### FEMA REGION X RISK MAP DISCOVERY INTERVIEW CITY OF GOLDENDALE, WASHINGTON June 19, 2015 9:00 AM PST

### Participants

City of Goldendale

- Larry Bellamy, Goldendale City Administrator
- Karl Enyeart, Goldendale Public Works Director

### FEMA Region X

• David Ratte, Regional Engineer

State of Washington

- Morgan Mak, Washington State Emergency Management
- Jerry Franklin, Washington Department of Ecology

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
- Emily Whitehead, Project Manager Lead

### Discussion

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

Pre-Discovery Meeting Interviews with Goldendale and communities the Middle Columbia-Hood Watershed have been scheduled throughout June and July, 2015. The in-person Discovery Meetings are scheduled for July 20, 21, and 22, 2015.

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

#### FEMA REGION X RISK MAP DISCOVERY INTERVIEW GOLDENDALE, WASHINGTON

### **Community Contacts**

• Larry Bellamy confirmed he is the planning director and floodplain administrator for Goldendale.

### 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.

- New aerial mapping is pending that will update local utility mapping and service. The contract is under review, and the community is deciding how far outside city limits to collect data
- This project does not include LiDAR. There was discussion regarding if FEMA has funding available to assist this project and add LiDAR into the contract. This could be a possibility if the Little Klickitat River is re-studied
- Non-contiguous incorporated areas illustrated on the draft Discovery Map are well fields for city water and protected mountain stream water sources. The large incorporated area southwest of city limits is the WWTP location
- Critical facilities discussed and located on the draft Discovery Map:
  - o 199 Industrial Way-9-1-1 communication center
  - 1505 South Grant Street—police department
  - o 1103 South Columbus—City Hall
  - o 205 South Columbus County Courthouse

### Planning

- Goldendale has an urban growth boundary and long-term plans for governing future development and land uses--associated zoning maps illustrate what future build-out of the community will be
- Goldendale is part of Klickitat County hazard planning, and police and public safety personnel were involved in the most recent planning program
- Goldendale needs to be, or should be, included within a formal, FEMA-approved hazard mitigation plan to access grant funding

### Earthquake Hazard

- One fault line northeast of town indicated on draft Discovery Map
- Community does not report any notable earthquake events

### Wildfire Hazard

• Forested areas surrounding the community are impacted by drought and invasive insects—large wooded areas in water recharge areas are especially susceptible to damage

- There are large areas of dead/dying trees in the wooded areas north of city. These areas are being cleared in order to thin dead plant material and reduce wildfire hazard. There are some concerns about increased soil erosion
- In 2011 and 2013, large fires in area (outside of city) brought in many firefighters for up to two weeks to control event

### Landslide Hazard

- Some erosion concerns near bridges—a normal part of having piers/structures in waterway. Additional vegetation planting could be helpful to stabilize things
- Some large sediment buildups were mentioned during the interview, but overall no channel migration concerns
- Overall, low risk and concern for landslides

### Severe Storm Hazard

- Goldendale experiences lots of high winds—this is generally a windy part of the state
- Damage usually limited to electrical lines, power outages resulting from winter ice storms
- Ice storms more of a problem than heavy snow during winter

### Flood Hazard

- Some fill on private property has taken place, which alters flows but nothing is documented or modeled
- According to Goldendale, floodplain boundaries illustrated on the interview map is close to what they observe on the ground. The source of the floodplains on the interview map is Q3 digital data derived from original FIRM panels
- Columbia Street Bridge culvert has been increased therefore the revised floodplain boundary would likely be smaller than what is shown on the effective FIRM, especially south of bridge
- Little Klickitat River will be listed as a re-study need (entire extent within Goldendale)
- Downstream (west) of Columbus Ave bridge is a large collection of sediment, dryer years means slower flow and sediment falls out as water approaches bridge. Mitigation needed to remove this sediment from river and improve flow
- Newer bridge along N Columbus Ave is significantly different from what was there during original study—specifically designed to accommodate 1% flood event, (2002-2003 construction)
- Nichols Engineering built bridge, uncertain if any floodplain/hydraulic modeling was done community will contact consultant and send along any data that may be available (Little Klickitat River)
- Pipeline Drive Bridge is a bottleneck point with erosion and sediment collection happening upstream along north bank constricting water flow on Little Klickitat River. There are no immediate plans for replacing the bridge
- Mill Street Bridge is also undersized for Little Klickitat River, 1% flood would overtop it according to original FIS documents/models

### Environmentally Sensitive Areas

• Shoreline master plan undergoing update, wetland mapping part of that project, will share data for draft Discovery Map when it becomes available

### Communications and Outreach

- Current community outreach/engagement through Klickitat County.
- Community outreach done as part of shoreline master plan, communicating especially with residents within floodplain areas
- Standard community webpage for announcements, general information, but no Twitter or Facebook accounts

### Next Steps

• STARR will coordinate with Goldendale and schedule Discovery Meetings within the next few weeks.

**Appendix A: Interview Presentation** 



# Risk MAP Discovery

# Middle Columbia-Hood Watershed

## Information Exchange Sessions June 2015





# 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 <u>quality data</u> that increases <u>public awareness</u> and leads to <u>action that</u> <u>reduces risk</u> 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

HAZUS Estimation of Direct Building Economic Loss Scenario 1: USACE 17,600 cfs Scenario for Green River Valley, King County, W





### Inundation





## 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





# Questions?

FEMA

- Kelly Stone, Risk Analyst, kelly.stone@fema.dhs.gov
- Kristen Meyers, Mitigation Planner, kristen.meyers@fema.dhs.gov
- Ted Perkins, Regional Engineer, dwight.perkins@fema.dhs.gov
  WASHINGTON
- Jerry Franklin, State Risk MAP Coordinator, jfra461@ecy.wa.gov
- Morgan Mak, Mitigation & Recovery Strategist, morgan.mak@mil.wa.gov
  STARR
- Emily Whitehead, emily.whitehead@starr-team.com
- Adam Pooler, adam.pooler@starr-team.com
- Becca Fricke-Croft, becca.croft@starr-team.com
- Josha Crowley, josha.crowley@starr-team.com

**Resilience Action Partners** 

Kathleen Warren, kathleen.warren@mbakerintl.com



