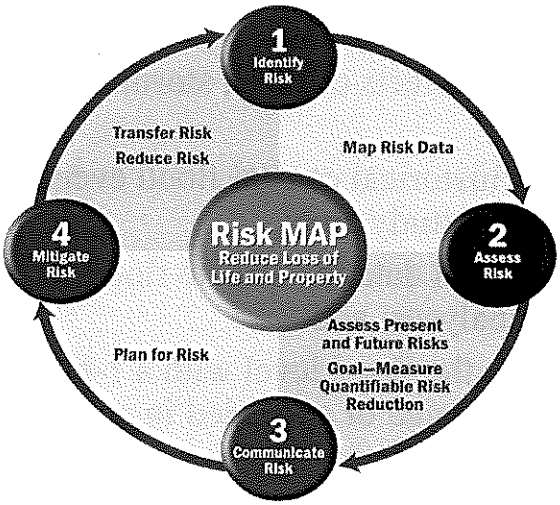
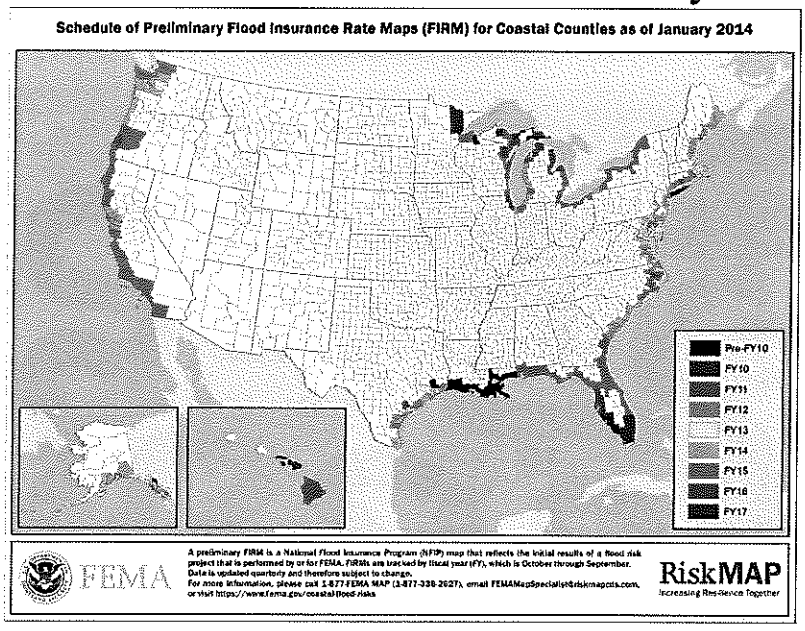
- FEMA Risk MAP 2014-

Risk **M**apping, **A**ssessment and **P**lanning



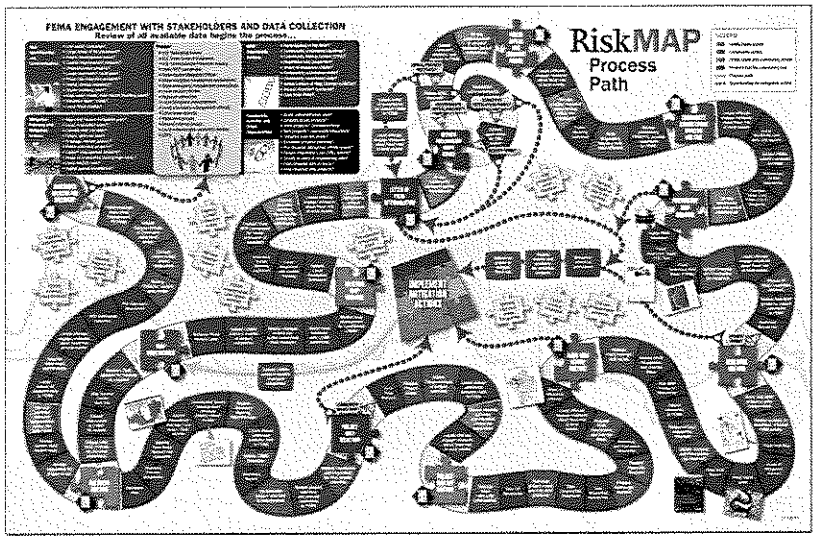
FEMA National Coastal Priority



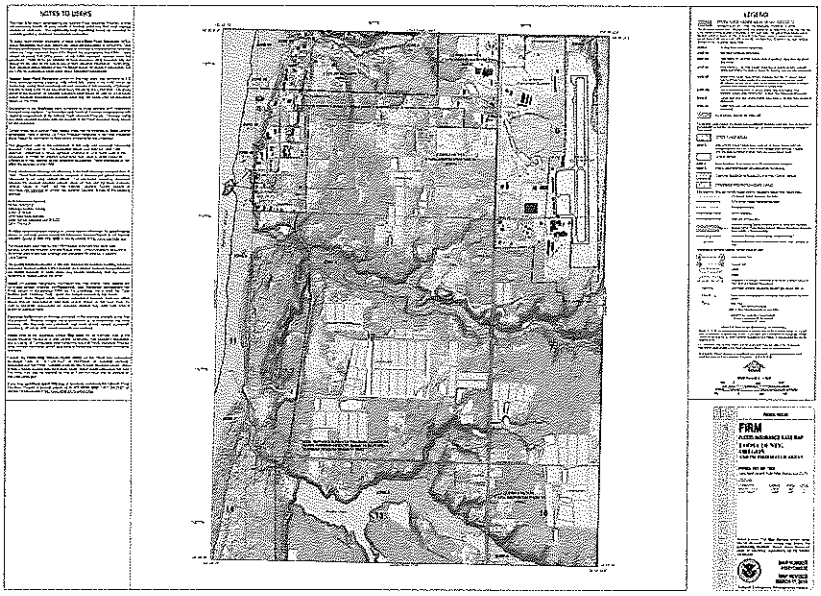
Risk MAP Coastal Priority

- All coastal flood studies:
- Include the effects of tides, storm surges and waves;
- Consider historical coastal flood events that have affected the study area;
- Use historical data to validate flood, wave and erosion analyses; and
- Determine the flood level with a 1-percent chance of being equaled or exceeded in any given year

The Flood Risk Study Process – The Perfect World



New look for the FIRM

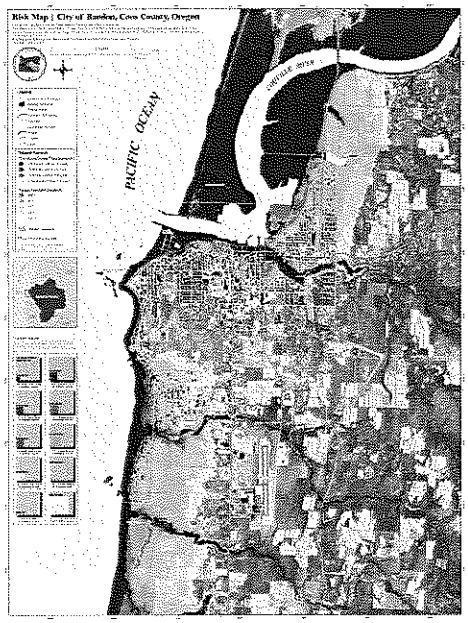


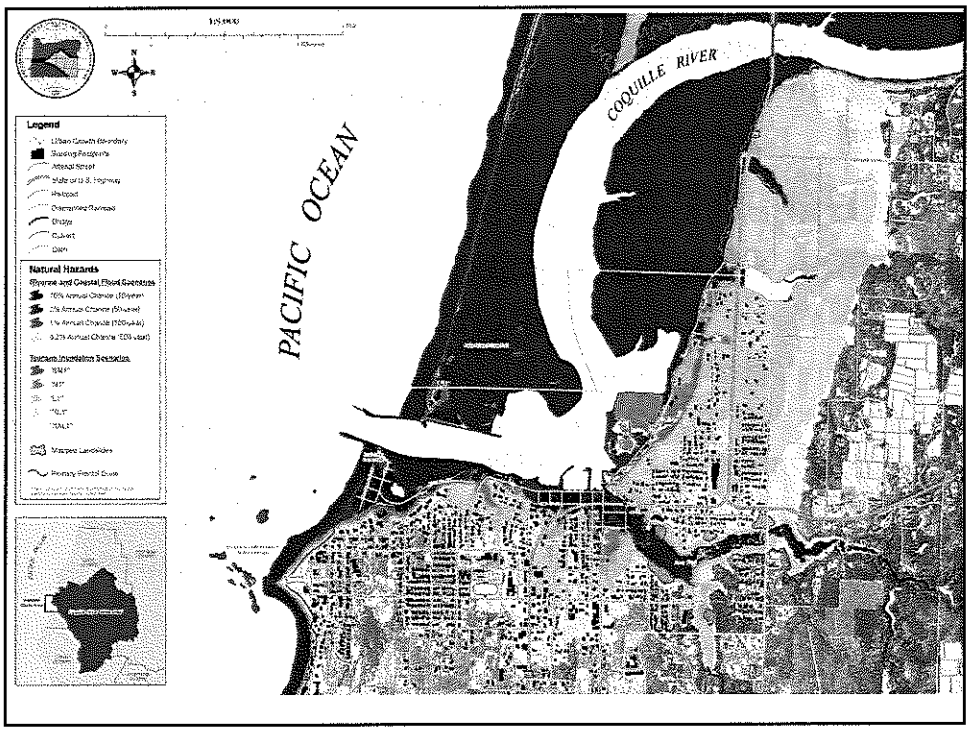
-Under the Risk MAP Program, additional **"non-regulatory products"** may also be included

Flood Risk Report, Flood Risk Map and Flood Risk Database

The **Flood Risk Report** provides stakeholders with a comprehensive understanding of flood hazard and risk exposure within their community, watershed or other geographic area. This report provides a narrative of the flood risk assessment methodology and results, as well as risk assessment information that can be incorporated into mitigation plans.

Bandon Flood Risk Map



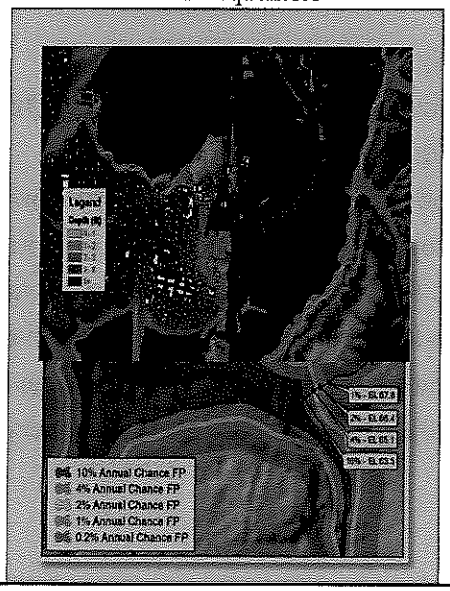


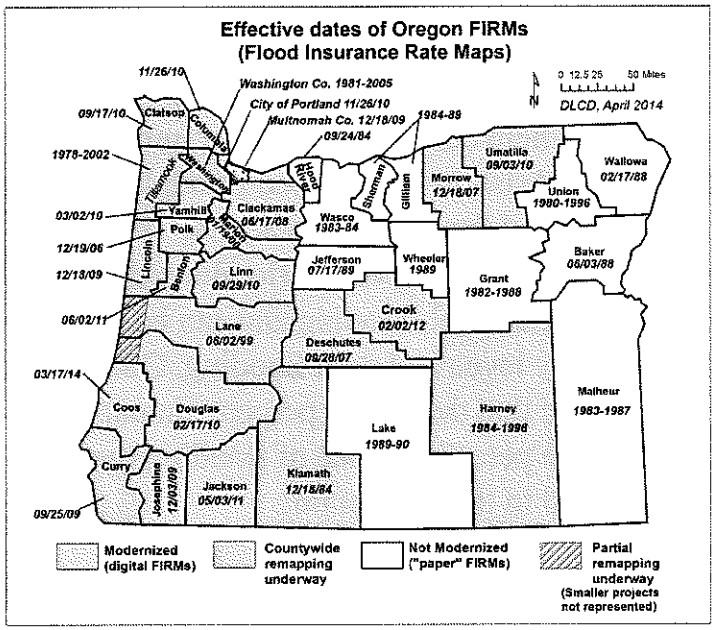
Flood Depth and Analysis Grids

These products help communities better understand their flood hazard and risk in the mapped floodplain. Depth Grids are produced for the 10%, 4%, 2%, 1%, and 0.2% annual chance events for riverine flooding; the 1% annual chance event for coastal flooding and can be produced for areas affected by levee and dam flooding. Other analysis grids are created that depict the percent annual chance of flooding and the percent chance of flooding over a 30-year time period in the floodplain.

Flood Depth and Analysis Grids

Top - flood depth grid showing relative depth of water
Bottom - % annual chance of flooding showing inundation areas of various flood frequencies





Types of Projects in Oregon

- Map Modernization legacy
- Map Modernization legacy with Watershed Discovery
- Map Modernization added to Risk MAP
- Post Map Modernization Pre-Risk MAP Hybrid
- Risk MAP projects with predetermined outcome
- Physical Map Revisions, no Risk MAP association
- Physical Map Revisions with Risk MAP deliverables
- Risk MAP Watershed-based projects combined with PMRs
- Risk MAP projects put on hold after Discovery
- And…

...Levee Impacted - All of the above

Levees

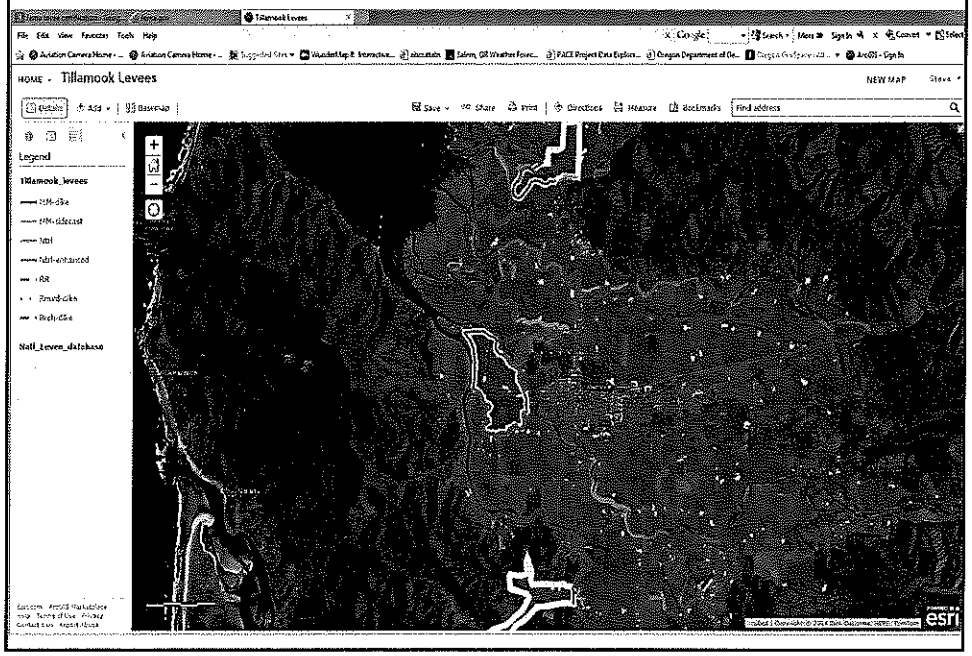
Levees, levees, levees, levees, levees, levees, levees, levees, levees,

- FEMA puts the burden of identifying which levees provide base flood protection on local communities or other parties who are seeking recognition for such levees.
- To **certify** a levee, the community or levee owner must work with a licensed engineer or a Federal agency responsible for levee design to develop and certify documentation that the levee meets design construction standards for at least the one-percent-annual-chance flood.
- A levee cannot be accredited until the certification process is completed. FEMA **accredits** a levee as providing adequate risk reduction on the FIRM if the certification and adopted operation and maintenance plan provided by the levee owner are confirmed to be adequate.
- ***If the levee is not accredited, the area will be mapped as a high-risk area, known as a Special Flood Hazard Area, or SFHA.***

Reedsport levee

Warrenton levee(s)

Tillamook area levees

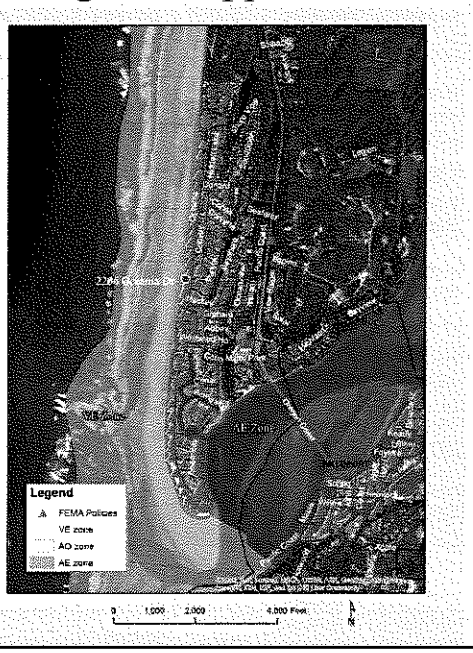


Coastal Risk MAP Projects, April 2014									
	Status	Discovery	Status Date	Discovery Kickoff date	Discovery Interview Date	Flood Study Report Date	CCO date	Pub Mtg	Projected Prelim
Clatsop County	Modernized	DOGAMI- Completed - 10/11/2012	Fld Study Review - 12/9/2013 (MM Effective 09/17/2010)	3/1/2011	6/13/2011; 8/26/2011	12/9/2013			2014
Coos County	Modernized	Pilot Project- not RiskMAP	MM- 2009 Effective 3/17/2014						Completed
Curry County	Modernized	Completed - 3/21/2013	Discovery - 3/21/2013 (MM Effective 9/25/2009)	7/1/2012	9/25/2012; 9/26/2012	Summer 2014	Fall 2014	Winter 2014	Fall 2014
Douglas County	Modernized	Scheduled - Q2 2014	Started - 10/1/2013 (MM Effective 2/17/2010)	12/1/2013	3/21/2014				12/31/2015
Lane County	Coastal - Partial Countywide	Completed - 7/31/2013	Discovery - 7/31/2013	10/1/2012	12/19/2012				12/31/2015
Lincoln County	Modernized	Completed - 12/5/2012	Discovery - 12/5/2012 (MM Effective 12/18/2009)	7/1/2011	9/8/2011		Fall 2014	Fall 2014	9/15/2014
Tillamook County	Partial Co (MM)- ON HOLD (Levees)		Map Mod Prelim 12/31/2009			N/A			12/31/2009
Tillamook	Coastal -	Completed - 10/24/2012	Flood Study Review	7/1/2011	7/20/2011;	4/2/2014			Winter 2014/2015

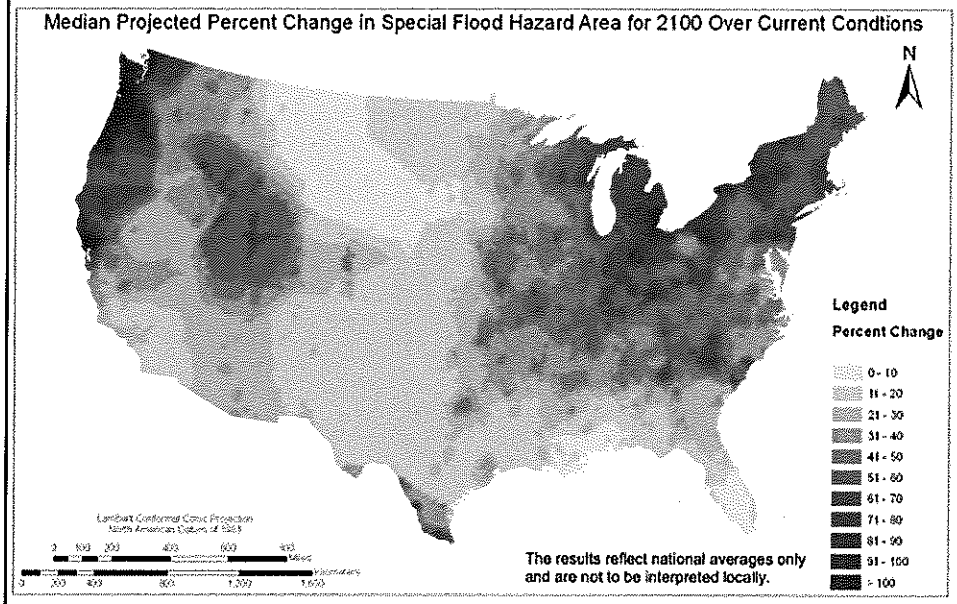
Future Considerations

- Endanged Species Act... ???

Mitigation Opportunities



Future Considerations



Questions?