

COUNCIL BRIEFING

City of Cascade Locks, Oregon

April 28, 2025



FEMA

Welcome!

1. Why are we here?
2. What goes into a flood study update?
3. What resources are available?



FEMA

Why are we here?

Flooding is the most costly, deadly natural hazard in the U.S., yet is highly predictable. A flood study update reflects:

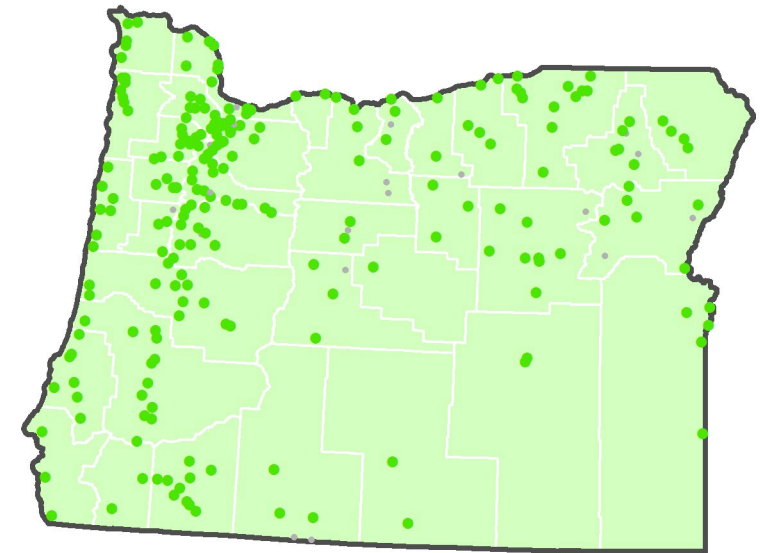
- Our understanding of flood risk as the land changes over time.
- Incorporation of new technology and years-of-record to update our understanding of flood risk.
- Updates to policies and national priorities.
- Promotion of risk identification before an event to allow communities time to mitigate.



FEMA

National Flood Insurance Act of 1968

- **Establish the National Flood Insurance Program (NFIP)**
 - ✓ Provides flood insurance for structures and contents in communities that adopt and enforce an ordinance outlining minimal floodplain management standards.
 - ✓ Identify and map flood risk on an ongoing basis.
- **Oregon Participants**
 - ✓ 36 of 36 counties
 - ✓ 220 of 240 incorporated communities (covering 98% of incorporated community population)



- NFIP Participating County
- NFIP Participating Community



FEMA

Program Overview | Risk MAP

Risk Mapping, Assessment, and Planning (Risk MAP)

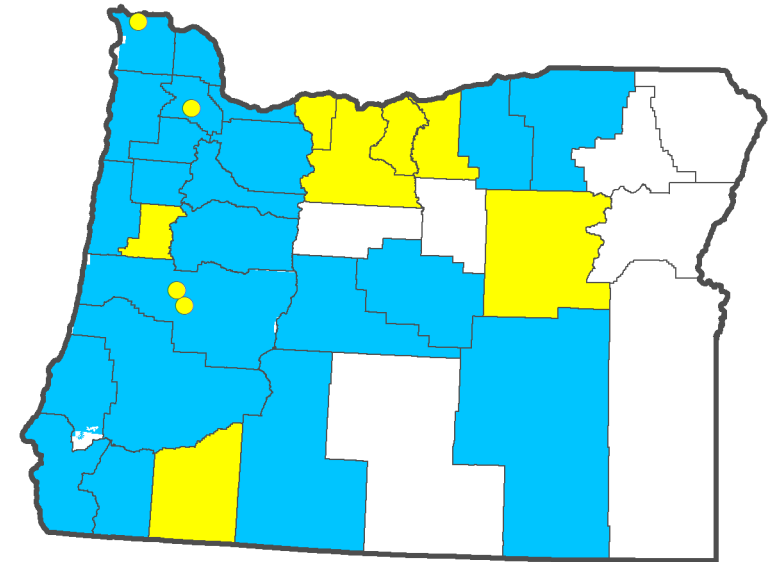
- Provides natural-hazard data to generate regulatory and non-regulatory datasets
- Builds partnerships across local, state, and federal entities
- Supports long-term hazard mitigation planning

Community's Role

- Prioritize areas of interest
- Provide feedback at key milestones
- Integrate hazard data into enforcement and planning mechanisms

FEMA's Role

- Fund, coordinate, and develop hazard data
- Facilitate conversations across partners
- Support translation of data into action



- Modernized
- Initial Engagement / Update In-Progress



FEMA

Federal Investments | Hood River County

Completed Projects

Statewide Building Footprint Inventory

<https://www.oregon.gov/dogami/pubs/Pages/dds/p-SBFO-1.1.aspx>

Natural Hazard Risk Report

2018-21 (Full Report & GIS files): pubs.oregon.gov/dogami/ofr/p-0-21-05.htm

Natural Hazard Risk Assessment

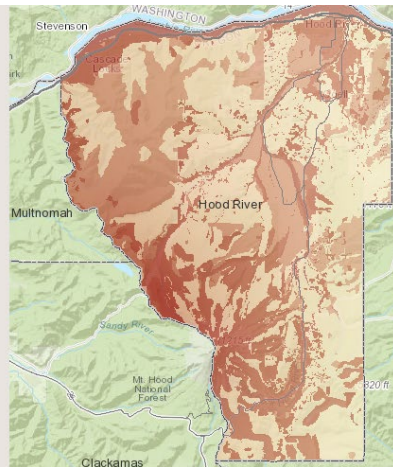
2021 (Story Map): [Hood River County, Oregon \(arcgis.com\)](https://arcgis.com)

Countywide Results

This map shows earthquake peak ground acceleration (PGA) for Hood River County. PGA models how hard the ground is shaking during an earthquake. Here is a summary of the results:

- Building loss estimate: \$1,309,753,000
Building loss ratio: 34%
- Nonfunctioning critical facilities: 31
- Potentially displaced population: 1,100

Click on the following buttons to view the earthquake hazards or the underlying features. Use the +/- buttons located on the lower right corner of the map to zoom in or out.



Ongoing Projects

LiDAR collection (*Eagle Creek Burn Scar area*)

- Status: In Progress (*publishing soon*)
- POP end: October 2024
- URL: <https://www.oregon.gov/dogami/lidar/pages/index.aspx>
- Viewer: [DOGAMI Lidar Viewer \(oregon.gov\)](https://www.oregon.gov/dogami/lidar/pages/index.aspx)

Post-Fire Debris Flow (PFDF) Hazard Mapping (Eagle Creek Fire)

- Status: In Progress (report publication in fall 2025)
- Final report & deliverables: September 2025
- URL (includes meeting recordings): <https://www.oregon.gov/dogami/landslide/Pages/PostFireDebrisFlow.aspx>

Landslide Hazard Mapping (Hood River County)

- Status: In progress (landslide inventory underway)
- Key dates: Kick-off meeting held on April 3, 2024
- Final report & deliverables due: September 2026
- URL (general info): <https://www.oregon.gov/dogami/landslide/pages/landslidehome.aspx>



FEMA

Flood Study Updates are a Collective Effort

Federal Government

Responsible for mapping communities on a continuing basis.

Makes flood insurance available and establishes minimal standards.

Incentivizes resilience towards natural hazards.

State Government

Prioritizes areas for future mapping studies.

Determines criteria for prioritization (availability of existing data, accuracy of mapping, connections to mitigation opportunities).

Connects across agencies.

Local Government

Provides local insight on mapping credibility.

Integrate hazard data into enforcement and planning mechanisms.

Ensures compliance with floodplain management requirements.



FEMA

What's Changing?

Since 1984, improved technology and years of additional streamflow data facilitated updates to:



Topography (Ground elevation)



Hydrology (How much water)



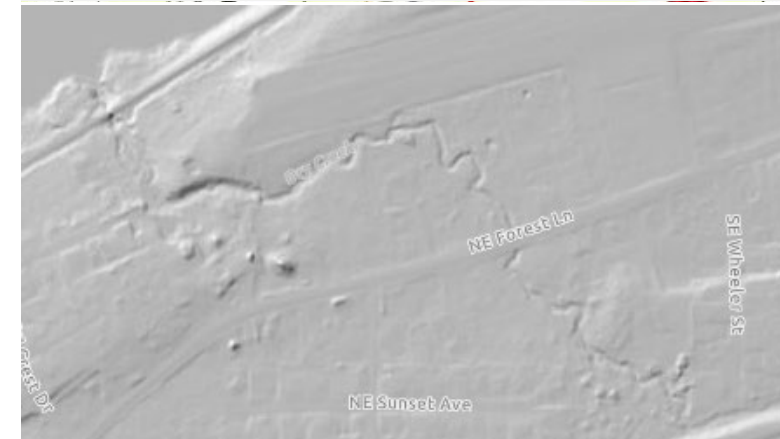
Hydraulics (How the water moves)



FEMA



1979 – USGS Quad Map: 40' Contours

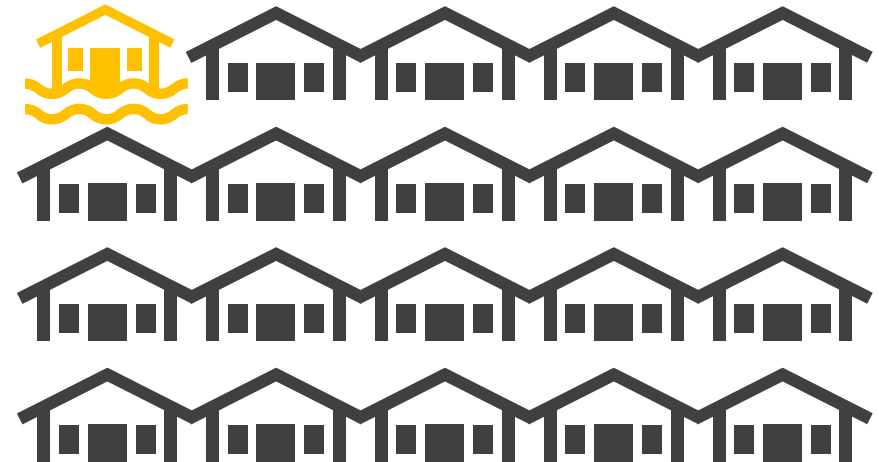


2008 – DOGAMI LiDAR: +/-1.5'

Visualizing Risk (30-Year Mortgage)

1% Annual Chance = High Flood Risk
Approximately **1 in 4** chance of flood event (**26%**)

0.2% Annual Chance = Moderate Flood Risk
Approximately **1 in 20** chance of flood event (**6%**)



FEMA

Mapping Update Objectives

Provide updated flood hazard analysis using data, tools, and processes unavailable in 1984.

- Use **high-resolution topographic data** (LiDAR) for the best view of the ground.
- **Provide flood elevations in rural areas** to assist with local permitting.
- Leverage **local expertise** in the mapping process.

Provide non-regulatory planning-level tools to support growth management over the next generation.



[Preliminary Floodplains | Hood River County, Oregon - Risk MAP Portfolio](#)



FEMA

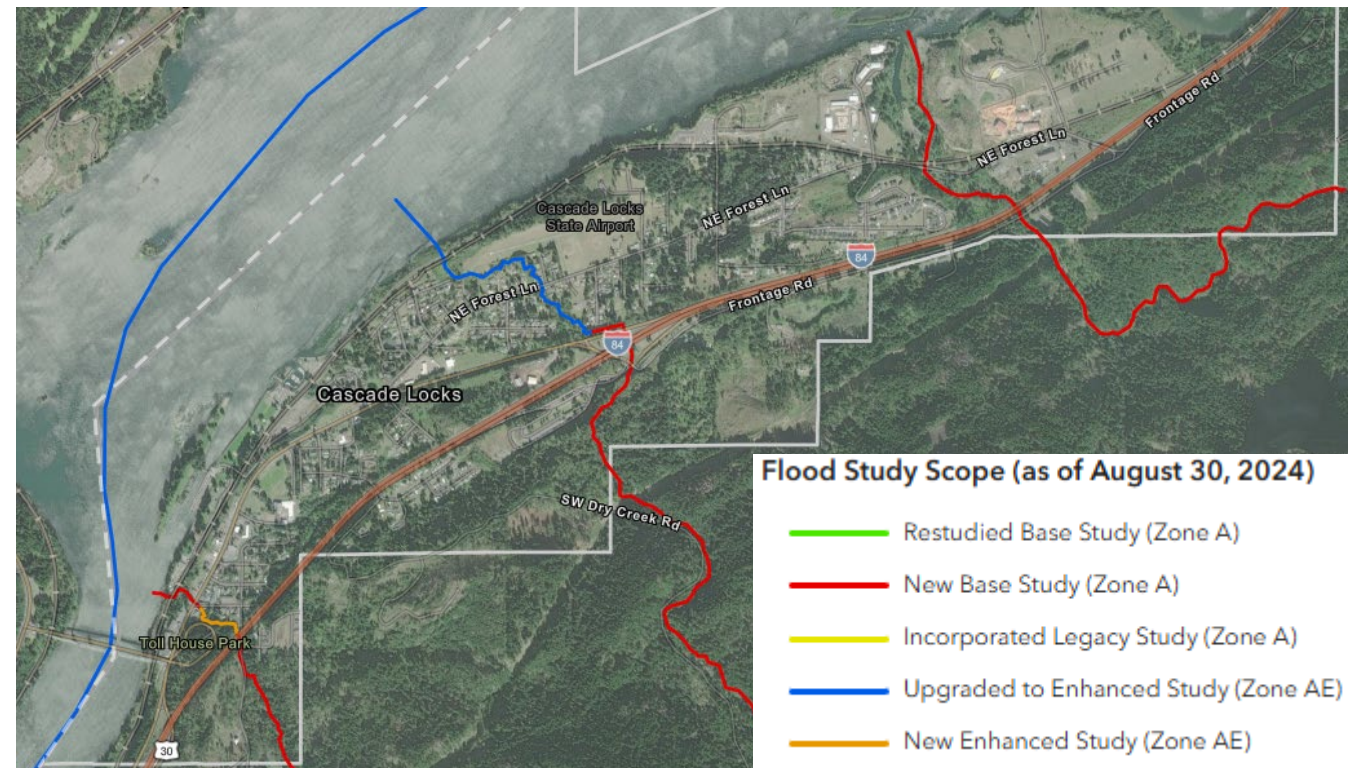
Scope of Work

Restudy or Upgraded analysis (Columbia River and Dry Creek downstream of I-84)

- Restudied and/or upgraded with additional investments typically due to actual or planned population growth.

New analysis (Dry Creek upstream of I-84, Herman Creek, Rudolph Creek)

- New investment to capture unmapped flood risk. Typically prioritized for populated or portions of populated areas.



FEMA

Flood Map Update - Online Storymap

Provides:

- ✓ Overview of the flood study update.
- ✓ Access to information to learn more about your property.
- ✓ Points of contacts for flood study information, floodplain management and insurance, and resources for other natural hazards.



[Hood River County, Oregon - Flood Map Update](#)



[Condado de Hood River](#)



FEMA

Flood Risk Public “Virtual” Open House



Property Identification

- Print a map of your property
- Learn about the current and proposed risk



Flood Study and Engineering

- How were the maps developed?
- How can I submit feedback?



Flood Insurance

- What are my flood insurance options and requirements?



Floodplain Management

- What does the NFIP require for building and development?



Local and State Resources

- Additional aspects of local and state floodplain management, permitting, planning, and mitigation requirements.



FEMA

Submittals of Appeals and Comments

Appeals:

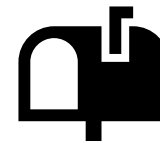
- Technical information or data that results in additional analysis and a significant change to the preliminary mapping.

Comments:

- Other information which does not result in a significant map change.

Procedure:

- (Preferred) Submit to the community floodplain administrator.
- Directly to the FEMA Regional Service Center via mail or email:



FEMA Region 10 Service Center
20700 44th Ave W, Suite 130
Lynnwood, WA 98036



to: RSC10@starr-team.com

cc: Marshall Rivers, marshall.rivers@fema.dhs.gov
(FEMA Project Monitor) and Brett Holthaus,
brett.holthaus@atkinsrealis.com (STARR II Project
Manager)



FEMA

Important Steps to Map Adoption

Letter of Final Determination

- Typically, 4-6 months following the appeal period end or resolution of comments and/or appeals.
- Community receives official Letter of Final Determination (LFD) starting 6-month process to update floodplain management regulations to adopt the FIS and FIRM.

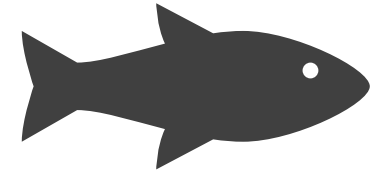
Community Responsibilities

- Assure your community's regulations meet the minimum NFIP and State floodplain management standards.
- Learn your community's ordinance/regulation adoption process.
- Contact your State NFIP Coordinator and/or FEMA Floodplain Specialist to help you review your current regulations.



Pre-Implementation Compliance Measures (PICM)

FEMA is working to implement immediate measures to ensure the National Flood Insurance Program (NFIP) complies with the Endangered Species Act (ESA). These [Pre-Implementation Compliance Measures \(PICMs\)](#) are intended to be in place until implementation of the Final NFIP-ESA Implementation Plan.



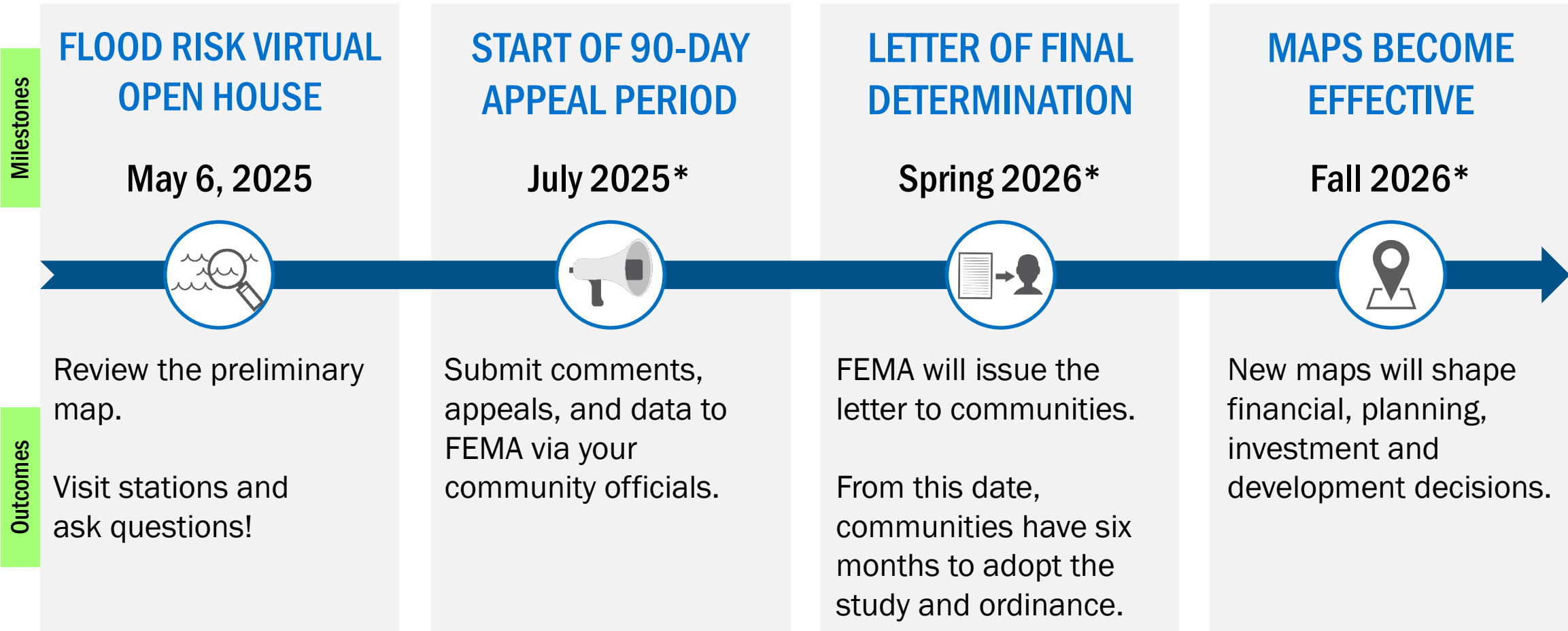
The [NFIP - ESA Model Floodplain Management Ordinance](#) and [Floodplain Habitat Assessment and Mitigation Guide](#) can be found at FEMA's website: [NFIP-ESA Integration in Oregon](#).

For information specific to the PICM and how FEMA is coordinating with participating NFIP communities to assist them in meeting the requirements of the ESA in Oregon, please visit this website for the latest information: [NFIP-ESA Integration in Oregon](#) or contact the team directly via email: FEMA-R10-MIT-PICM@fema.dhs.gov.



FEMA

Hood River County, Oregon: Project Timeline



* All projected dates may change as the project progresses.

Risk MAP Team

FEMA Region 10

Marshall Rivers (Main Point of Contact)
Risk MAP Lead/Project Monitor
(425) 381-3773
marshall.rivers@fema.dhs.gov

Dale Meck
FEMA Regional Engineer
(202) 285-2671
dale.meck@fema.dhs.gov

Joshewa Fulton
FEMA Integration Team (FIT) Planner
(202) 340.2147
joshewa.fulton@fema.dhs.gov

Floodplain Management & Insurance
FEMA-R10-MIT-FMI@fema.dhs.gov

Pre-Implementation Compliance Measures
FEMA-R10-MIT-PICM@fema.dhs.gov

YOU

State & Federal Partners

Deanna Wright
State NFIP Coordinator
(503) 573-0050
deanna.wright@dlcd.oregon.gov

Hannah Fattor
State RiskMAP Coordinator
(971) 718-2106
hannah.fattor@oem.oregon.gov

Bill Burns
Oregon Department of Geology and Mineral
Industries (DOGAMI)
bill.burns@dogami.oregon.gov

Paul Sclafani
Floodplain Management Program Manager -
USACE, Portland District
paul.sclafani@usace.army.mil

Contract Support

Brett Holthaus
Floodplain Mapping Project Manager, STARR II
(240) 264-8028
brett.holthaus@atkinsrealis.com

Joshua Crowley
Regional Service Center Lead, STARR II
(425) 329-3679
josha.crowley@atkinsrealis.com

Lisa Adair
Communication and Engagement Project
Manager, Resilience Action Partners
(206) 288-6024
lisa.adair@mbakerintl.com



FEMA