



FEMA

# Risk MAP Discovery

City and Borough of Sitka

Information Exchange Session  
June 2013

**RiskMAP**

Increasing Resilience Together



# Information Exchange Agenda

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

# Overview: Risk MAP



- Five year effort to modernize maps
- Result: digital flood data and digital maps for 92% of population
- Improved flood data quality
- Limited to flood hazards
- Limited up-front coordination
- Scoping not mandatory

## 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

# The Vision for Risk MAP

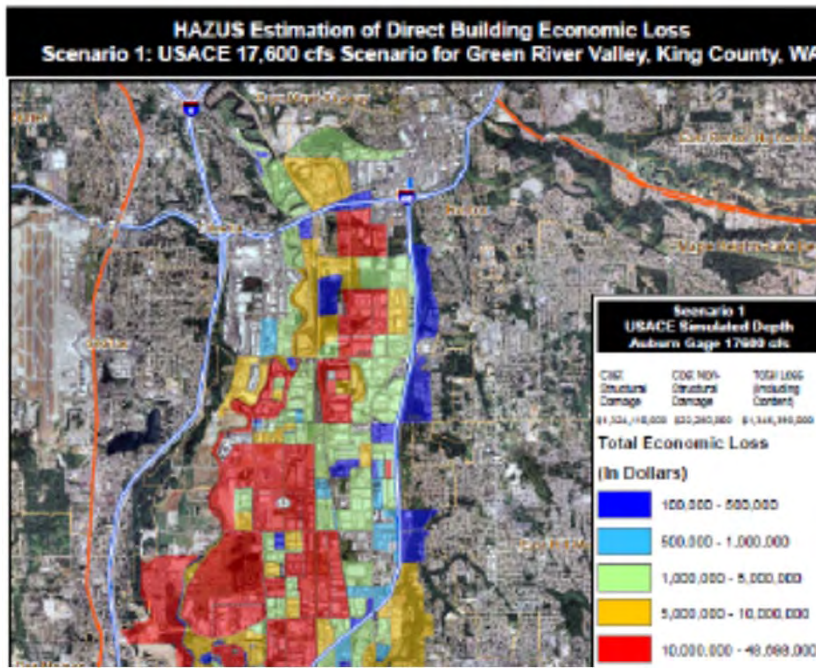
Through collaboration with State, Local, and Tribal entities, Risk MAP will deliver quality data that increases public awareness and leads to action that reduces risk to life and property



# 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

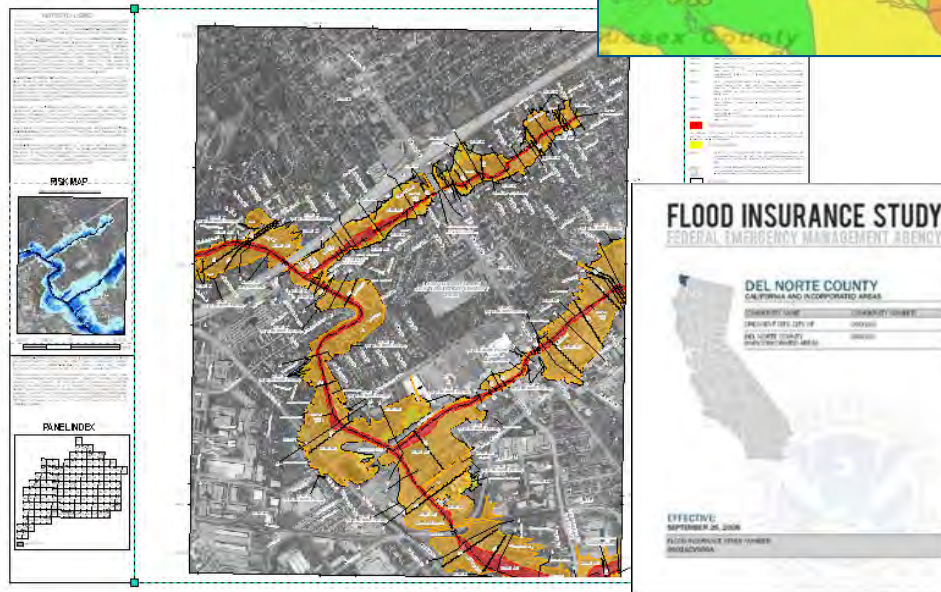
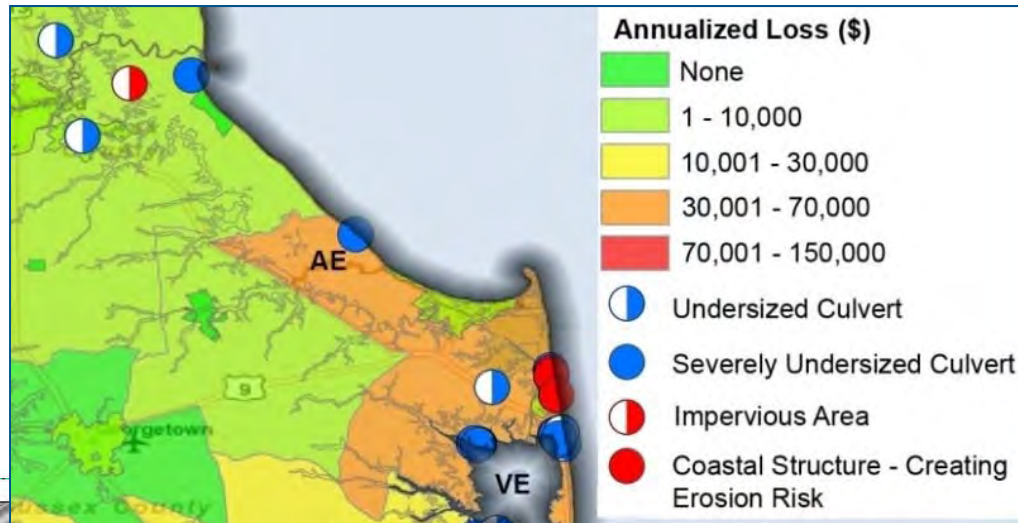
Enables communities to understand risk by reference to existing structure loss



# Risk MAP Products

## Contributing Hazard Factors

Highlights areas of concern identified throughout project

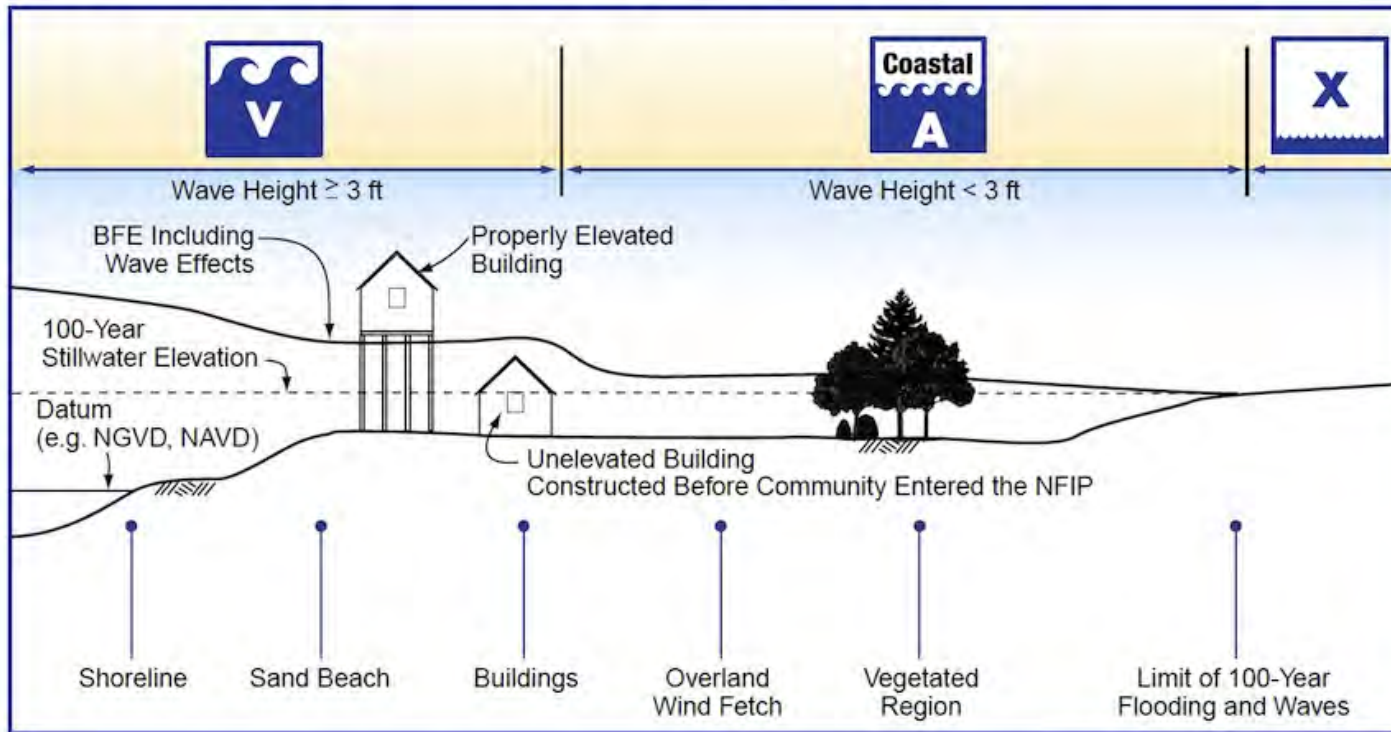


## FIS Reports and DFIRM Maps

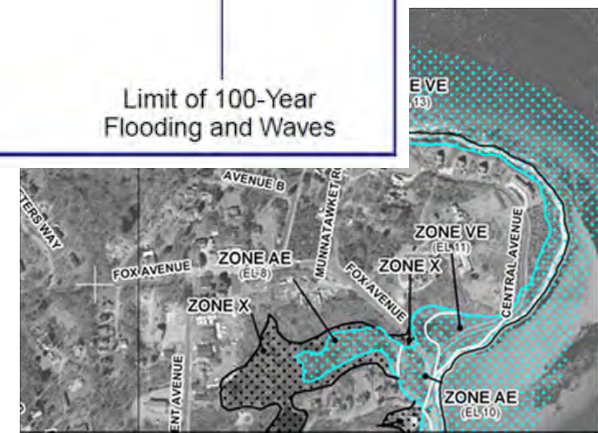
DFIRM and FIS will continue to fulfill regulatory requirements and support the NFIP

# Coastal Mapping

Typical shoreline-perpendicular transect used in the analysis of stillwater and wave crest elevations.



1% Annual Chance Storm (100-Year)  
 Stillwater elevation (tide plus surge)  
 Plus Wave Elevation  
 Plus Wave Run-Up



# 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





# City and Borough of Sitka 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?
- **Discovery Meetings: July 2013**
- **Risk MAP Project(s) Identified**
- **Possible FEMA Funding Allocated for Risk MAP Project**

# Discovery Questionnaire Overview

- **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

# Contact Information

	A	B	C	D	E	F	G
2	Community Contact Information						
3	Community	County (if Different)	State	Information Exchange Call Date (mm/dd/yy)	Name and Title	Name and Title 2	Name and Title 3

- Is our contact information complete and accurate?
- Are there others we should contact before the Discovery meeting?

# Topographic Data - LiDAR

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s	Data - LiDAR		
nts, ns, cluding eral SAs)	Are you aware of existing or planned additional topographic data? (Yes, No, Possibly)	LiDAR Comments, Explanations, Questions (Including general coverage area, date , and accuracy of additional data collection)	Trans L

- Assumed that new LiDAR needed.
- Any additional data?



# Local and Regional GIS Data

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	Local or Regional GIS Data										
ons e,	Transportation Layers	Political Boundaries	Land Use Data	Parcel Data	Building Footprints	Inundation Areas from Historic Flooding	Essential Facility Data	Wetlands or Environmentally Sensitive Data	Ortho-photography	Other	GIS Contact Information or GIS Data Comments, Explanations, Questions

- Local and regional data can be used in regulatory or non-regulatory products
- Helpful in identifying levels of risk within community for educational purposes

# Mitigation Planning

- **What do you value in your community?**
- **How much were you involved with developing your current plan?**
- **Do you desire support with planning in the future?**
- **What kind of technical assistance or support would you benefit from?**

# Desired Mitigation Projects

- **Does your current plan include all desired mitigation projects?**
- **Repetitive loss structures in your community?**
- **Do you have evacuation, response, or recovery plans adopted and in practice?**
- **Does your emergency management office have a plan for resilience?**
- **Are there other flood-related mitigation projects that you will be adding to your next mitigation plan update? Where? Why?**
- **Past grant projects? Successes?**

# Local Hazards

- Earthquakes
- Wildfires
- Landslides
- Severe Storms
- Flooding

## Things to consider

- Hazard areas mapped?
- Response plans in place?
- Is mitigation possible?
- Are your citizens aware of the hazard?
- How to communicate hazards and motivate risk reduction





# Levees

	Y	Z	AA	AB	AC	
	Levees					
Age s,	Are there levees in your community that provide protection from the base (100-year) flood? (Yes, No, Possibly)	Flooding source and general location of levee?	Do you know if these levees meet FEMA 65.10 requirements? (Yes, No, Possibly)	If yes, do you have the documentation to support recertification? (Yes, No, Possibly)	Levee Comments, Explanations, or Questions (including levee owner or POC for certification docs)	How your with th (Con

- Know of any in your community? Where?
- Provide base (100-yr) flood protection
- Certification of compliance with 65.10

# Environmentally Sensitive Areas

	AJ	AK	
	Environmentally Sensitive Areas		
ing ing ion and n)	Are there ESAs in your community that should be considered in flood-related projects? (Yes, No, Possibly)	ESA Comments, Explanations, Questions (including type and general location of ESAs)	Are y e a topog ( P

- Any ESAs in your community?
- Locations and details welcome

# Communications and Outreach

	AY	AZ	BA	BB	BC	BD	BE	BF	
	Communications and Outreach								
	In general, what is the current awareness level about flood risk among your citizens? (High, Low, Mixed)	If levees present, what is the current awareness level of flood risk among residents living behind levees? (High, Low, Mixed)	Thoughts on anticipated residents' reactions to updated flood study results? (Positive, Negative, Indifferent, Mixed)	Special flood-related outreach programs, such as in response to federally-declared disasters? (Yes, No)	Has the community found any particular type of outreach that works better to communicate risk to the different demographic groups? (Yes, No, Not Needed)	Regarding notification regarding future projects, are there regular meetings that officials hold where project status might be appropriate for the agenda? (Yes, No, Possibly)	With supporting templates and information, would your community be willing to take a proactive approach in educating citizens about their risk and steps they can take to protect themselves? (Yes, No, Possibly)	Communication and Outreach Comments, Explanations, Questions	

- Residents look to local officials for flood risk information
- Risk MAP to provide tools, templates, resources to support local officials in communication
- Goal to increase local knowledge of flood risk (not just insurance requirement)

# Compliance and Training

	BG	BH	BI	BJ	
	Compliance and Training				A
and ents,	Does your community have a identified Floodplain Administrator? (Yes, No, Unsure, Floodplains Managed by Other Entity)	Do you have a floodplain permitting process? (Yes, No, Unsure)	Is training or other support in floodplain management needed? (Yes, No, Possibly)	Compliance Comments, Explanations, Questions	Risk M

- Need support with your floodplain management program?
- Could use a little training?



# Questions?

## FEMA

- Jennifer Monroe, Risk Analyst, [jennifer.monroe@fema.dhs.gov](mailto:jennifer.monroe@fema.dhs.gov)
- Kristen Meyers, Mitigation Planner, [kristen.meyers@fema.dhs.gov](mailto:kristen.meyers@fema.dhs.gov)

## Alaska

- Sally Russell Cox , State Risk MAP Coordinator, [sally.cox@alaska.gov](mailto:sally.cox@alaska.gov)

## STARR

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