10001424127887323936404578579600222810048>

PRESCOTT, Ariz.—The 19 elite firefighters who died Sunday in an out-of-control wildfire were trained to handle the most dangerous conditions, the kind that raced through the nearby village of Yarnell and burned more than 8,000 acres and more than 200 structures.

What rescuers eventually found was that the men had been caught in a "burn over," a sudden change in the direction of the fire that overtook them faster than they could get out of the way, according to a spokesman with the Prescott Fire Department.

Prescott Fire Chief Dan Fraijo, choking back tears, said the firefighters were "protecting property."

Experts said wildfires can create their own weather conditions, generating winds in sometimes unpredictable directions. This can happen when the clouds that form above fires from water in the smoke get so heavy they collapse, said Wally Covington, professor of fire ecology at Northern Arizona University in Flagstaff. "When it does that, the winds go out in all directions," he said.

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### **Documentation R-1b – Yarnell Hill Fire, Arizona (near Phoenix), June 2013**

Fire Rescue 1 by Lexipol: Granite Mountain Hotshots: The firefighting team that died battling the Yarnell Hill Fire

Detailing how tragedy unfolded and how the community has honored the fallen firefighters

By Janelle Foskett

May 27, 2021

<https://www.firerescue1.com/yarnell-hill/articles/granite-mountain-hotshots-the-firefighting-team-that-died-battling-the-yarnell-hill-fire-Ot1BJ3uUG8US1wkl/>

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### **Documentation R-2a – Paradise Camp Fire, California, Nov. 2018**

Los Angeles Times: Must Reads: Here's how Paradise ignored warnings and became a deathtrap

By Paige St. John, Joseph Serna, Rong-Gong Lin II

DEC. 30, 2018, 3 AM PT

<https://www.latimes.com/local/california/la-me-camp-fire-deathtrap-20181230-story.html>

Paradise was built upon a system of volcanic ledges bisected by a fan of deep ravines emptying into the Sacramento Valley... There are nearly 100 miles of private roads that dead-end on narrow overlooks and few connector streets... For more than 38,000 people, access to the outside world came via four roads running south, down finger ridges and through forest canopy.

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### **Documentation R-2b – Paradise Camp Fire, California, Nov. 2018**

NBC News: Paradise regained: A year after the Camp Fire, a resilient town rebuilds

By Phil Helsel and Alex Johnson

Nov. 8, 2019, 1:52 AM PST

<https://www.nbcnews.com/news/us-news/paradise-regained-year-after-camp-fire-resilient-town-rebuilds-n1077991>

The Camp Fire ignited on Nov. 8, 2018, and by the time it **was contained** 17 days later, it had killed 85 people, laid waste to more than 240 square miles of Northern California forest and destroyed almost 19,000 homes, businesses and other structures.

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### **Documentation R-3a – Portland Bluff Fire, Oregon 2001**

Oregonian: Fire sear Portland bluff

By Peter Farrell

August 9, 2001

<http://www.splintercat.org/MockCrestFire/Images/Oregonian/oregonian2.html>

What started as a routine brush fire along the east bank of the Willamette River almost instantly spread up a steep North Portland bluff Wednesday evening to threaten homes and buildings and become one of the worst urban wildfires in the Portland's history.

All available firefighters -- about 170 -- were called out in five alarms to the University of Portland area. Many stationed themselves between the onrushing flames and endangered homes to help residents who were desperately using garden hoses against flames roaring 30 to 50 feet into the air in their back yards.

As the fire spread out of control, flames leaped from exploding brush to the tops of trees. As many as 100 homes were in the danger zone, fire officials said. Winds at 18 mph to 20 mph carried embers that started what appeared to be three big fires and several spot fires along the Union Pacific Railroad tracks at the base of the bluff.

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#### **Documentation R-4 – Portland Bluff Fire, Oregon 2011 (same bluff as 2001 fire)**

The City of Portland Oregon, Fire & Rescue: Portland Fire & Rescue Responding to 2nd Alarm Wildfire Near North Willamette Blvd  
September 25, 2011

<https://www.portlandoregon.gov/fire/article/365650>

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#### **Documentation R-5a – Oakland Fire, October 1991**

FEMA: U.S. Fire Administration/Technical Report Series  
The East Bay Hills Fire, Oakland-Berkeley, California

<https://www.usfa.fema.gov/downloads/pdf/publications/tr-060.pdf>

P 15

“The East Bay Hills fire originated on the steep slope at the very end of Temescal Canyon. The canyon turns north from the portals of the Caldecott Tunnel, forming a V-shape that leads directly to Grizzly Peak, the highest point in the area at almost 1,500 feet.”

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#### **Documentation R-5b – Oakland fire**

ABC: FROM THE ARCHIVE: A look back at devastating Oakland Hills firestorm in 1991

By Justin Mendoza

Tuesday, October 20, 2020

<https://abc7news.com/oakland-hills-fire-berkeley-storm-1991/7193803/>

More than 1,500 firefighters and 450 engines from Northern California battled the catastrophic blaze which burned 1,500 acres and destroyed 3,354 structures, according to the Federal Emergency Management Agency.

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#### **Documentation R-6 – Eagle Creek Fire, Multnomah Falls, Oregon**

The Oregonian: See the Eagle Creek fire damage on the trails around Multnomah Falls

By Jamie Hale

Updated: Aug. 29, 2019, 9:37 a.m.

<https://www.oregonlive.com/life-and-culture/g66l-2019/04/60f561dc5e9058/see-the-eagle-creek-fire-damage-on-the-trails-around-multnomah-falls.html>

In September 2017, the Eagle Creek fire burned out of control as it swept through the Columbia River Gorge. Whipped by the wind and pushed west, it had already burned through thousands of acres before bearing down on Multnomah Falls, one of Oregon's most beloved natural wonders.

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#### **Documentation R-7 – Caldor Fire, South Lake Tahoe, California, August to September 2021 (ongoing)**

New York Times: To Save Lake Tahoe, They Spared No Expense. The Fire Came Over the Ridge Anyway.

By Thomas Fuller and Livia Albeck-Ripka

August 21, 2021

<https://www.nytimes.com/2021/08/31/us/lake-tahoe-nevada-fire.html>

They sent thousands of firefighters, 25 helicopters and an arsenal of more than 400 fire engines and 70 water trucks. Yet the fire still advanced.

Bursting across a granite ridge into the Lake Tahoe basin, the [Caldor fire](#) now threatens tens of thousands of homes and hotels that ring the lake.

Experts believe that the challenge is a cautionary tale for future megafires in the West and lays bare a certain futility in trying to fully control the most aggressive wildfires.

No matter how many people you have out on these fires, it's not a large enough work force to put the fire out," said Malcolm North, a fire expert with the U.S. Forest Service and a professor at the University of California, Davis.

On Monday, propelled by strong winds, [the fire crested a granite ridge](#) that officials had hoped would serve as a natural barrier. Embers leapfrogged past firefighting crews and descended toward the valley floor just miles from South Lake Tahoe.

It was only the second time, officials said, that a wildfire that began on the western slopes of the Sierra Nevada crossed into the eastern side.

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#### **Documentation R-8 – South Canyon Fire, Colorado, 1994**

Research Paper RMRS-RP-9

Fire Behavior Associated with the 1994 South Canyon Fire on Storm King Mountain, Colorado

[https://www.fs.fed.us/rm/pubs/rmrs\\_rp009/5discussion.html](https://www.fs.fed.us/rm/pubs/rmrs_rp009/5discussion.html)

The presence of fire in the West Drainage at the base of the Double Draws is important to the later fire behavior because it places fire at the **bottom of a steep narrow canyon**.

We concentrate on two events: the blowup or transition from surface fire to a fire burning through the shrub canopy, and the fire behavior in the area identified as the **West Flank** that resulted in the entrapment and deaths of 14 firefighters.

We identify three major factors that contributed to the blowup on the afternoon of July 6, 1994. The first factor was the presence of **fire in the bottom of a steep narrow canyon**. Second, strong upcanyon **winds pushing the fire up the canyon**. Third, the fire moving into the green (not previously underburned) Gambel oak canopy.

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#### **Documentation S – Video of how fast a wildfire burns uphill**

**Video of how fast fire burns on slopes in the Paradise Camp Fire, California in deep ravines–November 2018**

Why Fire Move Faster Up a Hill than Down

Paradise, California's Camp Fire accelerated as it moved uphill. U.S. Department of Agriculture scientists conduct an experiment to discover why.

<https://www.pbs.org/wgbh/nova/video/why-fires-move-faster-up-a-hill-than-down/>

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#### **Documentation T - Governor Kate Brown's Executive Order**

Governor Kate Brown issued Executive Order 19-01 on January 30, 2019

[https://www.oregon.gov/gov/policy/Documents/FullWFCReport\\_2019.pdf](https://www.oregon.gov/gov/policy/Documents/FullWFCReport_2019.pdf)

P 1

Governor Kate Brown issued Executive Order 19-01 on January 30, 2019, establishing the Governor's Council on Wildfire Response, and directing the Council to review Oregon's current model for wildfire prevention, preparedness and response, analyzing whether or not the current model is sustainable given our increasing wildfire risks. To the extent this review identified insufficient or unsustainable systems, the Council was directed to develop recommendations for improvements.

In summary, upon extensive review over the course of 2019, the Council identified the need for comprehensive change. Consistent with best practices, the Council adopted the framework proposed by the **National Cohesive Wildland Fire Management Strategy**, which establishes three goals:

1. Create fire-adapted communities
2. Restore and maintain resilient landscapes
3. Respond safely and effectively to wildfire.

P 8

#### ***Core Causes Trending in the Wrong Direction***

The comprehensive costs of wildfire described above are symptoms of larger problems, which are trending in the wrong direction. In March 2018, Oregon State University hosted the inaugural Fire Summit in Portland, which included approximately 30 scientists, land managers and forest policy experts from five states and British Columbia. The Summit report concluded:

*"We live in unprecedented conditions; the forest landscape neither looks nor functions as it did 200 years ago. The landscape contains more biomass, and thus more fuel, than ever before. The fuel base is more contiguous and more homogenous. Furthermore, greater numbers of citizens are more closely connected to forests in communities that have an extended area of wildland-urban-interface. Meanwhile, the climate is warming and the forests are becoming drier making fire seasons longer and stretching resources further."*<sup>6</sup>



P 9

*"The most obvious impact of climate change in the West has been fire. Recent catastrophic fires in California and major wildfires in Oregon highlight the vulnerability of the state to increasing wildfire in a warming climate. The Eagle Creek Fire September 2017 closed I-84, a crucial transportation corridor between western and eastern Oregon. Fire risk is projected to increase across the entire state by mid- century, with the largest increases in the Willamette Valley and eastern Oregon. The associated wildfire smoke creates a health hazard for vulnerable communities, especially outdoor laborers and children, who may be exposed to poor air quality."*<sup>9</sup>

- Oregon Climate Change Research Institute

P 17

The Cohesive Strategy recognizes fire is a natural part of the landscape, particularly in the West, and our current trajectory of more frequent, larger, costly and destructive wildfires is likely to continue. No area provides greater risk from wildfire to human life than the wildland urban interface, where combustible homes meet combustible vegetation. Threaded through the Cohesive Strategy are approaches for helping communities adjacent to wildlands adapt to a more complex fire environment, from building codes to growth and planning considerations, from public engagement and education to air quality monitoring and reporting mechanisms for health effects. The strategy also recognizes new construction offers risk-mitigation opportunities that may not be available elsewhere, as communities can adapt their policies and practices.

P 34

### **Magnitude of Impact**

Additionally relative to overall wildfire risk in Oregon is VERY HIGH

### **Overall Priority**

HIGHEST

[1] definition of defensible space *"Defensible space is the buffer you create between a building on your property and the grass, trees, shrubs, or any wildland area that surround it."*

<https://www.fire.ca.gov/programs/communications/defensible-space-prc-4291/>

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### **Documentation U – Marquam Park History**

**Oregon Live:** Marquam Nature Park is a pocket of tranquility in Portland -- and it almost became apartments  
By Jamie Hale

Updated: Jan. 09, 2019, 8:06 p.m.

[https://www.oregonlive.com/travel/2016/04/marquam\\_nature\\_park\\_is\\_a\\_tranq.html](https://www.oregonlive.com/travel/2016/04/marquam_nature_park_is_a_tranq.html)

*"Tranquility reminds us that we are a small part of nature in a place where listening and looking inspire us." -  
Community mosaic at Marquam Nature Park*

**As the story goes**, a group of six local women gathered around a kitchen table in 1968, concerned about recently-announced plans to build a 600-unit apartment building on the land their families enjoyed. They organized a campaign to save the wooded gulch, spending the next 15 years securing funds to preserve the area as a park.

By 1974, that small group of women grew into a nonprofit, **Friends of Marquam Nature Park**, and by 1983 their dream was realized: the land was theirs, officially dedicated by the city of Portland as a public park.

Today, ownership of the park rests in the hands of Portland Parks and Recreation, and has expanded to about 200 acres of land, with more than seven miles of trails. It's also become a crucial link in Portland's sprawling trail system, connecting Terwilliger Parkway to Council Crest (and to Washington and Forest Parks beyond).

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#### **Documentation V-1 – Terwilliger Parkway listed on National Register of Historic Places**

<https://www.oregon.gov/oprd/OH/pages/national-register.aspx>

#### **Recently Listed Oregon Properties in the National Register of Historic Places**

- **Terwilliger Parkway**, Portland, Multnomah County, listed in March 2021 - Designed by noted landscape architect John C. Olmsted, and completed under the leadership of Portland Park Superintendent Emanuel Tillman Mische in 1914, the Terwilliger Parkway is a 2.5-mile lineal road corridor in southwest Portland, Oregon. It runs along the east bank of a hillside less than a mile west of the Willamette River. The Parkway was completed in two sections – the first southern section was completed in 1912, and the northern extension to the south end of downtown was completed in 1914, and reflects the City Beautiful ideals intended by Olmsted to provide beautification within the heart of a city. It is one of several parkways that were proposed in a 1903 plan for Portland parks, but the only one actually constructed. [Terwilliger Park nomination form](#)

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#### **Documentation V-2 – Terwilliger Parkway official letter recognizing park status on the National Register of Historic Places**

The official letter from Christine Curran, Deputy State Historic Preservation Officer, State of Oregon's Parks and Recreation Department announcing Terwilliger's new status.

Letter as follows:

It is my distinct pleasure to inform you that the property listed below, nominated by the Oregon State's Advisory Committee on Historic Preservation and the Oregon State Historic Preservation Officer, was officially listed in the National Register of Historic Places on 3/1/2021.

Terwilliger Parkway  
3000 SW Terwilliger Pkwy  
Portland  
NRIS # MP100006188

Listing in the National Register is intended to provide **recognition of a property's significance** as well as encourage its preservation...

(See attachment: OregonParksRecreationDepartment\_08March2021\_letter-1.pdf)

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**Documentation W - Ezone policy protects with full protection of these public parks**

<b>Site</b>	<b>Park</b>	<b>Natural resource feature</b>	<b>Ezone Protection</b>
FC5	Council Crest	all forest vegetation	protection (p)
FC10	Woods Memorial Nature Area	all forest vegetation	protection (p)
FP1	Inside public parks	all vegetation	protection (p)
FP2	Inside public parks	all vegetation	protection (p)
FC3	Inside public parks	all vegetation	protection (p)
FP4	Inside public parks	all vegetation	protection (p)
FP5	Inside public parks	all vegetation	protection (p)
FP6	Inside public parks	all vegetation	protection (p)
FP7	Inside public parks	all vegetation	protection (p)
FP8	Inside public parks	all vegetation	protection (p)
FP9	Inside public parks	all vegetation	protection (p)
FP10	Inside public parks	all vegetation	protection (p)
FP11	Inside public parks	all vegetation	protection (p)
FP12	Inside public parks	all vegetation	protection (p)
FP13	Inside public parks	all vegetation	protection (p)
FP14	Inside public parks	all vegetation	protection (p)
FP15	Inside public parks	all vegetation	protection (p)
FP16	Inside public parks	all vegetation	protection (p)
FP19	Inside public parks	all vegetation	protection (p)
FP20	Inside public parks	all vegetation	protection (p)
FP21	Inside public parks	all vegetation	protection (p)
FP22	Inside public parks	all vegetation	protection (p)
FP23	Inside public parks	all vegetation	protection (p)
FP28	Inside public parks	all vegetation	protection (p)
FP31	Forest Park	all forest vegetation	protection (p)
SW3	Pittock Acres Park	all forest vegetation	protection (p)
SW3	Hoyt Arboretum	all forest vegetation	protection (p)
SW9	Marquam Park (north side)	all forest vegetation	protection (p)
SW11	George Himes Park	all forest vegetation	protection (p)
SW16	Marshall Park	all forest vegetation	protection (p)
SW22	Tryon Creek State Park	all forest vegetation	protection (p)
JC18	Inside public parks	forest or woodland vegetation	protection (p)
JC23	Powell Butte Nature Park	forest vegetation	protection (p)

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**Documentation X-1 – Staff response redactions and/or omitted conservation plans and environmental plans (See Documentation B)**

**Ezone Staffers response to our written testimonies sent on August 23, 2021 and September 10, 2021 for Planning and Sustainability’s Open Hearing on August 24, 2021**

“The testifiers referred to the redacting of reports. Project staff believe that this is a misunderstanding of the Ezone Project proposals. The proposals include repealing and replacing

several natural resource protection plans that were adopted in compliance with State Land Use Planning Goal 5. The plans that would be repealed and replaced are currently listed in Chapter 33.430 of the Portland Zoning Code. If these plans are replaced by the Ezone Project, it will no longer be necessary to list them in 33.430, thus they were crossed out in the proposed code changes. There are other plans that are listed in 33.430 that are not being removed. This is because they contain resource sites that are not in the Ezone Project area. The plans that apply to Johnson Creek and the Northwest Hills include several resource sites that are primarily industrial in nature. These resources sites were excluded from the Ezone Project area, and the portions of the documents that pertain to the industrial areas will remain in effect. But new versions of the documents will be adopted that will exclude other resource sites that are being repealed and replaced. Similarly, the plans that apply to resource sites in the Columbia Corridor area were not included in the Ezone Project, and the plans that pertain to them will not be repealed and replaced by the Ezone Project proposals.”

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**Documentation X-2 – Staff response to Lowell Creek FC3 (forest between Dosch Road/Dosch Court /Sweetbriar Drive)**

**Ezone Staffers response to our written testimonies sent on August 23, 2021 and September 10, 2021 for Planning and Sustainability’s Open Hearing on August 24, 2021**

“Lowell Creek FC3 (forest between Dosch Road / Dosch Court /Sweetbriar Drive): The ‘p’ zone is being applied to the corrected feature mapping. There are both areas of increase and decrease to ‘p’ zone coverage based on where streams area located. The width of existing ‘p’ zones fluctuates throughout resource site FC3. On average, the existing ‘p’ zone covers the area that is within 50 feet of streams, but in various locations the width grows and shrinks in a seemingly arbitrary fashion. The mapping protocols that are employed in the Ezone Project are intended to apply clear, consistent and understandable mapping rules that are applied to specific resources in a way that adheres to the existing resource protection policy as much as possible. In some cases, the switch from the more arbitrary mapping decisions that were made in previous natural resource protection plans to the application of standardized mapping rules will result in increases or decreases in the area that is covered by the ezones, but the overall protection policy is retained.”

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**Documentation X-3 – Staff response: slope inventory coming**

**Ezone Staffers response to our written testimonies sent on August 23, 2021 and September 10, 2021 for Planning and Sustainability’s Open Hearing on August 24, 2021**

“Going forward, the citywide Natural Resources Inventory (NRI) is updated continuously. For example, any time there is a state-concurred wetland delineation report, the NRI is updated to reflect that information. When new LiDAR is available from Metro, **the slope maps will be updated**. However, this does not automatically change the ezone maps. The location of the ezones can be change through a Type II land use review (as described in the cover memo, item E). The city could consider periodic ezone corrections, through the quasi-judicial process, that would bring the ezones in alignment with the most current feature mapping. PSC could recommend that City Council explore this option and what staffing would be needed.”

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#### **Documentation X-4 – Ezone Staffer response to slope analysis for Sweetbriar forest**

Email to Lynne Chao:

On Thu, Jun 17, 2021 at 10:14 AM Brooks, Mindy <[Mindy.Brooks@portlandoregon.gov](mailto:Mindy.Brooks@portlandoregon.gov)> wrote:  
The Landslide Hazard Map has already been updated. That area is subject to those rules, which require Geotechnical engineering.

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#### **Documentation Y-1 – Personal Testimony**

About Owen P Kramer, environmentalist, who lived in our neighborhood and revived our forest by planting our trees.

##### **Hugh Givens and Deb Givens, owners of 3612 SW Hillside Drive**

Not long after we moved into our home on Hillside Drive, I was contacted by the owner of the property that backs up to ours. Owen P. Cramer wanted to meet and introduce himself in person.

Owen, at the time, was 90 years old. He wanted more than to introduce himself. He wanted to introduce me to the forested ravine on his property at 3327 SW Dosch Road. Owen took me on a walk through the ravine. He told me that he had lived in his home since he was a young boy and that he had seen the Tillamook Burn from his living room window. He showed me a small rock exposure on the east slope of the ravine where his father had quarried rock for projects around their house. He showed me remains of an old apple orchard and said that the ravine had once been barren of trees, with the sides of the ravine and Fanno Creek sullied and trampled by grazing cows.

Owen wanted me to know that he had made it a life's work to restore the ravine. Owen planted most of the trees you see there today. He planted the row of now 75' tall Douglas Fir along the back of his property. **He made a special point of showing me blossoming trillium in the ravine basin.** Trillium was an indicator species, he told me. It had taken about 60 years for it to come back. He wanted me to know how fragile the ravine is.

Owen passed in 2017. Only after that did we come to understand Owen's knowledge and experience. Owen was a USFS forester and weather expert. Since the early 1950's he wrote and co-authored dozens of research papers and books for USFS and USDA concerning forest health and climate. Much of his work continues to be cited and has influence to this day.

We're not environmental experts. But clearly Owen was. His family's generations-long restoration of upper Fanno Creek should be recognized and respected. Knowing how long it took to restore, we hope that the city will take note of this special history and see that it is a treasure to preserve.

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**Documentation Y-2**

**Personal Testimonies**

**Kathy Prosser, owner of 3819 SW Sweetbriar Drive**

Our family has owned 3819 SW Sweetbriar since the late 1930's and I have owned it since 1990, observing growth and change over that period, with significant infill in the last 10 years. While I support urban expansion, the new proposed Ezone change R10C, from R10P, allowing for construction in a healthy forest that has been protected to date and should remain protected is not prudent. It is also not consistent with how other healthy forests have been preserved. We urge you to take the time to understand the forest that will be negatively impacted if construction is allowed.

**Michael Kutter and Marti Kutter, owners of 3586 SW Hillside Drive**

Fire science & geological engineering 101 informs us that housing should not be placed in an extremely steep canyon. This area is at risk of land movement caused by soil supersaturation and/or any soil disruption. Housing in this canyon would place the structures, residents and Fire Bureau personnel at high risk of loss of homes, injury or death. Such housing would destroy native plants which also allow an amazing community of native animals to thrive in our otherwise hostile City. Housing would damage the riparian area surrounding the stream in the canyon bottom.

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**Barrett Streu and Rachel Streu, owners of 3608 SW Hillside Drive**

We are fairly new to the neighborhood having purchased our home roughly two years ago. That said, one of the primary reasons we chose this area was the protected ravine behind the property. We strongly believe these wild spaces are integral to living in a sustainable urban environment. We are worried that further development, not only in the ravine directly behind our home but the forest between Sweetbriar Drive / Dosch Road / Dosch Court as well, could displace wildlife (including coyotes) and native plant species that have made it their home. We are also disappointed in the lack of notification regarding the potential change—especially given that this happened during the beginning months of the pandemic.

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**Alexander Cooley, owner of 3718 SW Sweetbriar Drive**

The city-wide E Zone update is making excellent use of available technology to draw clearer and more rational boundaries. However, the watershed area to the east and south of Sweetbriar Drive is a large and complicated site which deserves some additional scrutiny by city staffers to ensure that the ezone changes adequately & appropriately protect this natural resource from future development which would substantially harm the habitat.

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**Yoann Foucher and Laurence Juthy, owners of 3616 SW Hillside Drive**

As affected property owners, we request that the public record be re-opened regarding the Environmental Zone Map Correction Project.

We are living next to the protected ravine area potentially affected by the Ezone change, and are very concerned about the long-term consequences of such change on the local protected fauna and flora

that are part of this area, as well as the neighborhood's potential additional traffic.

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**Kevin Pendergast, owner of 3835 SW Sweetbriar Drive**

Whereas I appreciate the committee wanting to find ways to house more people, I think the idea of using inner city green space to accomplish it is the wrong approach. Focusing more on policies to better utilize existing residential zoning is a much more palatable approach. As we become more urbanized, we need the environmental spaces to escape from the impact of city life.

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**Lynne Chao, owner of 3702 SW Sweetbriar Drive**

You can have urban density and protect the environment responsibly together. Environment and the wildlife cannot speak up for themselves. It is our responsibility to do so. What happens here determines what we give to future generations. I ask, with all these policy changes, how will the landscape of Portland look 5 years and 10 years from now?

The forest between Sweetbriar Drive, Dosch Road to Dosch Court is an amazingly well-maintained forest by neighbors who deeply care about its upkeep and habitat. This forest is in headwaters of Lowell Creek FC3, which is at the top of the tributary of Fanno Creek, near Council Crest, the top of the watershed. Hundreds of trillium plants are thriving in the spring in this forest where protection P zones are taken off. It has taken years for these sensitive flowers to grow back. This is a wildlife corridor with coyotes who travel with their pups following the tributary streams in this forest. We ask that you review this pristine area.

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