

**FEMA REGION X  
RISK MAP DISCOVERY INTERVIEW  
KLICKITAT COUNTY, WASHINGTON**  
June 25, 2015 2:30 PM PST

**Participants**

Klickitat County

- Curt Dreyer, Klickitat County Planning Department Director, FPA
- Joe Sheridan, Klickitat County Planning Department Senior Planner (Secondary Contact)

FEMA Region X

- Ted Perkins, Regional Engineer
- Kelly Stone, Risk Analyst

State of Washington

- Morgan Mak, Washington State Emergency Management

Resilience Action Partners (RAP)

- Kathleen Warren, Region X CERC Lead

STARR (FEMA Contractor)

- Josha Crowley, Regional Service Center (RSC) Lead
- Adam Pooler, GIS Lead/Senior GIS Analyst
- Andy Dobson, Senior Planner

**Discussion**

Josha Crowley made introductions and presented an overview of the Risk MAP program and the different projects and products can benefit communities. Our overall goal is discovering how FEMA can help Klickitat County become a more hazard and disaster-resilient community. A copy of the presentation is included with these meeting notes as Appendix A.

Pre-Discovery meetings and interviews with communities within the Middle Columbia-Hood Watershed have been scheduled throughout June and July, 2015. Discovery Meetings are scheduled tentatively for the week of July 20, 2015.

*The following information was collected during the interview. Unless otherwise noted, all comments are from Klickitat County representatives.*

### *Community Contacts*

- Updating planning department and floodplain administrator contacts on our database
- Rex Johnson added as County Commissioner District 1
- Gordon Kelsey updated as Public Works Director
- Emergency Management Coordinator changed to Jeff King
- David Sauter, County Commissioner District 2
- Joe Sheridan will be the primary point of contact after Curt Dreyer retires in November, 2015.

### *Fact Sheets and Discovery Mapping*

The draft Discovery Map illustrates a variety of geographic data from state, national, and (when possible) local sources. These include basic geologic and geographic features, jurisdiction boundaries, hazard locations, critical facilities, floodplain data, infrastructure, aerial images, and environmentally sensitive areas. One reason for this interview is to review and refine the draft Discovery Map before the in-person Discovery Meeting with the community.

- How does the information we provided look to you? Revisions or questions?
  - Adam running through description of various national, state, and local datasets, natural geographic features, and community features illustrated on Discovery Map
- Where are critical facilities and infrastructure located?
  - Contact GIS Coordinator for Klickitat County
- Do you know of any other projects that have collected topographic data that could be useful?
  - DOGAMI
- Do you have a GIS specialist and data layers that we could add to our maps?
  - Kim Gleason (king@klickitatcounty.org), public works department, GIS coordinator for the County
  - Will talk with her about getting mapping on local critical facilities, get as much mapped as we can and then fill in any gaps during in-person Discovery Meetings

### *Planning*

- What do you value in your community?
  - Pioneer Center mentioned down in White Salmon
  - Emergency Management Facility in Goldendale
  - See note about critical facilities mapping—will get this on draft map and fill in gaps at discovery meeting in July
- Status of FEMA Hazard Mitigation Planning projects
  - Jeff King, Emergency Management would need to be asked about this
    - Emergency Operations Plan
- Top hazard mitigation priorities
  - Wildfire hazard are a high priority

*Earthquake Hazard*

- Risk level
  - Many recorded fault lines running throughout county and illustrated on Discovery Map
  - Does not sound like earthquakes are a significant concern,
- History/Damage
  - Nothing in recent memory,
  - Mt. St. Helens (1980) most recent
- Vulnerable locations – Review Emergency Management Plan

*Wildfire Hazard*

- Risk level
  - Significant concern
  - Major fires in all of last three years
  - Mile Post 28 Fire and Monastery Complex Fire
  - Regular fires started along railroad tracks from train activity—up to 20-30/year
- Vulnerable locations
  - Critical Areas Ordinance – Identifies vulnerable locations.
- Other needs - None
- Mitigation projects or initiatives
  - Wildfire Study updated 8-10 years, detailed catalog of historic fires, and delineation of vulnerable areas. Economic Development Department
  - We have a copy (2006) for Klickitat and Skamania Counties
  - Fire Wise & Fire Districts mitigation projects discussed but haven't moved forward—County Commissioners leaving it to individual property owners to keep their homes safe
  - Strict burn bans in effect within Fire Districts, currently in effect

*Landslide Hazard*

- Risk level
  - Major slide above east side of Bingen (refer to Bingen notes)
  - Cuts Along Centerville Highway and Klickitat River
- Vulnerable locations
  - Critical areas ordinance, may or may not be available in GIS, slopes evaluated on site-by-site basis, no comprehensive study out there.
- Other needs
- Mitigation projects or initiatives
  - More than 15% slope: County Building Department regulations require geotechnical analysis for any construction or development

*Severe Storm Hazard*

- Risk level

**FEMA REGION X  
RISK MAP DISCOVERY INTERVIEW  
KLICKITAT COUNTY, WASHINGTON**

- Heavy snowfall fairly regular occurrence in NW portion of County, Trout Lake & Glenwood Area
- Vulnerable locations
- Damage, power blackouts, duration
  - Ice storms cause frequent blackouts, take lines down due
  - Can last for weeks, depending on where in the county you are located
  - Huge variety of vegetation and topography in different portions of the county.
- Shelter needs and facilities
  - Have needed to shelter people during recent wildfires, emergency shelter
  - Flooding in 1997 required sheltering because people were isolated from their homes
- Mitigation projects or initiatives
  - Klickitat County PUD addresses outages.

**Emergency Communications**

- Two local radio stations great at getting the word out about oncoming storms
- Jeff King, Emergency Services may know of other means for emergency communication

***Flood Hazard***

- Risk level
- FIRM comments, revisions, questions
  - Mapping is inaccurate, Trout Lake area especially mentioned because of mitigation and flood-protection work going on there along Bear Creek.
  - Klickitat River also inaccurate, Q3 data unusable in many cases
  - White Salmon River floodplain concerns
  - Very similar concerns with existing floodplain mapping that we're hearing from in every community in the watershed—new floodplain studies necessary countywide (numerous creeks and rivers mentioned during interview and indicated on Discovery Map)
  - Going to have to discuss all of this in more detail at Discovery Meeting—too complicated to capture during phone interview, but got as much as we could illustrated on Discovery Map
- Repetitive loss properties- Properties along the Snyder Creek near the unincorporated Town of Klickitat (Community Center and 3-4 homes).
- Recent infrastructure projects that might affect floodplain/floodway/elevations
  - Communities involved in Fish Populations Recovery/Maintenance requiring upgraded/enlarged culverts.
- New development or construction that could affect runoff amounts, impact waterways
  - Abandoned rail line taken over by state parks, removal of approach slopes on trestle bridge over river significantly altered river flow and flood prone areas
- New floodplain studies
  - Rely heavily on local engineering knowledge to determine flood levels, areas vulnerable to 1% flood, interpreting what is shown on FIRM

**FEMA REGION X  
RISK MAP DISCOVERY INTERVIEW  
KLICKITAT COUNTY, WASHINGTON**

- Flood Study needed near the unincorporated town of Trout Lake.
- Other flooding issues or concerns
  - “Suburbia” area upstream on Klickitat River from Salmon Creek experienced massive damage during 1996 flooding, homes retrofitted with elevated foundations by County—homes appear to be within floodway (area is outside watershed boundary)
  - Highway 142 along the Klickitat River flooded during 1997 flooding.

*Levees*

- Other levees or flood control structures not shown on the map
  - Nothing regulated, some private dikes to protect individual buildings are out there, but nothing likely to affect riverine flooding one way or another
  - Dickey Farms property levee mentioned, (see Bingen Interview notes)
- Documentation – None at this time

*Environmentally Sensitive Areas*

- Habitat areas mapped—check with GIS coordinator
- Wetland areas mapped—check with GIS coordinator
- DNR Forest Practices
- Need the Critical Areas Dataset from county GIS

*Communications and Outreach - Unknown*

- Current community outreach/engagement
  - Local radio and media used
- How would residents react to changes in floodplain mapping - unknown
- Where does your community get information about disasters and hazards
- Who are the key players in communication and outreach to residents
- What kind of outreach works best in your community
- Current awareness among residents about disasters and hazards
- Regular meetings of boards, organizations, etc. where outreach could happen
- Use of RiskMAP products for outreach, communication, and education

*Compliance and Training*

- Floodplain administrator
- Floodplain permitting
- Training and support

**Next Steps**

- Will coordinate with local officials on dates, times, and locations for Discovery Meeting. Especially want to make sure GIS and emergency communication reps can attend
- Include Jeff King with Emergency Management and Public Works Department

## **Appendix A: Interview Presentation**



FEMA

# Risk MAP Discovery

## Middle Columbia-Hood Watershed

Information Exchange Sessions  
June 2015

**RiskMAP**  
Increasing Resilience Together



# Information Exchange Agenda

- **Overview of Risk MAP and Discovery**
- **Introduction to Enhanced Risk MAP Products**
- **Interactive Questionnaire**
- **Close**



# The Vision for Risk MAP

Through collaboration with State, Local, and Tribal entities, Risk MAP will deliver quality data that increases public awareness and leads to action that reduces risk to life and property



# RiskMAP

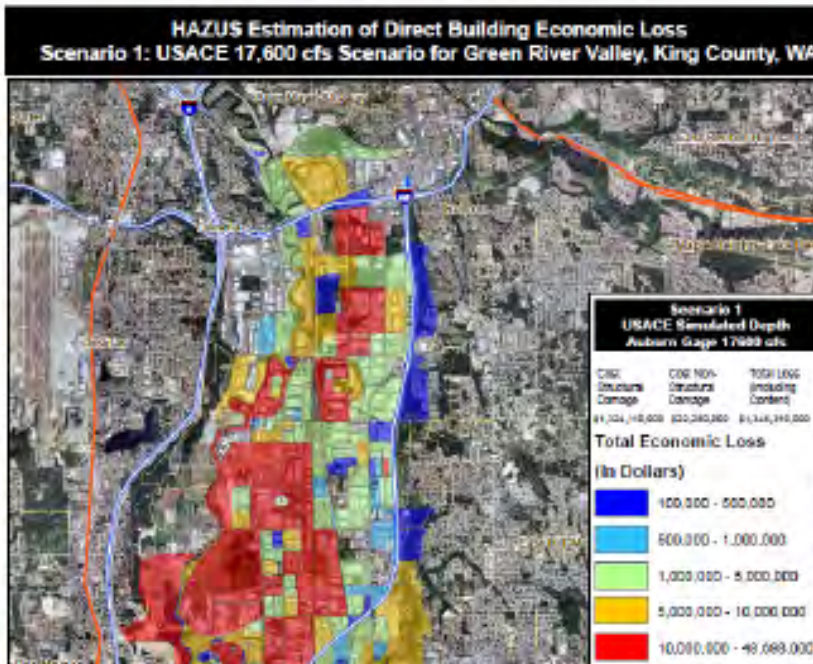
Increasing Resilience Together

- Collaborative approach
- Goals: quality data, public awareness, action that reduces risk
- Watershed-oriented
- Multi-Hazard
- Focus on up-front coordination
- Discovery is mandatory

# Risk MAP Products

## Multi-Frequency Depth & Water-Surface Elevation (WSE) Grids

10%, 2%, 1%, 0.5%, 0.2% annual chance profiles



### Inundation

- 3 feet or less
- 3 to 6 feet
- 6 feet +

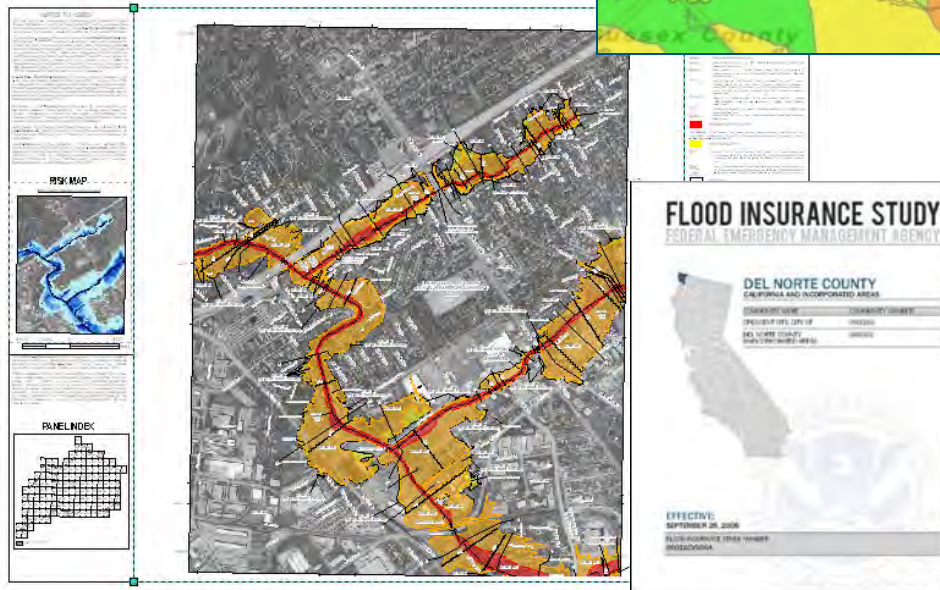
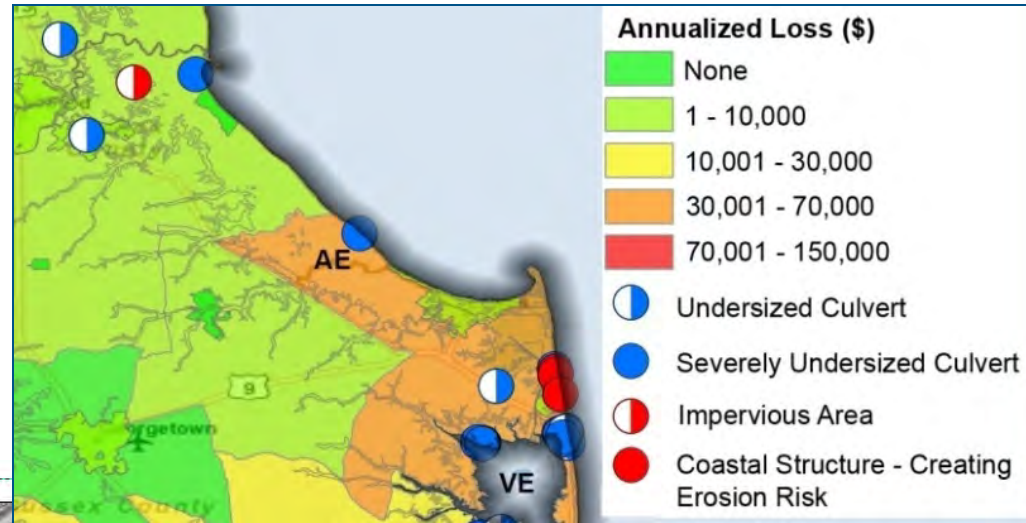
## HAZUS Risk Assessment & National Flood Risk Layer

Enables communities to understand risk by reference to existing structure loss

# Risk MAP Products

## Contributing Hazard Factors

Highlights areas of concern identified throughout project



## FIS Reports and DFIRM Maps

DFIRM and FIS will continue to fulfill regulatory requirements and support the NFIP

# Discovery

***Discovery is the process of data collection and analysis with the goal of initiating a hazard risk or mitigation project and risk discussions within the watershed***

## **When:**

- After an area/watershed has been prioritized
- Before a Risk MAP project is scoped or funded

## **Required for new and updated...**

- Flood studies
- Flood risk assessments
- Mitigation planning technical assistance projects

## **Why:**

- Increases visibility of flood risk information, education, involvement
- Helps inform whether a Risk MAP project will occur in the watershed



# Middle Columbia-Hood Discovery

- **Federal and State Data Collection**
- **Local Issues: Identify Risk MAP Needs**
  - Need support with mitigation planning?
  - Need mitigation projects?
  - Need new flood study data?
  - Need training on floodplain management?
  - Need support developing a hazard risk outreach program?
  - What else can FEMA do to help your community become resilient?
- **Pre-Discovery Interviews: June 2015**
- **Discovery Meetings: July 20-24, 2015**
- **Risk MAP Project(s) Identified**
- **Possible FEMA Funding Allocated for Risk MAP Project**

# Discovery Interview

- **Local Contacts**
- **Data**
  - LiDAR
  - Local or Regional GIS Data
- **Mitigation Planning**
  - Desired Mitigation Projects
- **Local Hazards**
  - Earthquakes
  - Wildfires
  - Landslides
  - Severe Storms
  - Flooding
- **Levees**
- **Environmentally Sensitive Areas**
- **Communications and Outreach**
- **Compliance and Training**

Mitigation Planning		
How would you describe your level of involvement with the development of the mitigation plan? (Considerable, Moderate, Minimal)	Do you need assistance with mitigation planning in your community? (Yes, No, Possibly)	Mitigation Planning Comments, Explanations, Questions

# Questions?

## FEMA

- **Kelly Stone, Risk Analyst, [kelly.stone@fema.dhs.gov](mailto:kelly.stone@fema.dhs.gov)**
- **Kristen Meyers, Mitigation Planner, [kristen.meyers@fema.dhs.gov](mailto:kristen.meyers@fema.dhs.gov)**
- **Ted Perkins, Regional Engineer, [dwight.perkins@fema.dhs.gov](mailto:dwight.perkins@fema.dhs.gov)**

## WASHINGTON

- **Jerry Franklin, State Risk MAP Coordinator, [jfra461@ecy.wa.gov](mailto:jfra461@ecy.wa.gov)**
- **Morgan Mak, Mitigation & Recovery Strategist, [morgan.mak@mil.wa.gov](mailto:morgan.mak@mil.wa.gov)**

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