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# Big Wood Watershed Flood Study Kickoff

**November 25, 2014**

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# Today's Objective

- **Review finalized Study Scope**
- **Provide Overview of Risk Assessment Products**
- **Review Partnership Agreement**

# Big Wood Discovery

- Discovery Meeting held July, 2011
- Communities Identified Areas which required an updated study
- FEMA Discussed Risk Assessment Products
- Communities identified mitigation and training needs

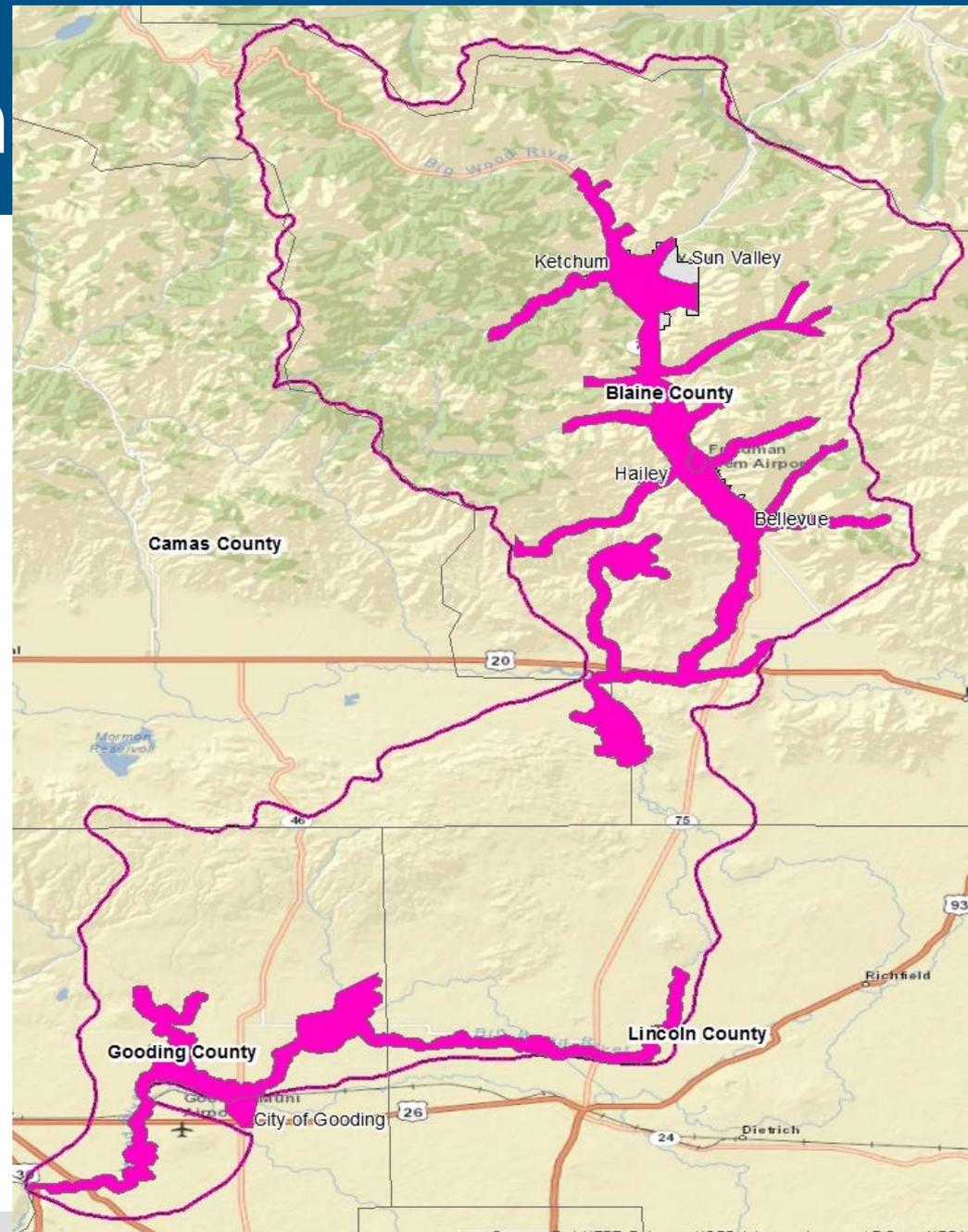


# LiDAR Collection

Collection will begin between  
February/March 2015\*  
*\*(Weather permitting)*

FEMA funded DOGAMI to collect  
the LiDAR.

DOGAMI (Oregon Department of  
Geology and Mineral Industries)



# Study Scope- Overview



# Ketchum & Sun Valley

## Zone AE

- Eagle Creek, 1.2 miles
- Big Wood- Ketchum, 2.6 miles
- Lower Warm Springs, 4.8 miles
- Upper Warm Springs, 2.5 miles
- Comstock Canal 1.3 miles
- East Fork Wood River, 3 miles

## Zone A

- Lake Creek, 1.6 miles
- Deer Creek, 3.4 miles

## Redelineation

- Big Wood River (North Reach) 6.2 miles
- Trail Creek, 0.9 miles
- Big Wood River (South Reach), 15.8 miles



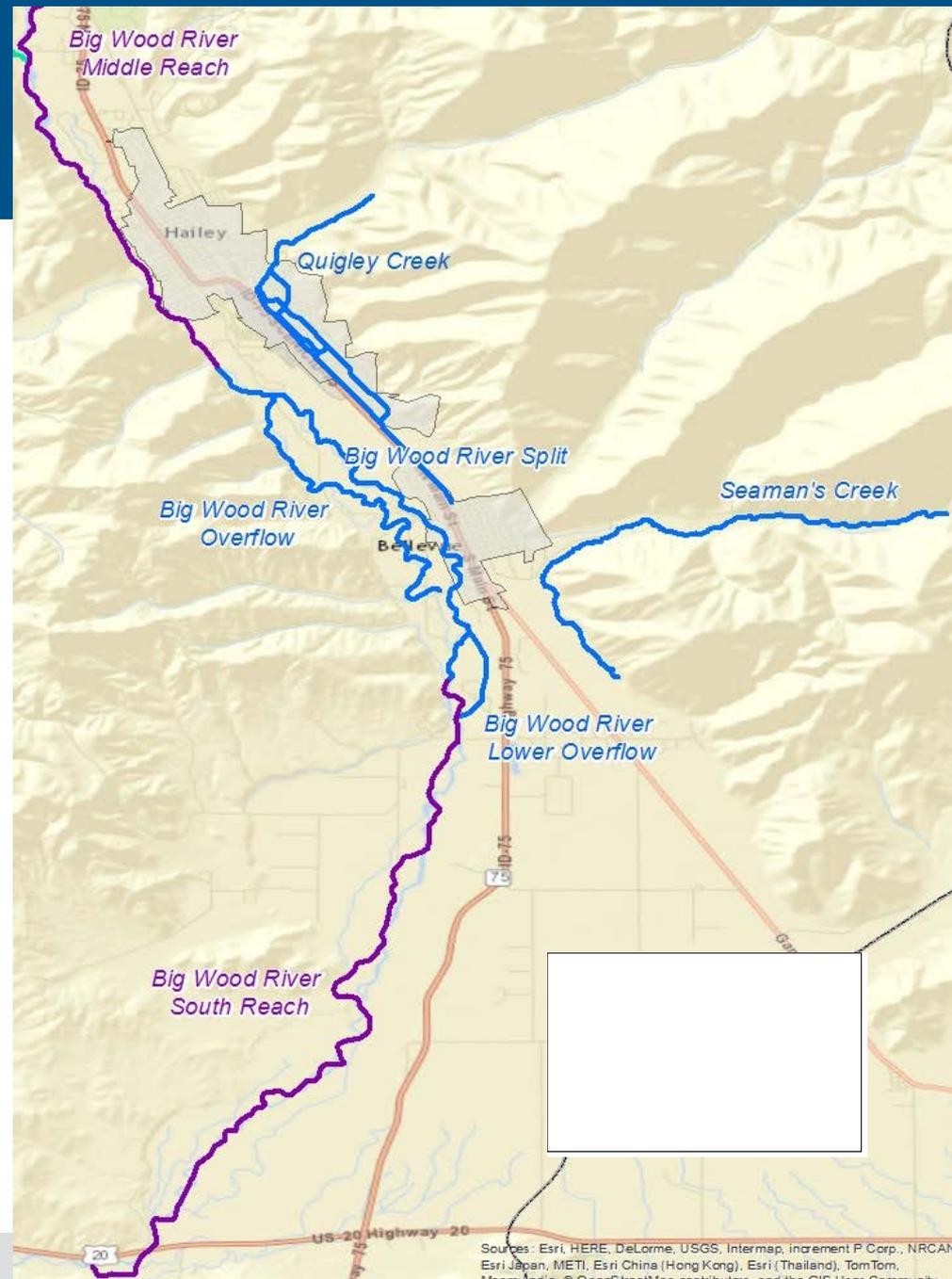
# Bellevue & Hailey

## Zone AE

- Quigley Creek, 5.4 miles
- Quigley Creek overflows, 3.8 miles
- Big Wood River Split, 6.1 miles
- Big Wood River Overflow, 4.8 miles
- Seaman's Creek, 6.5 miles
- Big Wood Lower Overflow, 1.2 miles

## Redelineation

- Big Wood River (Middle Reach) 15.8 miles
- Big Wood River (South Reach) 10.6 miles



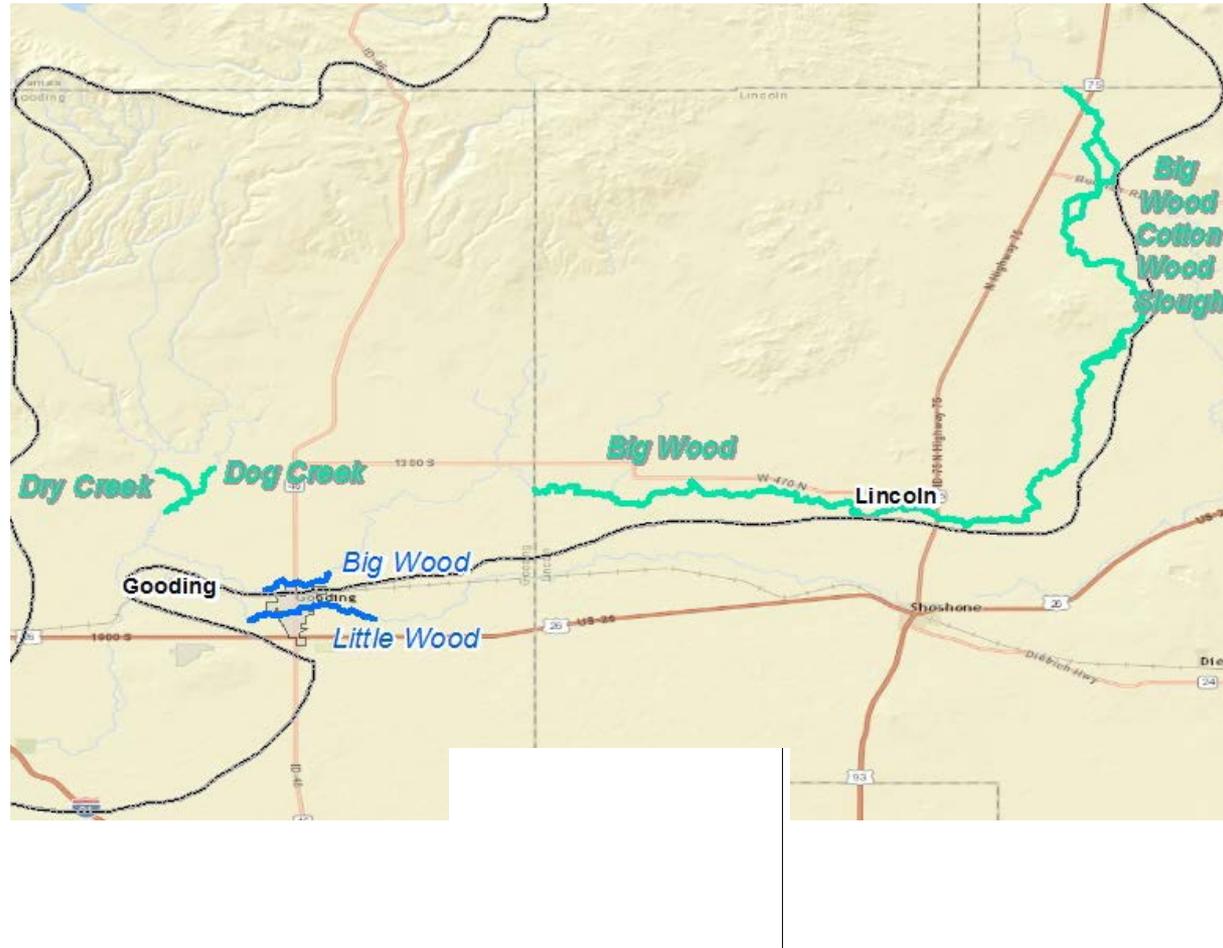
# Gooding and Lincoln Counties

## Zone AE

- Big Wood, 2.3 miles
- Little Wood, 4.5 miles

## Zone A

- Dry Creek, 2.7 miles
- Dog Creek, 1.3 miles
- Big Wood, 38.8 miles
- Cotton Wood Slough, 6.5 miles



# Schedule Forward\*

- **Flood Study Review Meeting (Winter/Spring 2017)** – The input data, methodology, and draft flood maps will be presented to the communities. Hydrology expected this summer. Hydraulics anticipated early 2017.
- **Preliminary Map Release (Fall/Winter 2017\*)**
- **Final CCO Meeting (Fall/Winter 2017)** – The preliminary flood insurance study is reviewed and discussed with community officials. A public meeting can then be held afterwards to present the maps to the public. Appeal period typically starts shortly after the public meeting.
- **Resiliency Meeting (Winter/Spring 2018)** – The resiliency meeting reviews all of the risk assessment products and will focus on mitigation action

*\* Dates are dependent upon available funding and are subject to change*



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# Risk Assessment Products

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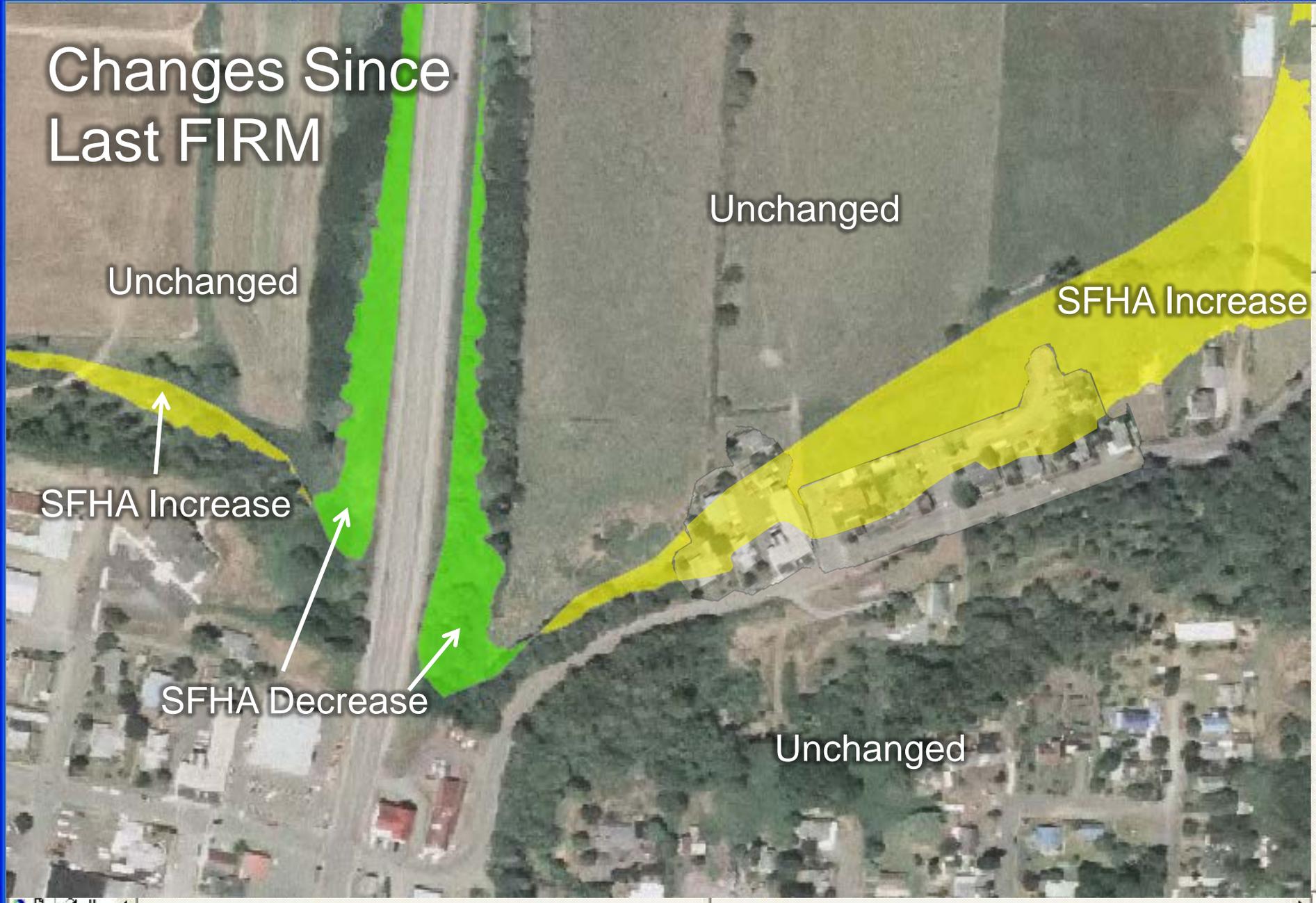
# Changes Since Last FIRM

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# Changes Since Last FIRM



Unchanged

Unchanged

SFHA Increase

SFHA Increase

SFHA Decrease

Unchanged



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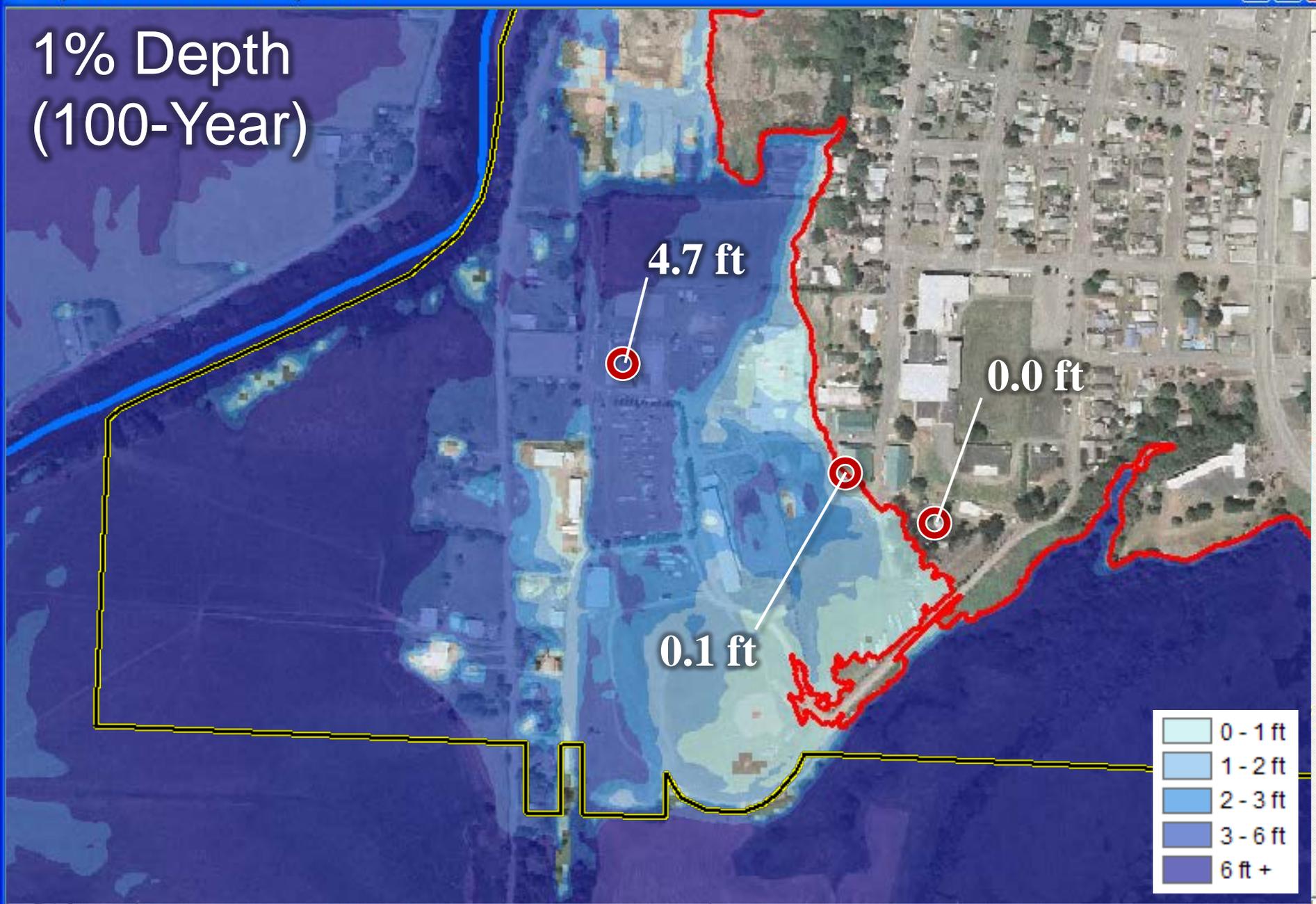
# Flood Depth Grids

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# 1% Depth (100-Year)





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# Risk Report

- Multi-Hazard
- Hazus for Flood Scenarios
- Hazus for Earthquake



## Flood Risk Report

For Big Wood Watershed study area including: Cities of Bellevue, Gooding, Hailey, Ketchum, Sun Valley and Blaine, Gooding, and Lincoln Counties

04/26/2012

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# Purpose - Risk Report

- **Deliver Community and Project Level Results**
  - Project Results Summarized by:
    - Communities
  
- **Provide Information to Augment or Enhance Other Efforts**
  - Local Hazard Mitigation Planning
  - Local Emergency Management Planning
  - Local Master Planning and Building Development

# Risk Assessment

- Risk assessments are completed using Hazus for earthquake and flood
- Will use local parcel/assessors data in assessment if available
- If data is available, a building specific assessment may be completed

# Hazus Flood Outputs (Bellevue)

Structure Related Losses	Total Inventory		10% (10-yr)		2% (50-yr)		0.5% (200-yr)	
	Estimated Value	Percent of Total	Dollar Losses	Loss Ratio	Dollar Losses	Loss Ratio	Dollar Losses	Loss Ratio
Residential Building/Contents	\$26,347,000	58%	\$217,000	59%	\$491,000	74%	\$644,000	72%
Commercial Building/Contents	\$14,634,000	32%	\$151,000	41%	\$172,000	26%	\$242,000	27%
<b>Total Building/Contents</b>	<b>\$45,500,000</b>	<b>100%</b>	<b>\$369,000</b>	<b>.81%</b>	<b>\$665,000</b>	<b>1.5%</b>	<b>\$893,000</b>	<b>2%</b>

Population Impacts	10% (10-yr)	2% (50-yr)	0.5% (200-yr)
Shelter Needs	2	13	30
Displaced Population	28	88	136

Debris	10% (10-yr)	2% (50-yr)	0.5% (200-yr)
Debris (tons)	11.9	30.19	42.16

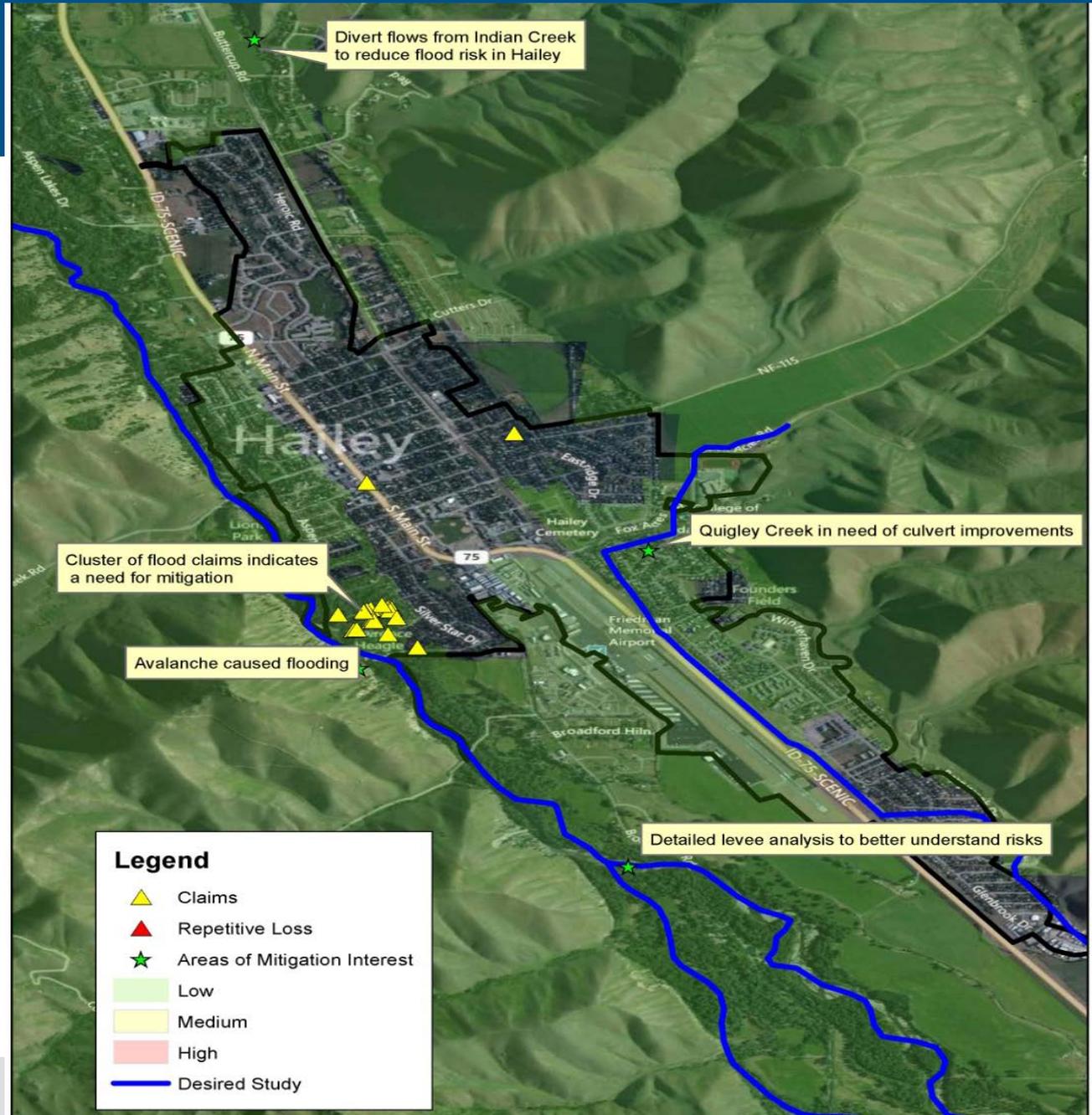
# Infrastructure Analysis (Hailey)



*This figure shows a school in the effective floodplain.*

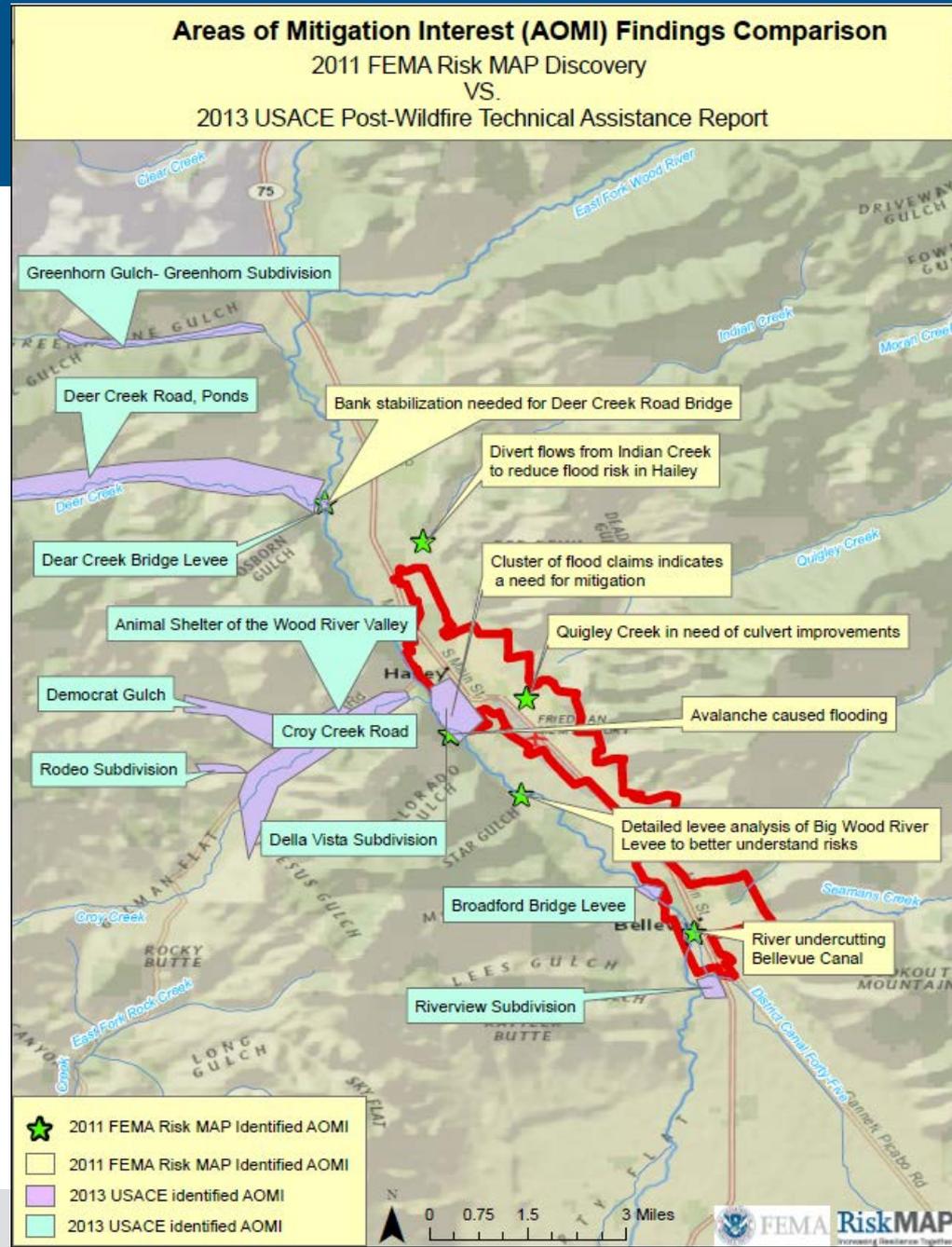
# AOMI

- Areas of Mitigation Interest

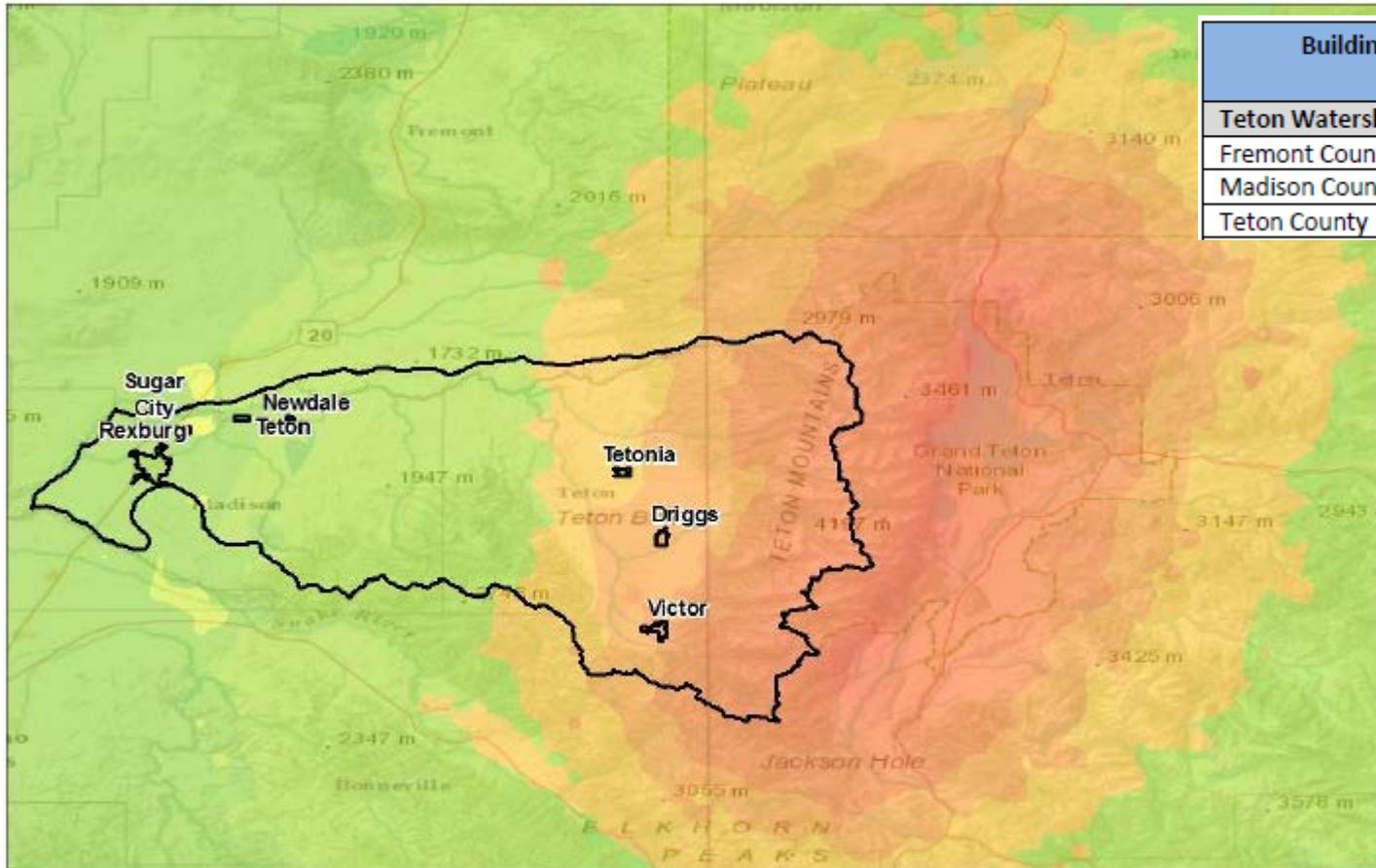


# Wildfire Analysis

- Analysis from recent wildfires
- Identification of high wildfire hazard areas and assessment potentially impacted of infrastructure

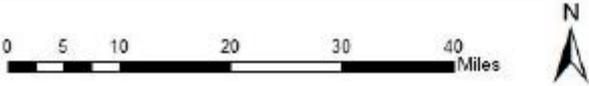


# Seismic Analysis



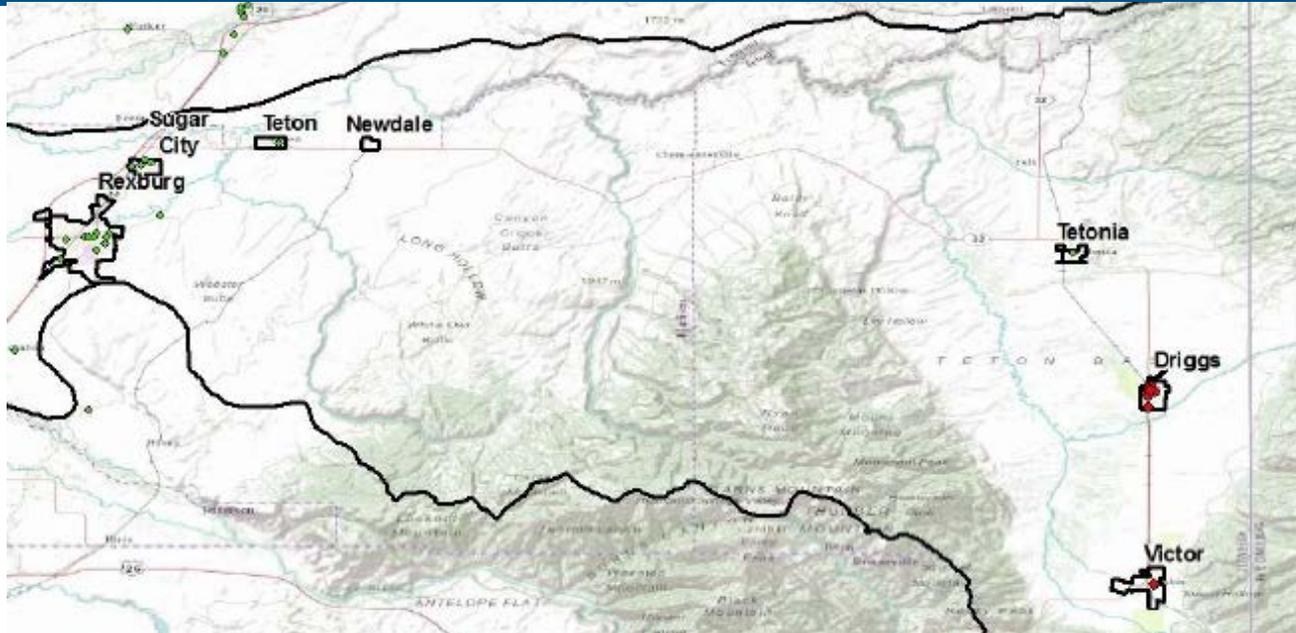
Building-Related Economic Losses (building+contents)	
Teton Watershed	\$3,888,713
Fremont County	\$447,686
Madison County	\$536,847
Teton County	\$2,420,382

## M7.2 Teton Fault Earthquake



**Disclaimer:**  
 The estimates of impacts illustrated on this map were produced using FEMA's HAZUS loss estimation software and the USGS's ShakeMap ground motions. There are uncertainties inherent in any loss estimation technique; therefore, there may be significant differences between the modeled results and actual losses following a specific earthquake.

# Seismic Analysis Continued



**Essential Facilities Susceptible to Damage**

Facility Name	Facility Type	County	City
Basin Junior High	School	Teton	Driggs
Driggs Elementary School	School	Teton	Driggs
Teton Education Center	School	Teton	Driggs
Teton Middle School	School	Teton	Driggs
Teton Valley Hospital	Hospital	Teton	Driggs
Teton County Sheriff	Police	Teton	Driggs
Victor Elementary School	School	Teton	Victor



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# Partnership Agreement

- Communication
- Products
- Signatures

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# Trainings, Webinars, Info-Sessions

- **FEMA Hazus Courses (Flood, Seismic, CDMS)**
- **Overview of Hazard Mitigation Planning**
- **Letters of MAP Change**
- **Elevation Certificates**
- **Elevation Certificates in A Zones**
- **Regulating Development in Unnumbered A Zones**
- **Two-Year Preferred Risk Policy Eligibility Extension**
- **Why Hydrology Matters**
- **Post-Flood Recovery and Substantial Damage Assessments**
- **Community Rating System (CRS)**
- **What is Risk MAP?**



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# Questions/Suggestions??

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# Questions & Comments

## FEMA Contacts

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