

**DATE:** June 28, 2019

**TO:** Clean Water Services Advisory Commission Members  
and Interested Parties

**FROM:** Mark Jockers, Government & Public Affairs Director

**SUBJECT: REMINDER OF AND INFORMATION  
FOR JULY 10, 2019, CWAC MEETING**

This is a reminder of the Clean Water Services Advisory Commission (CWAC) meeting scheduled for **Wednesday, July 10, 2019**, at the District's main office, 2550 SW Hillsboro Highway. The CWAC meeting packet will be mailed to Commission members on July 1 and posted to the [CWAC section](#) of Clean Water Services' website.

Dinner will be served for CWAC members at 5:30 p.m. **Please call or send an email to Stephanie Morrison ([morrison@cleanwaterservices.org](mailto:morrison@cleanwaterservices.org); 503.681.5143) by July 3 if you are unable to attend** so food is not ordered for you.

Enclosures in this packet include:

- July 10 Meeting Agenda
- June 12 Meeting Notes

## **Clean Water Services Advisory Commission**

**July 10, 2019**

### **AGENDA**

**6:30 p.m. Welcome & Introductions**

**6:35 Pure Water Wagon Tour/Briefing**

Clean Water Services commissioned a mobile high purity water pilot system—the [Pure Water Wagon](#)—in January 2019. The purpose of the Wagon is to advance public understanding and acceptance of water reuse and demonstrate innovative water management technologies. Staff will provide an overview and tour of the Wagon.

- Dr. Ken Williamson, Regulatory Affairs Director
- Mark Jockers, Government & Public Affairs Director
- AJ Johns, Operations Analyst (& Wagonmaster)

**7:05 p.m. Review/Approval of Meeting Notes of June 12, 2019**

**7:10 p.m. Design & Construction Standards Update**

In May 2019, the Board of Directors charged CWAC to act as a sounding board and provide input on possible amendments to the District's Design and Construction Standards, specifically those elements that relate to hydromodification and the use of fee-in-lieu. Staff will present the status of the ongoing data analysis regarding fee-in-lieu and possible modifications to the Standards.

Nora Curtis, Managing Director, Utility Operations & Services

- Damon Reische, Development Services and Systems Planning Division Manager

Requested action: *Discussion and input*

**7:45 p.m. Announcements**

**8:00 p.m. Adjourn**

**Next Meeting: August 14, 2019**

**Clean Water Services  
Clean Water Advisory Commission  
June 12, 2019 | Meeting Notes**

**Attendance**

Attending the meeting from CWAC:

- Commission Chair Tony Weller (Homebuilder-Developer)
- Molly Brown (District 2/Treece)
- Andy Duyck (District 4/Willey)
- Nafisa Fai (District 1/Schouten)
- Art Larrance (At-Large/Harrington)
- John Jackson (Agriculture)
- Judy Olsen (Agriculture)
- Stu Peterson (Business)
- Kris Balliet (Environmental)
- Matt Wellner (Homebuilder-Developer)
- David Waffle (Cities/non-voting)

Absent:

- Commission Vice Chair Mike McKillip (District 3/Rogers)
- Kevin Wolfe (Business)
- Lori Hennings (Environmental)
- Diane Taniguchi-Dennis  
(Clean Water Services Chief Executive Officer (non-voting))

Attending the meeting from Clean Water Services:

- Shannon Huggins, Public Involvement Coordinator
- Gerald Linder, General Counsel
- Nora Curtis, Managing Director, Utility Operations and Services
- Damon Reische, Planning and Development Services Division Manager
- Chris Faulkner, Water Resources Program Manager
- Stephanie Morrison, Office Manager
- Anne MacDonald, Senior Water Resources Program Manager

**1. Call to Order**

Mr. Weller called the meeting to order at 6:30 pm in the Tualatin Room at the Clean Water Services (CWS) Administration Building Complex in Hillsboro, Oregon.

**2. Previous Meeting Notes**

There were no comments regarding the notes from the last meeting, May 8, 2019.

**3. Calendar Invitations**

Ms. Huggins proposed that Stephanie Morrison send electronic meeting invitations to CWAC members to ensure the meetings are on everyone's calendars.

#### 4. Design and Construction Standards Update

The CWS Board of Directors adopted the Design and Construction Standards (Standards) on April 2, 2019, and asked for additional analysis of the fee-in lieu component. Can CWS expand fee-in-lieu? If so, where is it possible to safely expand fee-in-lieu? The Board directed CWAC to continue its role as a sounding board and to provide comments and input on potential stormwater management amendments to the Standards (**presentation attached**).

*Questions and comments related to the Design and Construction Standards update are in Appendix A.*

Mr. Reische spoke about existing stakeholder concerns such as small project viability, financial sustainability and operational efficiency of having many small stormwater facilities and timing issues relative to regional sub-basin planning. Other concerns include the cumulative impact of development and how fee-in-lieu money would be spent. Finally, there are concerns that under the current Standards, there's no middle ground. Discussion of fee-in-lieu have generally been about requiring onsite mitigation of a development's entire stormwater impact or allowing development to pay a fee-in-lieu for the entire impact.

The intent of fee-in-lieu (FIL) is to provide flexibility for smaller projects. Fee-in-lieu addresses small, distributed impacts programmatically.

A Regional Stormwater Management Charge (RSMC) funds specific regional approach projects. The RSMC is in place in North Bethany. The RSMC is structured and functions like a System Development Charge (SDC).

The difference between FIL and RSMC is reflected in the amount of the fee and charge. The current FIL for hydromodification is \$1.00/square foot of untreated impervious surface. For a "typical" single family house, if an applicant paid FIL instead of managing stormwater onsite, the maximum they would pay is \$2,640. In comparison, the RSMC for a typical single family residence is between \$4,000-\$5,000.

The Standards are based on the concept of selecting measures based on the condition or risk level to the receiving reach of a stream.

Mr. Reische showed several maps, including a Hydromodification Risk Planning Map. Because the Board directed CWS to focus narrowly on fee-in-lieu, CWS excluded areas where FIL is not applicable -- expansion areas, which are more appropriate for regional planning and RSMC; areas draining to high-risk stream segments; areas with known threatened infrastructure; and areas with recurring flooding.

Within the resultant FIL focus area, staff began its analysis to answer the following questions:

- Where could development occur?
- Where is development occurring?
- What is the impact to streams if development occurs in these focus areas?

Mr. Wellner asked why the analysis is being limited to areas draining only to low or moderate risk streams, as he believes that there is significant development occurring in areas of steep slopes and those developments need to have options other than onsite facilities. Ms. Curtis responded that this analysis is specifically aimed at evaluating the potential impact of FIL, and FIL is not an appropriate stormwater management approach for use in high risk corridors. Streams with a high risk of hydromodification require physical approaches. Ms. Curtis also noted that the data that is being used for the FIL analysis might also be able to be used to prioritize subbasin planning for regional approaches.

Mr. Faulkner said CWS used data from 2007-2015 from the Metro Buildable Land Inventory to capture a full building cycle, pre- and post-recession. The data was vetted by various stakeholders, then CWS also overlaid its development activity data to evaluate the integrity of the data set.

He showed a series of GIS maps that identify parcels likely to be developed or redeveloped. When actual development activity is overlaid, CWS sees activity where there is a high availability of buildable lands.

This data is the basis of the CWS analysis. Does this data seem valid to CWAC? What additional data sets should we consider?

Suggestions from CWAC:

- Identify adjacent parcels with common ownership.
- Look at slopes and vegetated corridors; is development potential really there?
- Consider analyzing data from title companies.

### **Next steps**

Next steps will include running additional analyses on sample basins with differing distributions of buildable land density to further evaluate the potential impact of fee-in-lieu. The preliminary timeframe for performing this work is as follows:

- Select representative basins and develop methodology to evaluate the impacts of development within those basins by July.
- Start developing draft concepts by August.
- Start drafting language by September.

### **6. Announcements**

- There are plans for a barbeque and canoe paddle in September.
- The next CWAC meeting is scheduled for Wednesday, July 10, 2019.

### **7. Adjournment**

Mr. Weller adjourned the meeting at 7:55 pm.

(Meeting notes compiled by Jody Newcomer.)

**Appendix A**  
**Clean Water Services Advisory Commission Meeting Notes**  
**June 12, 2019**

Questions and comments regarding Design and Construction Standards:

**FEE-IN-LIEU**

**Q: How does fee-in-lieu affect conformity with federal directive?**

A: CWS staff believe the hydromodification program conforms with the DEQ permit.

CWS developed fee-in-lieu to provide flexibility for smaller projects and to address smaller distributed impacts with a programmatic approach. FIL is part of the base strategy adopted as an interim step to developing subbasin-specific strategies.

There's a distinction between fee-in-lieu as a programmatic approach for small distributed project impacts and the Regional Stormwater Management Charge, which is intended to fund specific regional projects.

**Q: Could you give an example of distributed impacts of fee-in-lieu?**

A: We're trying to assess the impact of small developments around the basin, as opposed to one large development with a concentrated impact.

**Q: Why are we being asked to look at fee-in-lieu?**

A: When the Board adopted the Standards, there were a number of concerns that were expressed, especially about how the Standards would impact developments' viability. At the same time, there was concern about why we would allow fee-in-lieu at all. There was a last-minute proposal to expand the fee-in-lieu, which was not adopted. Instead, the Board adopted the Standards as proposed and directed CWS to dig deeper into fee-in-lieu. We're not presupposing an outcome of this analysis or trying to prove a specific theory. We're performing an analysis to explore the Board's request and we're asking CWAC if the proposed analysis methodology makes sense.

**Q: In October, will this analysis identify potential projects and a fee-in-lieu amount as a result of those projects?**

A: No. Fee-in-lieu is not tied to specific projects because it's intended to address those small, distributed impacts. We haven't started the discussion about what could be funded with FIL yet.

Specific projects (e.g., facilities, restoration or enhancement, etc.) would be an outcome of subbasin-specific planning and funded through a Regional Stormwater Management Charge.

**GENERAL**

**Q: Aren't projects most likely to occur in areas with high-risk streams?**

A: Not necessarily, and the data set we are proposing can help determine that.

**Q: Did you look at parcel size?**

A: Not in this analysis.

The size of the dots on the map represents how many more potential parcels could be made out of buildable lands. There is additional analysis we can do.

**Q: Use of Metro Buildable Lands data makes the assumption that there are developable parcels.**

A: That's the assumption. We then used actual development data to determine if the assumption is valid. The first question asks where is development possible; the next question asks whether development is really happening where Metro says it's possible. The trend suggests yes.

**Q: Do you know the median project size?**

A: We have the data; we have not run the analysis.

**Q: Having that information and knowing where it would fall on spectrum of hydromodification would help.**

Q: If a project is a certain size, you'll have to do hydromodification anyway.

**Q: What is an SPL?**

A: Service Provider Letter. It's the natural resource review that determines the extent of Vaegated Corridors on a development site and is one of the first steps in the development land-use process.

**Q: When you're doing an analysis on impacts, are you doing it by watershed?**

A: We're doing it by sub-watershed. We're trying to identify the appropriate tool to use for a specific stream segment.

**Q: Are large sites required to provide on-site detention?**

A: Yes, unless there's a regional stormwater management approach in place, or in progress.

**Q: My impression is that providing detention (for a conveyance restriction) does not have as great an impact to my property as providing a hydromod facility, because you have to use TRUST (Tualatin River Urban Stormwater Tool) to size for hydromodification.**

A: While it is true that larger projects require more calculation, continuous simulation modeling using TRUST is not a requirement in the base strategy; it's an option. The only place continuous simulation using TRUST is required is River Terrace in Tigard.

**Q: What did Tigard do in River Terrace? Did they have the same issues seen in North Bethany?**

A: Most of the activity in River Terrace has been done by a small number of developers on larger developments. Therefore, it was easier to implement regional-type solutions. The concerns are the same. Tigard has a more restrictive code with an aesthetics requirement. Their code is different than the CWS base code for a regional or neighborhood-scale facility.

**Q: Why wouldn't we focus our efforts in the most high-risk corridors where the most development is likely to occur?**

A: We're trying to answer the Board's question about the ability to use fee-in-lieu in non-risk areas. It's not a question about where we will prioritize sub-basin plans, but that question may be answered through this analysis. This data can help us prioritize where we should focus beyond the expansion areas to develop regional plans.

The Board asked if there are options to individual project-by-project facilities, such as paying a fee or preparing a sub-basin strategy.

We can incorporate issues raised tonight as part of our recommendations to the Board. We will bring potential amendments to Standards in the fall, which might include prioritization of sub-basin plans. This data set helps drive analysis of where we should focus.

**Q: Are you only analyzing residential data?**

A: Yes, at this point.

What is CWAC's opinion? We haven't looked at the Metro data for multi-family and commercial sites closely enough to present to CWAC. Also, those sites most likely would be required to do something on-site because of their size.

**Q: There's a lot of development opportunity in Aloha. Is there a need for regional facilities? What are the condition of those stream corridors?**

A: There is a lot of potential developable area and there's a lot of activity. There are also a lot of existing problems in Aloha, such as inadequate storm drainage.

**Q: Is the map data available to CWAC members?**

A: The web tool is only available internally. Notes from the meeting will include static maps. CWAC members are welcome to meet with staff in the office to view the dynamic maps.

**Q: Would RSMC be based on the same structure that was used in North Bethany, or would it be a whole new set of assumptions?**

A: We don't know yet.

**Q: How do you figure impacts?**

A: We have data on stream conditions, but we need to develop methodology to evaluate impacts.



# Buildable Land & Activity Analysis Update

Nora Curtis, Utility Operations & Services Managing Director  
Damon Reische, Planning & Development Services Division Manager  
Chris Faulkner, Planner & Water Resource Program Manager

Clean Water Advisory Commission  
June 12, 2019



# Presentation Agenda

- Background & CWAC's Role
- Review Current Fee-in-Lieu
- Review Analysis Methodology
- Next Steps
- Analysis Timeline



# Background – How We Got Here

## March 14, 2019

- Response to Comments: Preliminary Draft Standards
- Proposed Draft for Public Hearing, Chapters 1, 2, & 4

## March 26, 2019

- Board Work Session & Public Hearing
- Public Hearing Continued
- Staff Proposed Changes

## April 2, 2019

- Board Work Session & Continued Public Hearing
- Draft with Directed Changes & Additional Changes
- Board closes Public Hearing, Directs Additional Changes, & Adopts Standards

## April 16, 2019

- Work Session
- Staff Proposal – Scope, Criteria, & Schedule for Fall 2019 Amendments
- Board Direction to Proceed and Continue to Use CWAC for Stakeholder Engagement



# CWAC's Role

- April 16 Work Session Board Renewed CWAC's Charge
- Act as Sounding Board
- Provide Comment and Input
- Focus on Stormwater Management Amendments



## Existing Program Concerns

- Small project viability
- Effectiveness & efficiency of many, small stormwater facilities
- Uncertainty around timing to complete sub-basin plans for non-expansion areas
- Cumulative impact of development
- Fee-in-lieu program activities currently undefined
- “All or Nothing” for on-site solutions

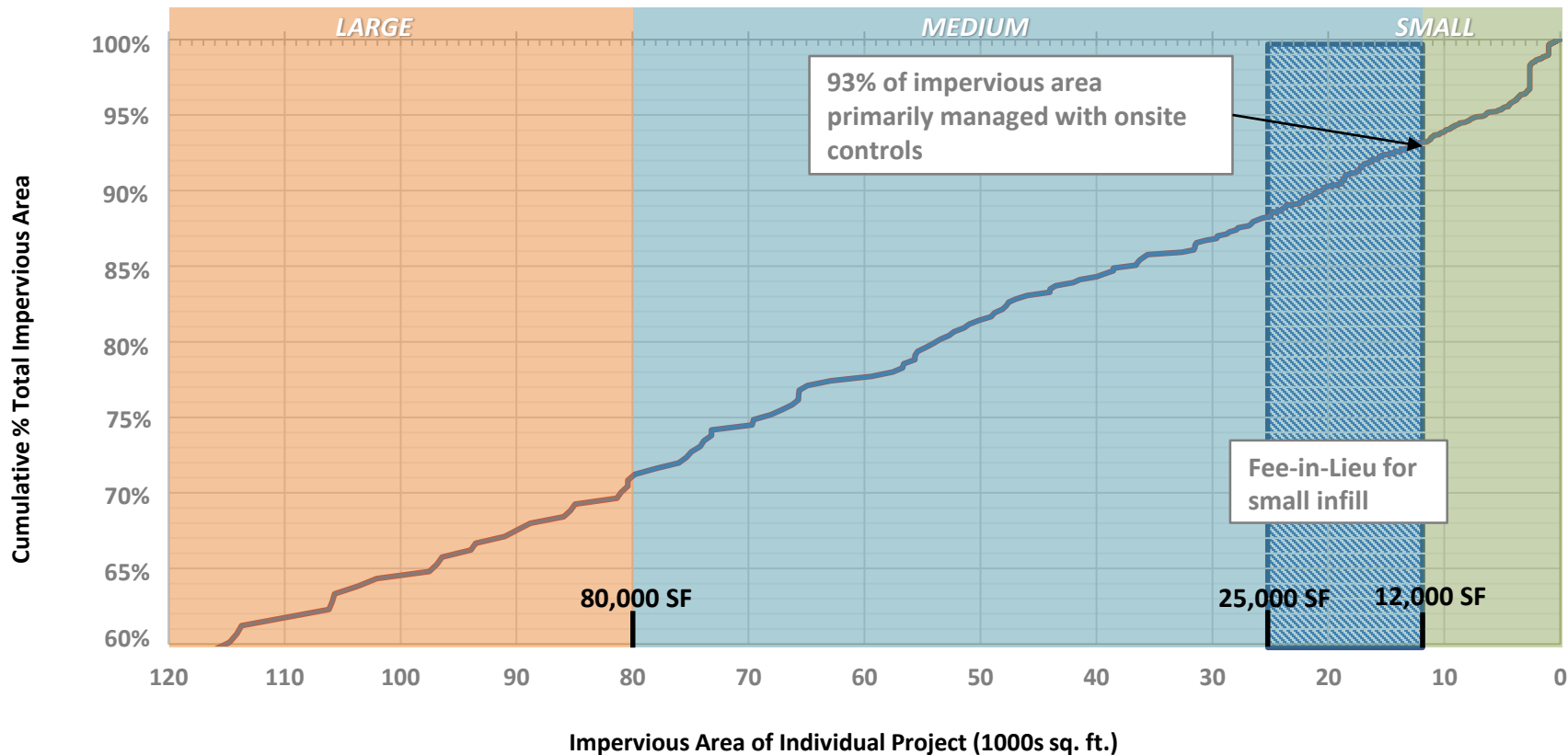


# Current Fee-in-Lieu Program

- Intent
  - Flexibility for smaller projects
  - Address smaller, distributed impacts more effectively than with site-specific facilities
  - Interim step to sub-basin strategies
- Structure
  - Allowance for Steep Slopes, High Groundwater, Shallow Bedrock, etc. per permit
  - Standards also allow for:
    - ❖ Small projects under 12,000sf
    - ❖ Projects between 12,000sf and 25,000sf meeting Chapter 4 criteria



# Project Size Thresholds



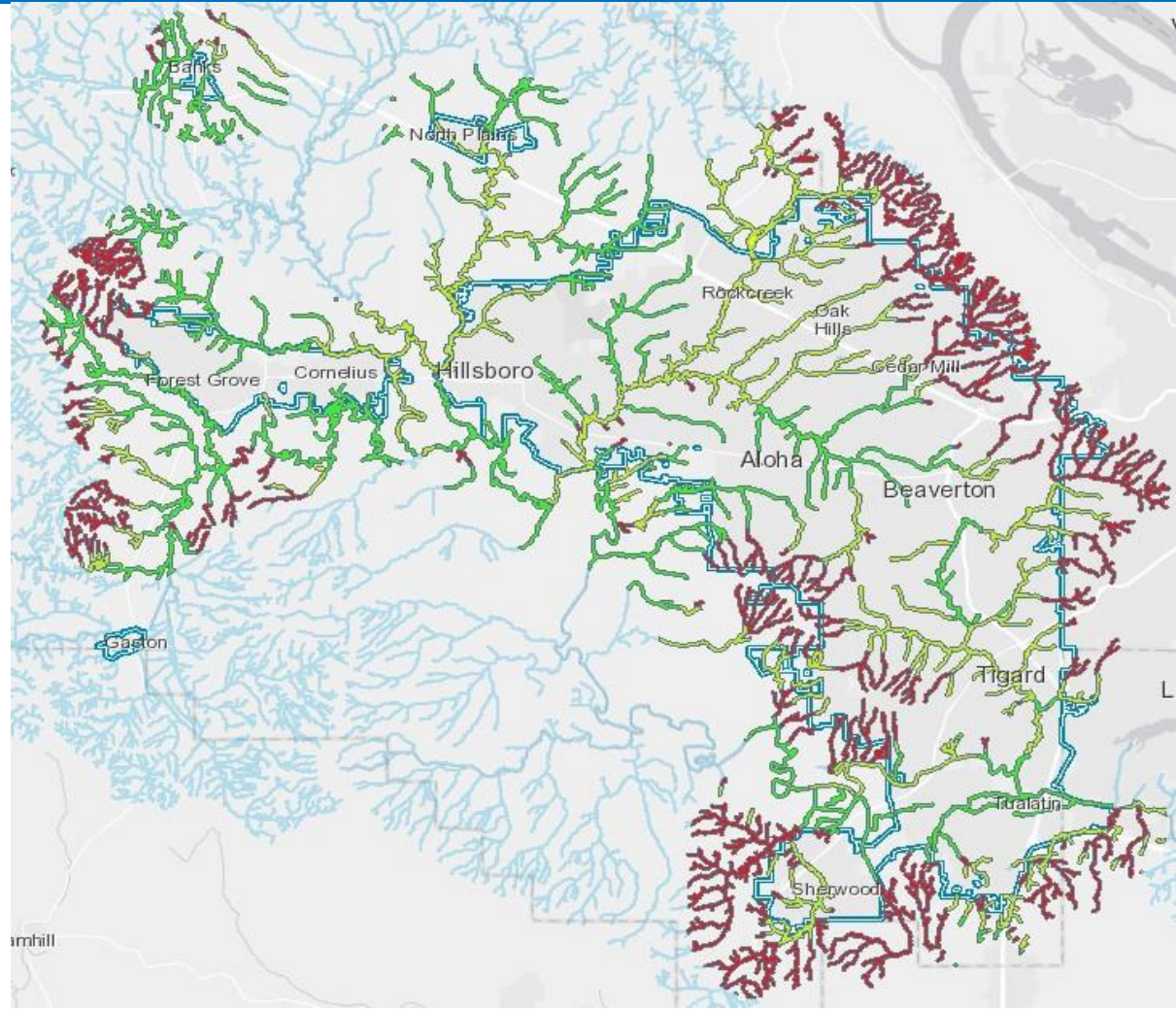
## Fee-in-Lieu vs. RSMC

- Fee-in-Lieu addresses small, distributed impacts programmatically
- Regional Stormwater Management Charge funds specific regional approach projects
- This difference is reflected in the amount of the fee and charge
- For a single family lot:
  - FIL = \$2,640 maximum
  - RSMC = \$4,000 - \$6,000

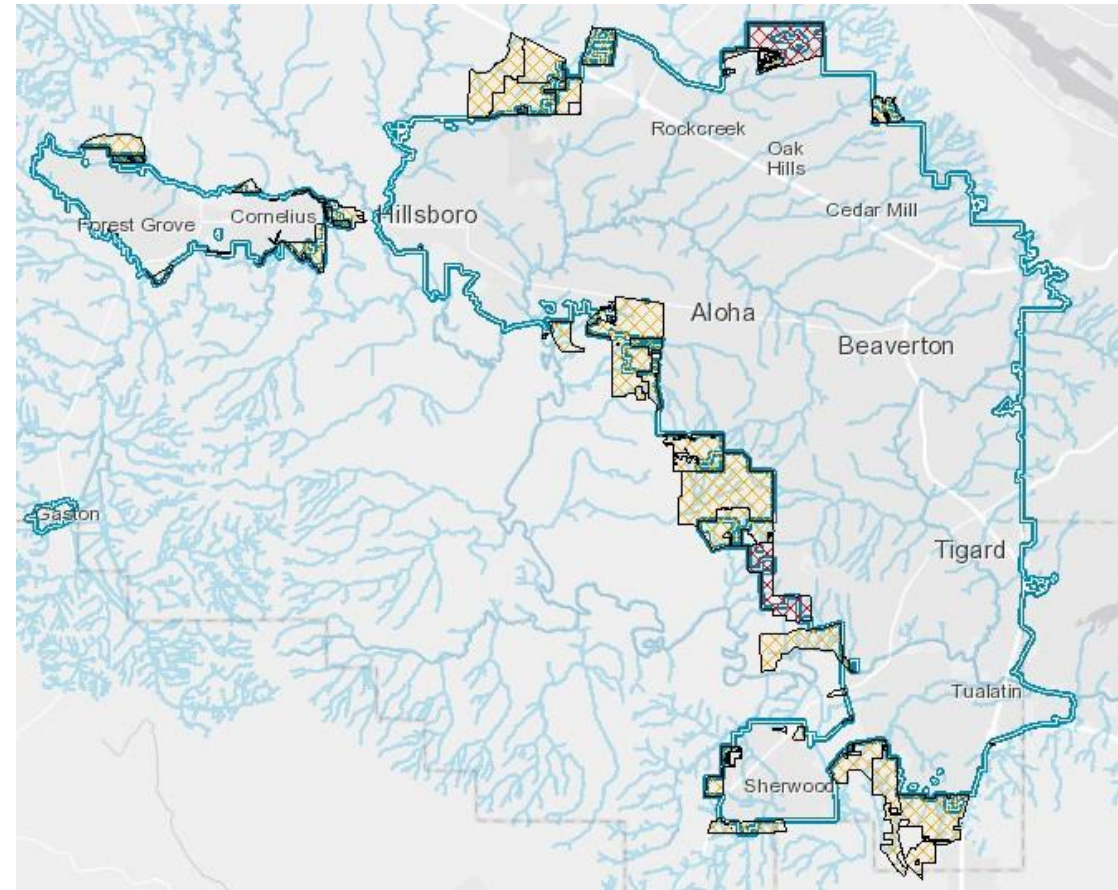




# Hydromodification Risk Planning Map

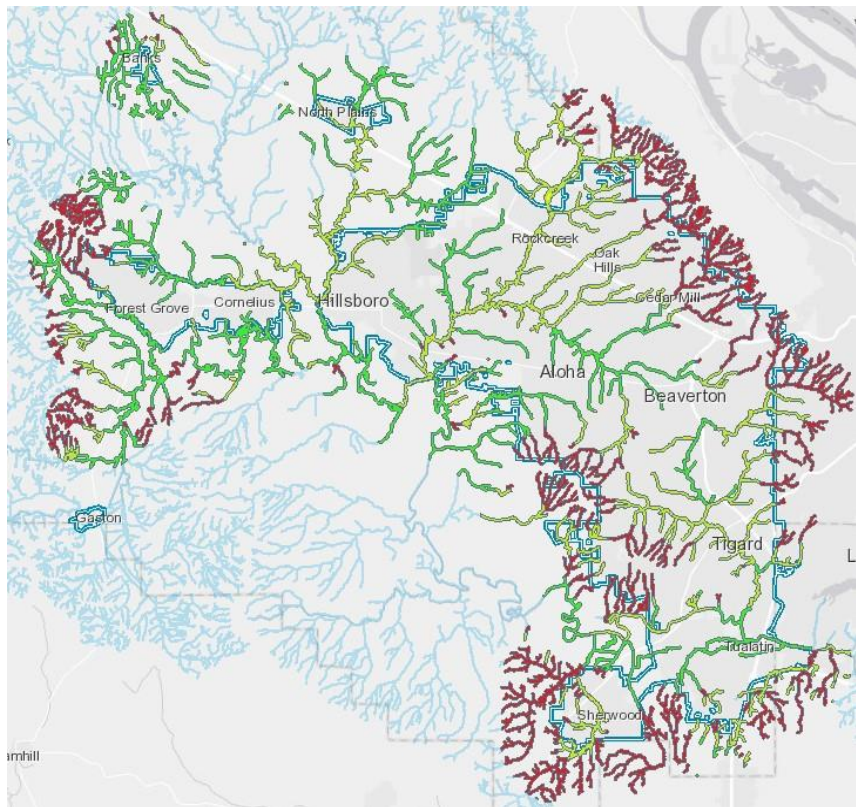


# Exclusions – Expansion & Sub-Basin Strategy Areas





# Exclusions – High Risk Streams





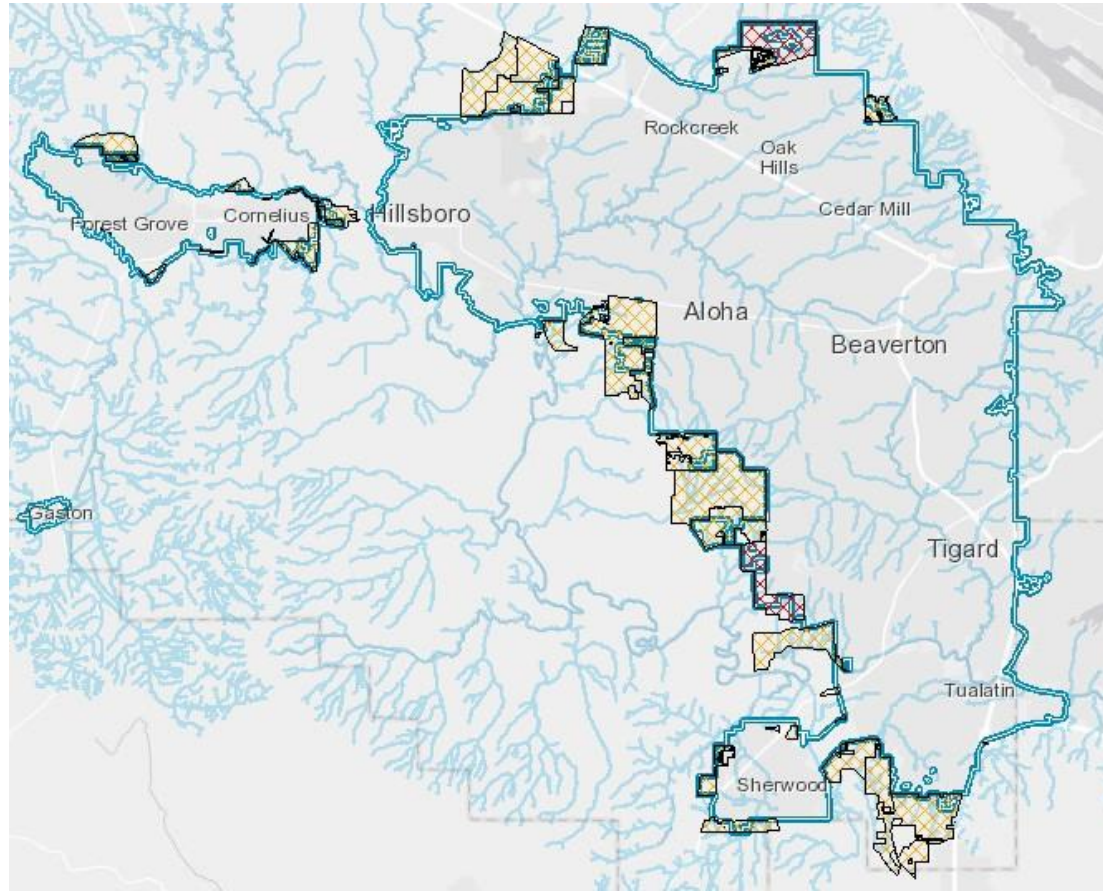
# Exclusions – Problem Areas Based on Field Surveys

- Threatened Infrastructure



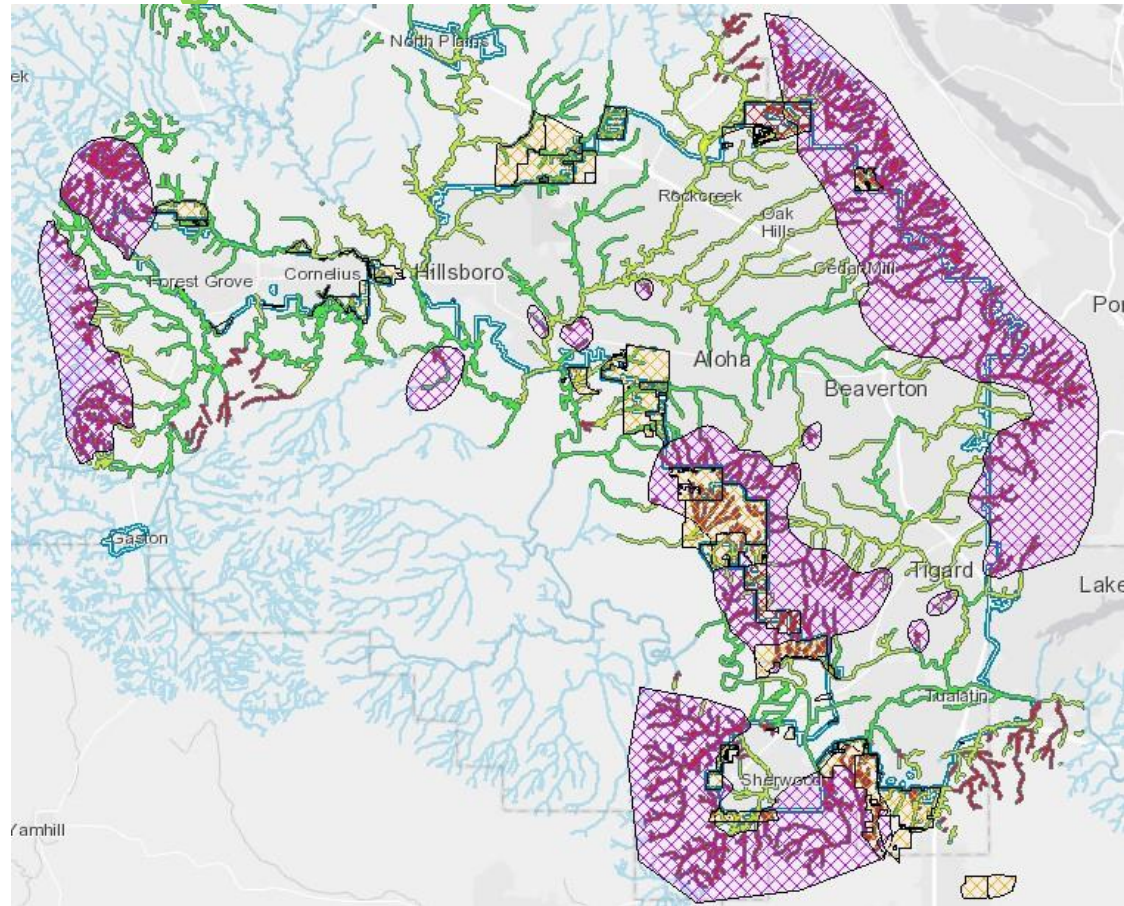
- Recurring flooding

# Exclusions – Expansion & Sub-Basin Strategy Areas

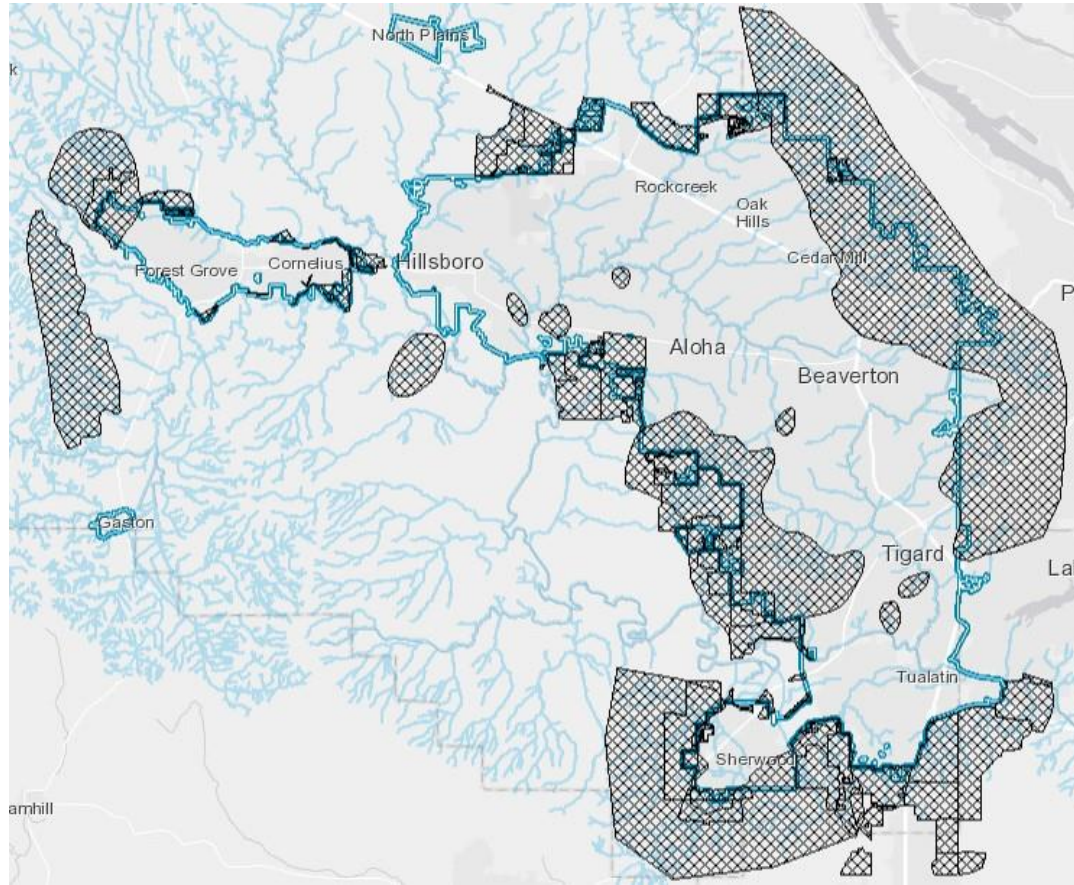




# Exclusions – High Risk Streams



# Exclusions – All Excluded Areas



# Focus Area Analysis Questions

- Where are buildable lands within the focus area?
- Where is development occurring within the focus area?
- What is the potential impact to the streams if development occurs in these areas?



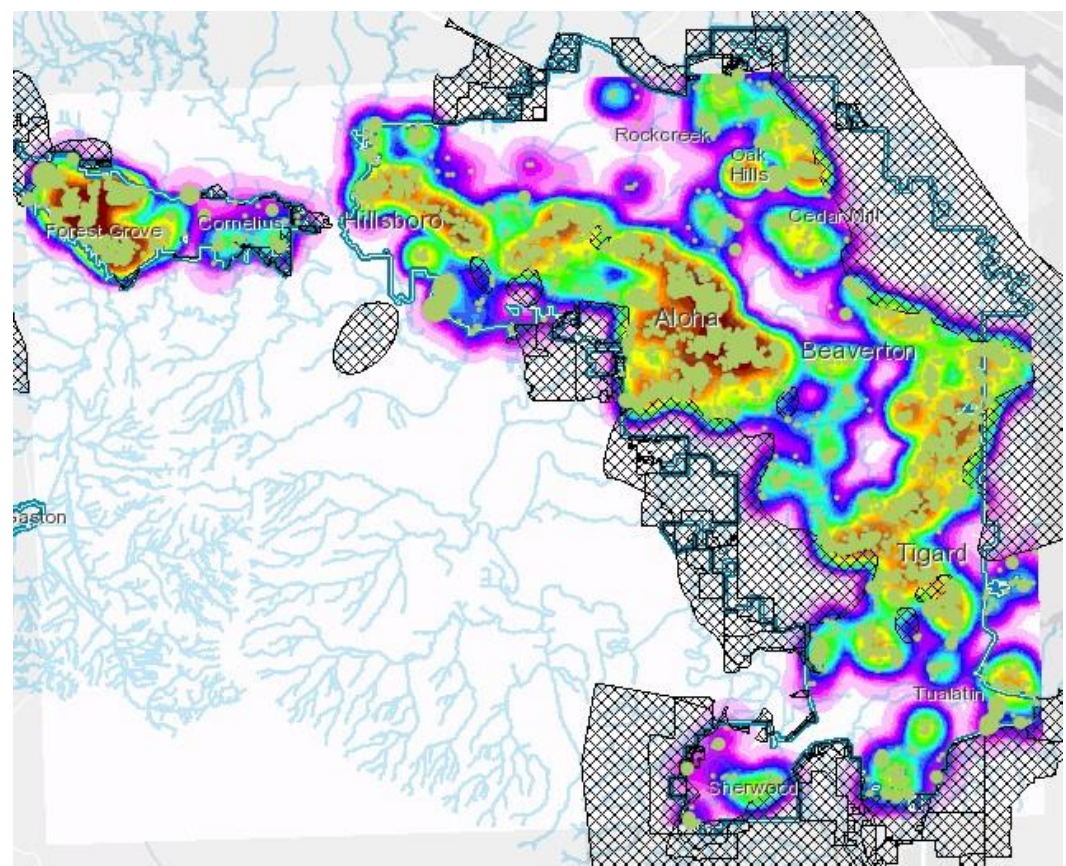


# Buildable Land & Activity Analysis - Data

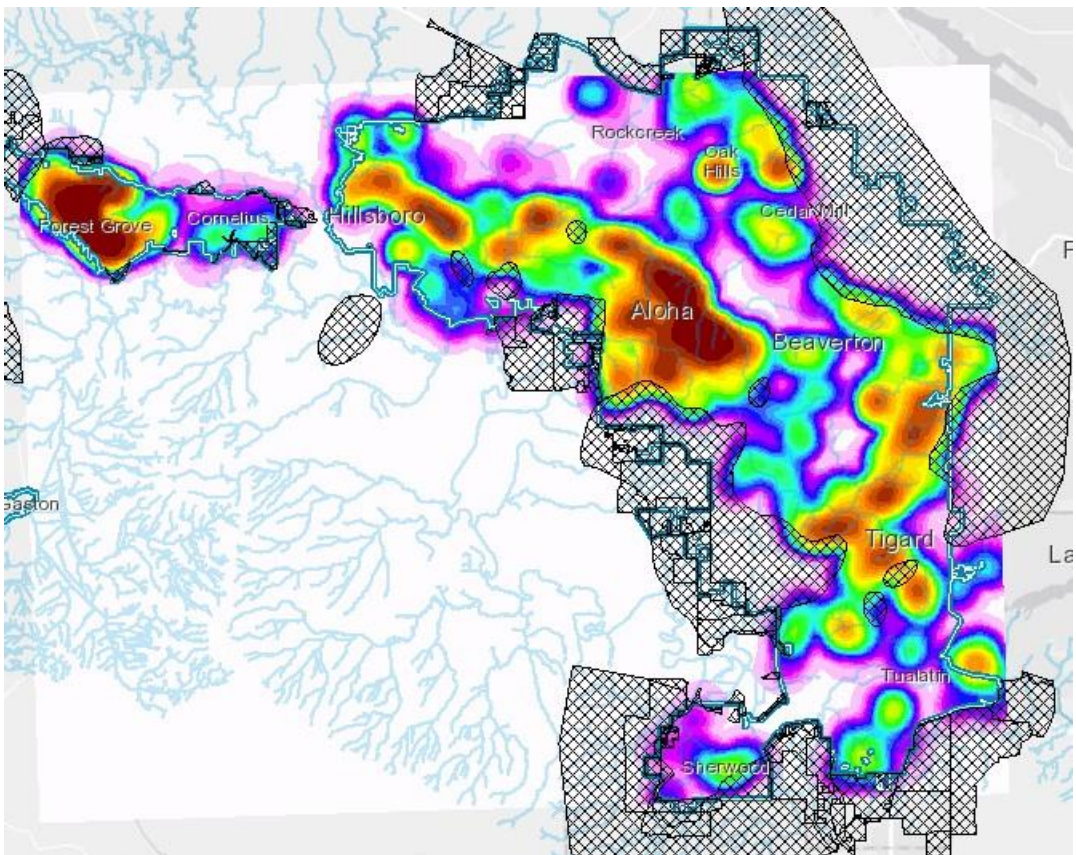
- Metro 2018 Buildable Land Inventory
  - 20 year forecast
  - Updated at minimum every 6 years
  - 2007 – 2015 data used for forecasting
  - Data vetted by jurisdictions and private sector
  - Excluded parcels not likely to be developed
  - Only analyzed single family residential data (SFR)
- Clean Water Services Data
  - Service Provider Letter data used to “gut check” Metro Data



# Buildable Land & Activity Analysis – Available Lands

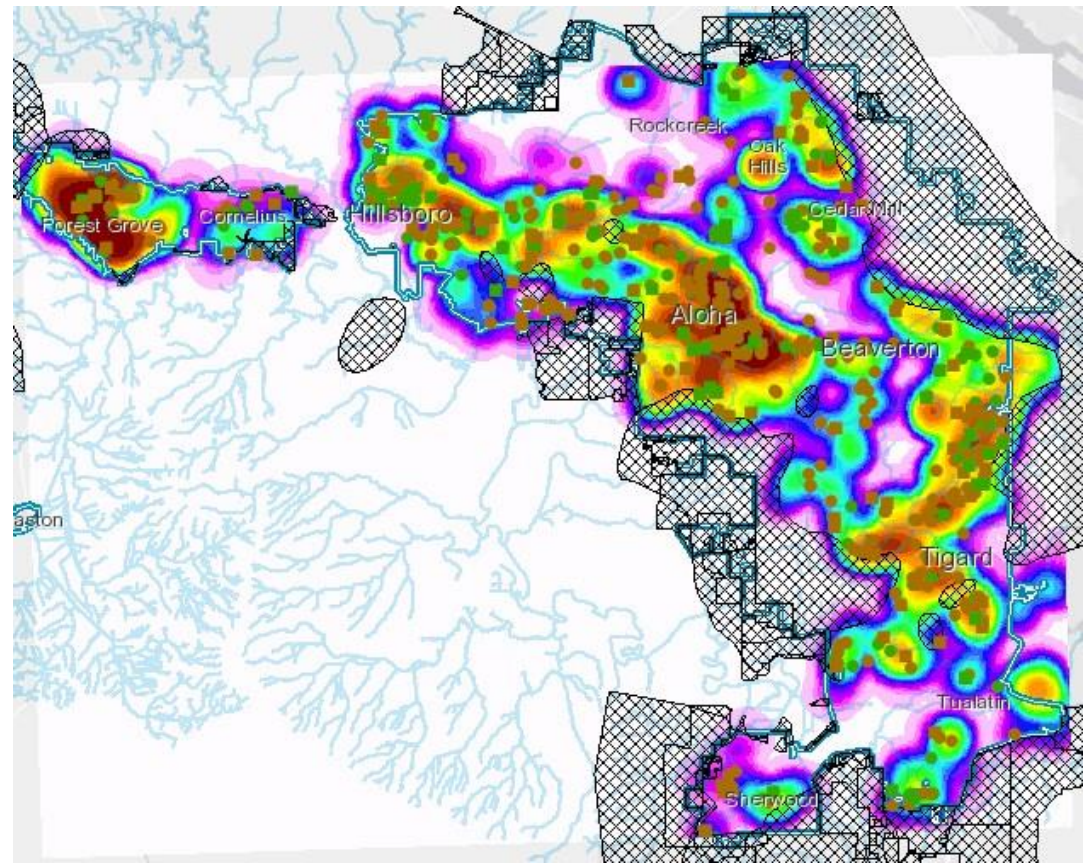


# Buildable Land & Activity Analysis – Available Lands Heat Map

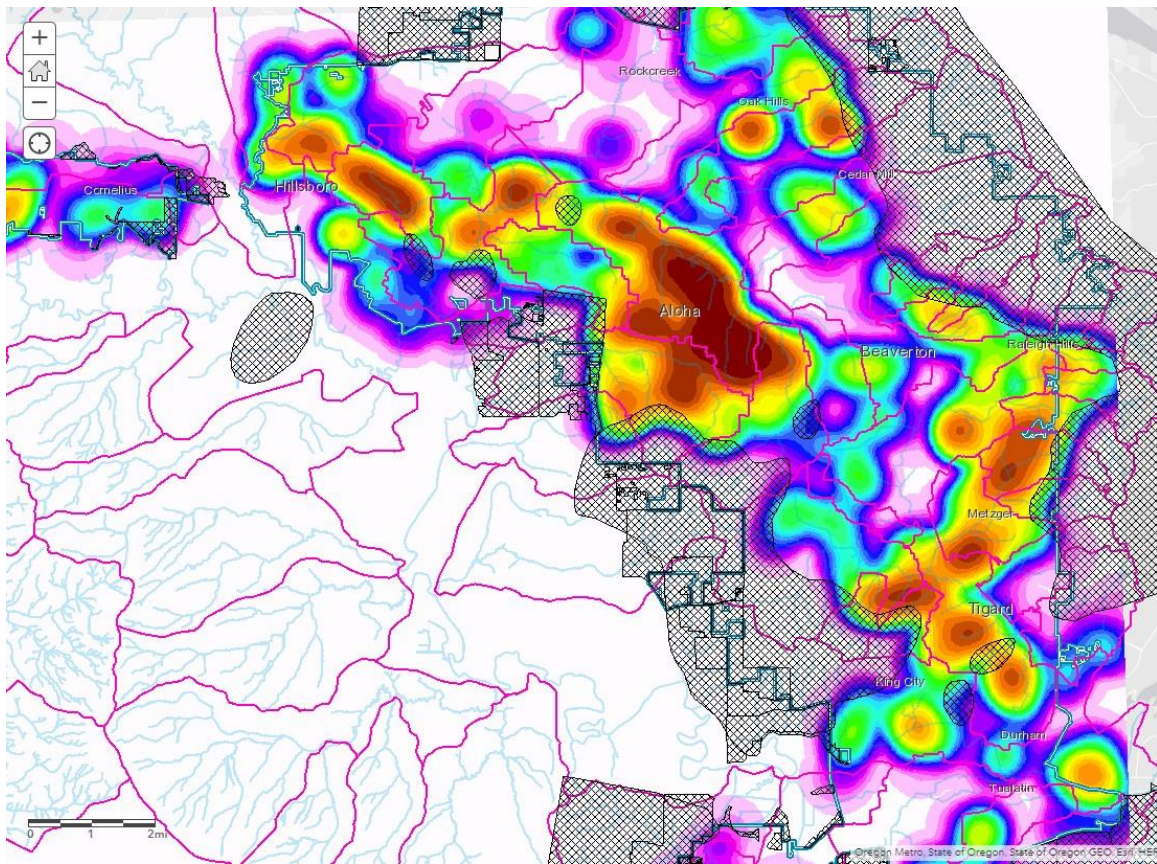




# Buildable Land & Activity Analysis – “Gut Check” w/ SPL Data

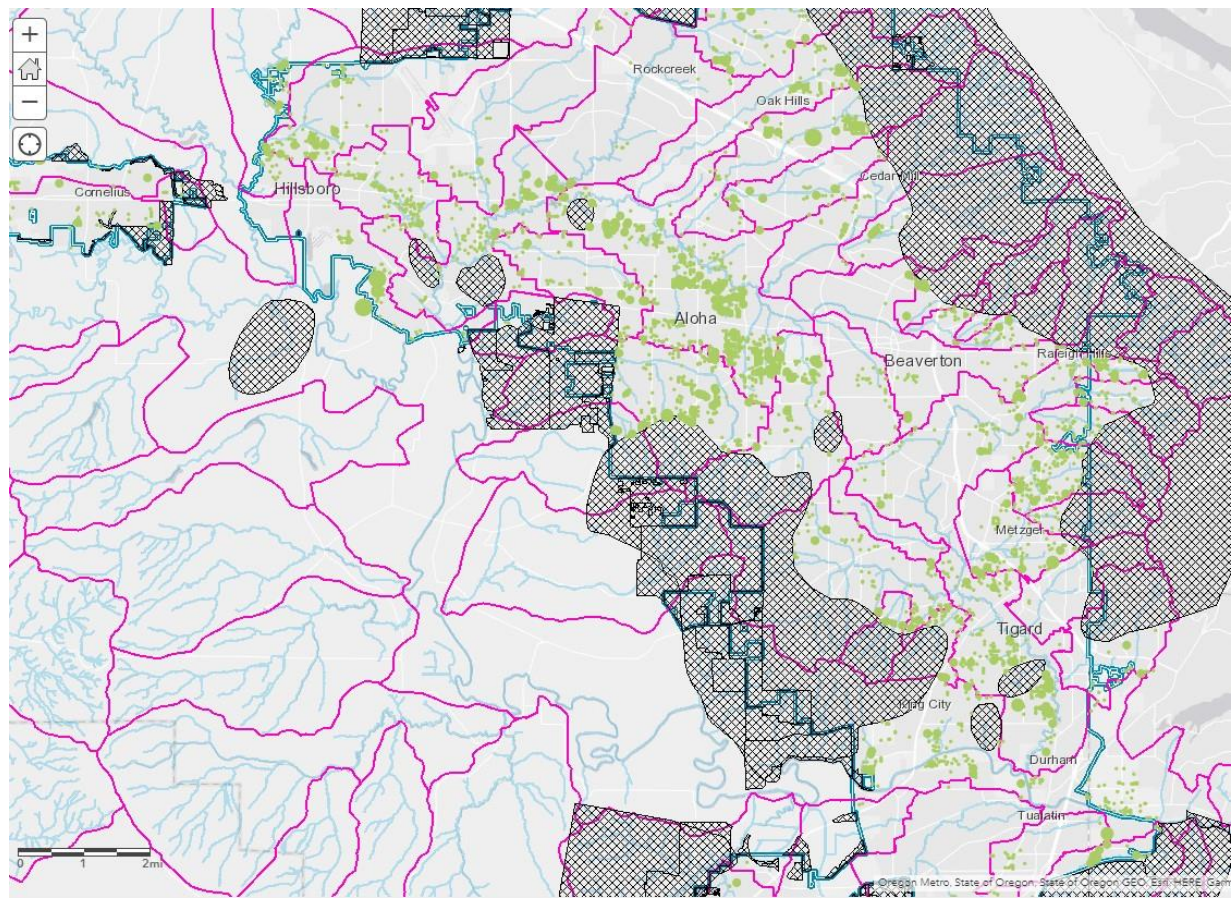


# Buildable Land & Activity Analysis – Available Lands & Sub-Watersheds





# Buildable Land & Activity Analysis – Available Lands & Sub-Watersheds



## Next Steps

- Select Representative Basins
  - Large & Small Basins
  - Range of Available Land
- Develop Methodology to Evaluate Impacts within Representative Basins



# Proposed CWAC Timeline

