FEMA Region X – Risk MAP Discovery Interview
Ketchikan Gateway Borough, AK
Ketchikan Gateway Borough/City of Ketchikan, Alaska
June 17, 2013 11:00 AM Pacific Time

Attendees:
City of Ketchikan/Ketchikan Gateway Borough
Richard Harney – Floodplain Administrator and acting Emergency Manager and Associate Planner
Mike Medford – Borough Planning Commission
Ed Schofield – Borough Public Works Director
Frank Share – City Fire Chief, Emergency Manager
Seth Brakke – City Assistant Public Works Director
Chet Hugo – City Mapping/GIS professional
Charles Dearden – City Building Official

State of Alaska
Sally Russell Cox – Alaska State Risk MAP Coordinator (meeting facilitator)

FEMA Region X
Kristen Meyers – FEMA - Mitigation Planner
Jen Monroe – FEMA - Risk Analyst
Ted Perkins – FEMA - Acting Risk Analysis Branch Chief, Regional Engineer

STARR (FEMA Contractor)
Josha Crowley – STARR – RSC Lead (meeting host)
Emily Whitehead – STARR – Project Manager

Ms. Russell Cox provides a presentation introducing Risk MAP and the Discovery process. The presentation is attached to these minutes as Appendix A.

Ms. Meyers provided a demonstration of the Region X Pin Map web application. This web application is available for users to add location data (aka "pins") to the Risk MAP Discovery datasets (such as Flood Hazard, Tsunami, Earthquake, and Wildfire). Information can be gathered through this site regarding critical facilities, specific hazard locations, important places, mitigation actions, high water marks, and other relevant data. The web application link is:
http://maps.starr-team.com/Default.aspx?cn=Ketchikan-Coastal

Mr. Crowley discussed the coastal significance of the upcoming Risk MAP study for Ketchikan Gateway Borough. See section VI later in these Discovery notes for more details.

The following information was collected during the Interview. Unless otherwise noted, all comments are from Ketchikan Gateway Borough and City of Ketchikan representatives.

I. Local Contacts
   a. The local contact spreadsheet was displayed on screen via the webex software, and asked if there were any updates needed:
      i. Add Frank Share to the contact list.
      ii. Add Ed Schofield to the contact list.
      iii. Jim Pomplun is GIS POC for Ketchikan Gateway Borough.
      iv. Chet Hugo is the GIS POC for City of Ketchikan

II. Topographic Data
   a. Is new LiDAR desired?
      i. Five-Year cycle of aerial photography and LiDAR is upcoming
      ii. Previous LiDAR produced at 5-foot interval and flown in 2008.
      iii. Borough unsure of funding for new LiDAR
      iv. Borough and City would be interested in partnering with FEMA on new LiDAR collection. Discussion of upgrading to 2-foot contours in analysis areas.

III. Local and Regional GIS Data
   a. Both Borough and City have GIS Staff
   b. Borough and City have data
      i. Ms. Whitehead will send Borough and City an email list of data that would be of interest for the Discovery process

IV. Mitigation Planning
   a. Ms. Russell Cox asked what are the highly valued aspects of the City and Borough
      i. Life and Property
      ii. Expansion of new developments known and unknown for economic base
      iii. Recreation
      iv. Infrastructure
   b. Discussion regarding the local Hazard Mitigation Plan, effective through 8/17/2015
      i. Locals already feel the plan is outdated, so they will be looking into updating the plan early in 2013
      ii. Trying to get HGMP funding to update
      iii. Discovery and Risk MAP process will be helpful in updating the Plan
   c. Is assistance or support to implement or improve the existing plan desired?
      i. Yes, they would like any assistance/support they can get as they move through the Risk MAP process
   d. What are the Top Hazard Mitigation Priorities locally
      i. The City feels dams are a priority, and Sally suggested we wait to discuss dams later during the levee/flood control structure portion of this interview.
   e. Who handles Emergency Response locally
      i. City – City Fire Department and City Police Department
      ii. Borough – Service areas set up for North Tongass Fire Department, South Tongass Fire Department, and Airport Fire Department
   f. Is there are any Repetitive Loss structures locally
      i. None filed recently (4-5 years)
      ii. Most issues from backed up stormwater drains
   g. Has the Borough and/or City developed and/or adopted evacuation, response, recovery plans?
      i. The City has some plans In review currently
      ii. The City also has plans are set up with Shelters in place
      iii. Looking into getting all-hazard alerting sirens
      iv. Ketchikan – Home Rural City – Building and Fire Codes
      v. Borough – Second Class Borough – has all Planning and Zoning authority

h. Are there any Flood-Related mitigation projects to add to updated Mitigation Plan?
    i. At this point, no specific project other than updating the Plan
i. Does the Borough or City execute regulation that directs development away from Flood or Wildfire risk?
    i. Ordnances for flood permits but do not direct development away from flood or wildlife risk.

V. Flood Hazard
a. Ms. Russell Cox asked if there are areas where the Effective Flood Insurance Rate Map does not accurately reflect 1% Annual Chance Flood
    i. Local response that three of the four effective detailed flood studies need updating:
        1. Hoadley Creek – Limit does not extend far enough into development
        2. Ketchikan Creek
        3. Schoenbar Creek – Needs revision – development pressure – floodplain too wide for size of creek
    ii. Harbors Construction – Effective maps show original (1950s) meander line and do not reflect where fill has been added
        1. There have been a lot of LOMR-Fs in the mapped areas
        2. Taunnie with State of Alaska recommended community-wide LOMR, but there is a lack of support to complete LOMR
b. Are there coastal areas that experience flooding that aren't accurately depicted?
    i. North of Ketchikan – Whipple Creek area has study done but not on FIRM.
c. Transportation/Infrastructure projects in floodplain
    i. One planned – addition to Hospital includes some work on outskirts of floodplain, culvert installed around 1994 and map was not updated at the time and floodplain does not reflect
d. Rapid Growth/Development impacting run-off or areas near mapped floodplain
    i. Upper portion of Hoadley Creek drainage has increased development
    ii. Schoenbar Creek has increased development
    iii. No LOMC for Schoenbar development but one may be in planning stage
    iv. Most of Hoadley Creek development is outside 1990 study limits. One LOMR has been completed and approved on Lincoln Street
e. Are coastal areas that experience severe wave run-up?
    i. Not anything that has been studied
f. Erosion Issues Experienced Locally?
    i. Sidewalk trails along South Tongass Highway may see erosion and sloughing due to being built over fill over embankment
g. Seawalls, Abutments or Bulkheads being overtopped
    i. None
h. Coastal Roads that are flooding by tides or waves
    i. No

i. Flood Insurance Rate Map use that makes update necessary
    i. Coastline riverine areas are not an issue but Hoadley Creek, Ketchikan Creek and Schoenbar Creek areas are seeing a lot of Elevation Certificates for Development and LOMRs
    ii. Securing Mortgages and Insurance along coast – US Coast Guard submitted LOMR to get building removed to renew lease

j. Existing Studies to provide data for Risk MAP
    i. City of Ketchikan has 2010 Storm Drainage Study, included Hydrology and identified critical storm drain areas and mapping/capital improvement plan (CIP) recommendations, posted on City website for download.
    ii. Whipple Creek Study is available. Mr. Crowley asked if there is a local desire to include Whipple Creek study on the regulatory FIRM. Local desire is conflicted. Mr. Crowley explains that one benefit of the Risk MAP products is to demonstrate risk but not change the regulatory map. **This study should be discussed further at the in-person Discovery meeting in August.**

k. Any additional information or areas of concern
    i. None

VI. Mr. Crowley and Mr. Perkins Discussed Scoping for Coastal Flood Study
a. Coastal Mandate is to map the populated coastline (funded this year)
b. Update other riverine areas with significant needs due to new development and development pressure

VII. Earthquake Risk
a. Seismic design category B
b. No epicenters
c. Queen Charlotte Fault – off of Prince of Wales Island
d. Last two earthquakes around 7.9 Queen Charlotte Fault - a lot of shaking, dams and bridges needed inspection, no damage

VIII. Landslides/Ground Hazards
a. Rockslides
    i. Recent rockslide took out North Tongass Highway

IX. Tsunami Risk
a. Minor Tsunami (2 inch)
b. Heavy tides and currents in harbors

X. Severe Storms
a. High winds
    i. Roofs being torn off
    ii. Siding torn off
    iii. Trees falling down
    iv. Established 120mph exposure properties along narrows

v. 110mph in protected area
vi. Power outages
vii. Mobile Homes needed to be vacated

b. Heavy Rains
i. Rock slides

XI. Shelters
a. None – use hotels or friends' homes

XII. Communication of Severe Weather or other risks
a. Flash Alert System – text messages and emails
b. Weather Forecast Service
c. NOAA Weather Radio
d. Emergency Alert System – TV and Radio
e. Reverse 911 – all landlines and cell phone if signed up

XIII. Is there a wildfire risk locally?
a. Very Rare – fairly minor

XIV. Are there levees or other flood control structures locally?
a. Dams
i. Ketchikan Lakes Dam
1. Energy Producer
2. Emergency Action Plan on file
3. Have Inundation Maps
ii. Carlanna Lake Dam
1. Emergency Action Plan on file
2. Have Inundation Maps
iii. Whitman Lake Dam
1. Ongoing project
iv. Connell Lake Dam – Private
1. Emergency Action Plan
v. Lower Silvis Lake Dam
vi. Upper Silvis Lake Dam

XV. Do any Environmentally Sensitive Areas exist locally?
a. All of area SE is wetlands
b. Working on mitigation bank above Bear Valley area
c. Coast Guard has mitigation of Hazardous Materials from Painting operations

XVI. Has Ketchikan experienced Presidential Declared Disasters?
a. Not in recent memory

XVII. Communications and Outreach
a. Flood Insurance mailing to lenders and property owners for CRS credit
b. Unmapped Areas in Borough went from Zone X to Zone D
c. Elevation Certificates needed for cabins stating that they are above 22'

d. Unsure of community response to new mapping due to being mandated to get Flood Insurance
e. Inaccuracy of maps within the City has bred contempt for mapping
f. Accuracy in the City would be embraced
g. Types of Communication/Outreach
    i. Borough does Public Meetings
    ii. Borough would like to increase Outreach for Emergency Response
    iii. City does a lot of Public speaking – AARP members, Chamber of Commerce
    iv. Community Event attendance
    v. Regular Radio Shows
    vi. Ketchikan Live TV Shows
    vii. Public Service Announcements
    viii. Church meetings
    ix. Leg work and Work of Mouth
    x. Community is pretty aware of Risks (Tsunami, Earthquake, Wind)
        1. Could do a little better with Dam Inundation awareness
    xi. Social Media
        1. Facebook
        2. Twitter
h. Is there interest in FEMA or the State sharing outreach templates?
    i. Yes, the locals are Interested in templates

XVIII. Compliance and Training

a. Floodplain permitting
    i. Application submitted
    ii. Elevation Certificate required for anything in Floodplain or near 22' mark
    iii. Flood Hazard Permit that goes along with Elevation Certificate
b. Training/Support
    i. Work with City Building officials to make sure flood proofing meets or is elevated above Base Flood Elevation
    ii. All building permits run through Borough
    iii. Potential Training needs – What is accepted by NFIP for flood vents and what they can and can't be
    iv. Online trainings not well suited for engineers or surveyors in the community– not in person, dial in options are not affective for the community – may need to discuss further to increase participation
    v. Variety of Training can be provided
c. RSC Newsletter
    i. Lists training
    ii. Mr. Harney is subscribed to the newsletter

XIX. Mapping Discussion

a. City/Borough has digitized effective floodplains available for distribution
b. Schoenbar Creek – Cross Sections D and E, couple of bridges and culvert – looking to get more elevation information on to remove it from the floodplain
c. Ketchikan Creek has a dam but Limit of Detailed Study (LODS) ends near water treatment plant
d. A lot of fill in the Coastal Zone A – will be remapped as part of Coastal Mandate
e. Updated facilities may be needed – current Fire Station location is incorrect
f. Hoadley Creek – Hospital is close to Cross Section B
    i. Hospital is expanding – culvert has been installed but not reflected in the mapping
g. 2008 Imagery .25-foot pixel inside City and 1-foot outside city limits
    i. 2008 imagery may be able to be downloaded from the City website
    ii. MrSid imagery files are available to provide to STARR/FEMA – will need an email
h. Political Boundaries
    i. City has annexed to the NW and would be interested in mapping the entire annexation
    ii. Borough boundary needs to be updated, roads extend 8 miles south and 18 miles north of the City of Ketchikan
    iii. City of Saxman is within the Borough is a second class city with smaller population
i. More areas to be identified with newer aerial photos

XX. Scheduling Discovery Meeting

    i. Local Meeting on 7/31/13 but FEMA/STARR unable to make it

XXI. Questions

a. What will Ketchikan Gateway Borough and City of Ketchikan get from this effort?
    i. Discovery Report
    ii. Coastal update
    iii. Other Hazard Risk Assessment
b. Cost to Community
    i. Staff time and input into products that would lead to study work
    ii. Partnership on LiDAR – only cash contribution
c. Conversion to NAVD88
    i. Current Datum is Mean Lower Low Water
    ii. Richard mentioned that they may not be interested in converting to NAVD88
    iii. Ted explained why NAV88 conversion and how there are exceptions that would need backup information justifying the exception

d. What is process for Community to "lock in to this process"? Will Governing bodies need to pass resolutions?
    i. Partnership Agreement – layout what FEMA would like to do, what FEMA would like from the Community
        1. Not a binding legal agreement – flexible on who signs the agreement
        2. City and Borough said a signature from Borough Manager and City Mayor will be needed. Legal review as well.

Appendix A -

Discovery Information Exchange Presentation

FEMA

Risk MAP Discovery

Ketchikan Gateway Borough

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

Map MODERNIZATION
Federal Emergency Management Agency

- 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

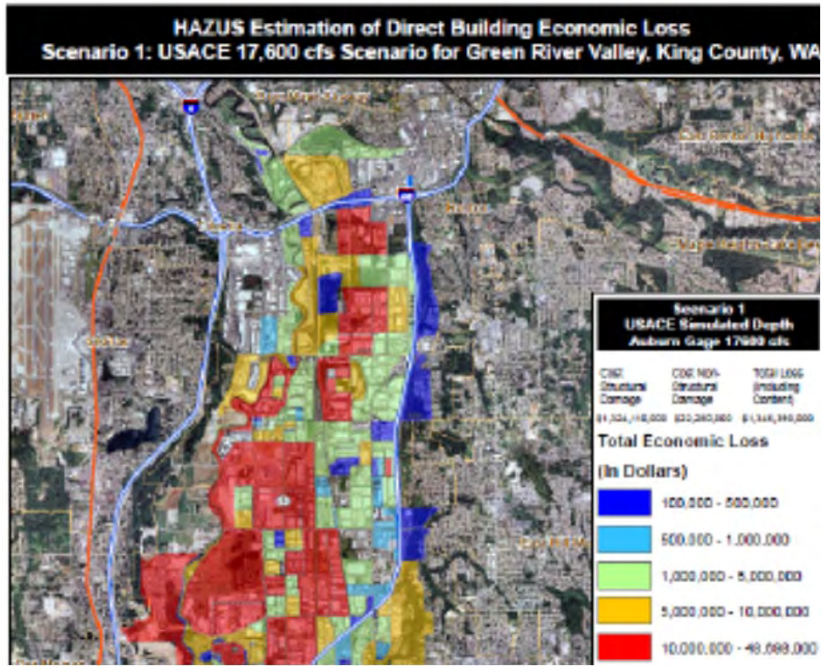
The Vision for Risk MAP

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 +

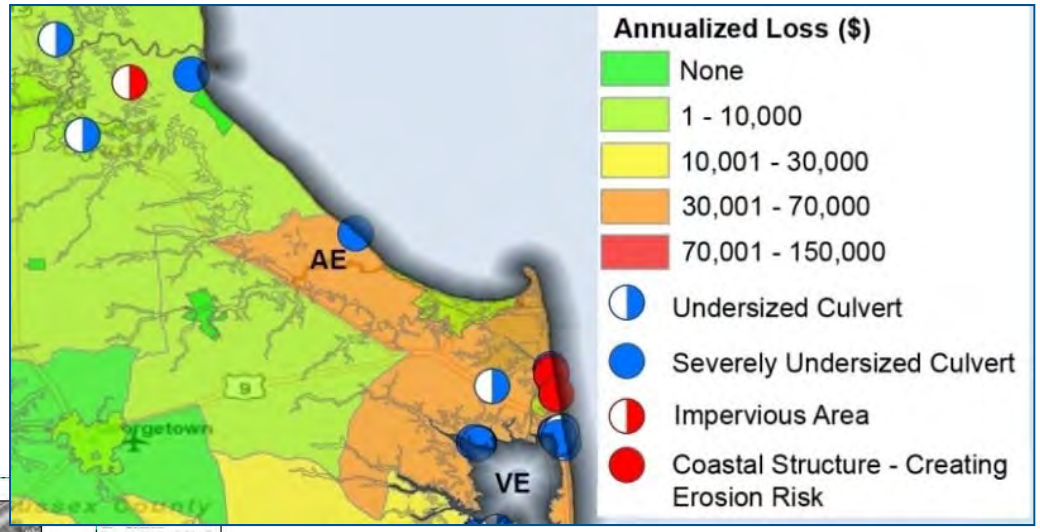
HAZUS Risk Assessment & National Flood Risk Layer

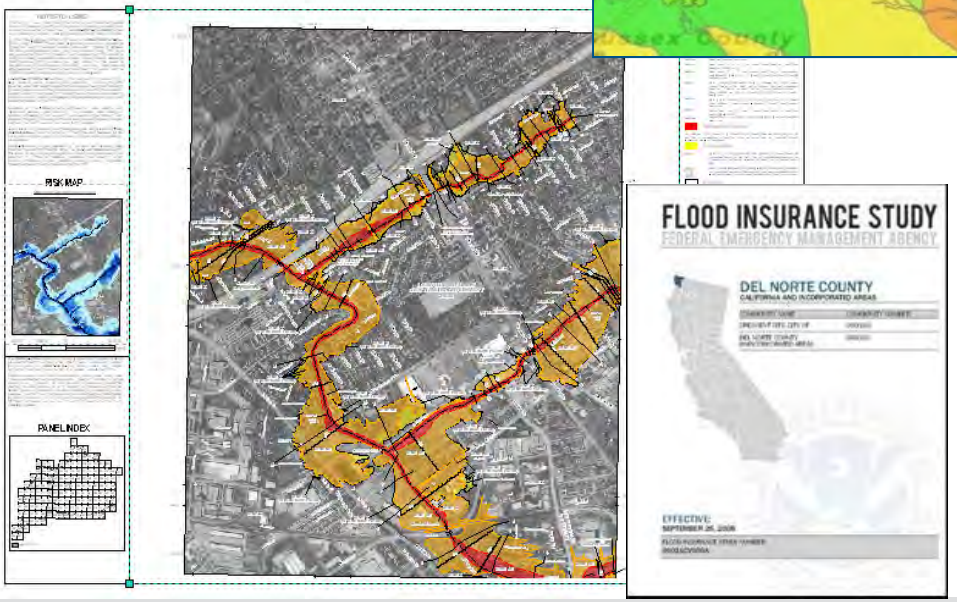
Enables communities to understand risk by reference to existing structure loss

Risk MAP Products

Contributing Hazard Factors

Highlights areas of concern identified throughout project



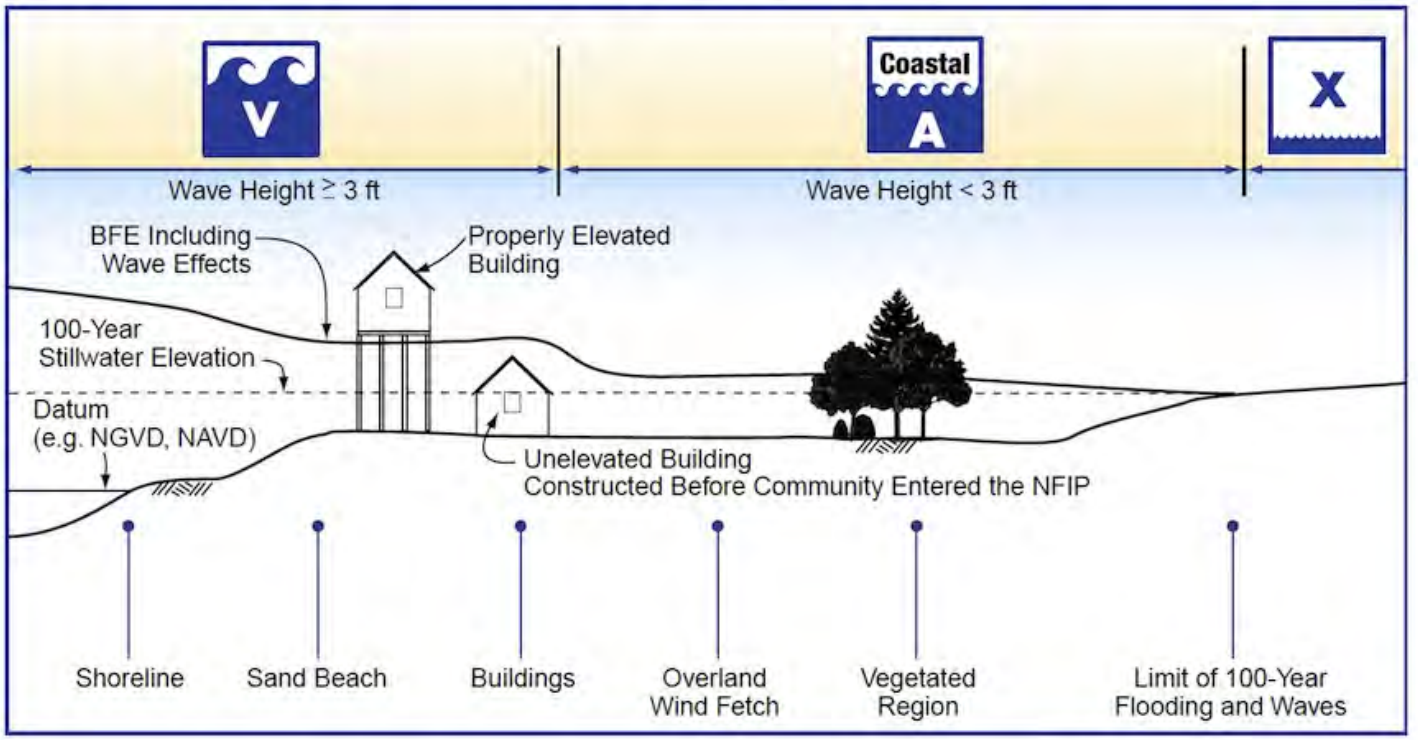


FIS Reports and DFIRM Maps

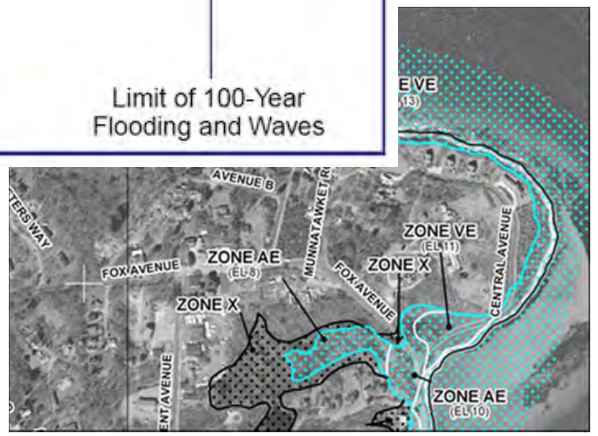
DFIRM and FIS will continue to fulfill regulatory requirements and support the NFIP

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

Ketchikan Gateway Borough 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/August 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
  - Tsunami
  - Wildfires
  - Landslides
  - Severe Storms
  - Flooding
- **Levees**
- **Environmentally Sensitive Areas**
- **Communications and Outreach**
- **Compliance and Training**

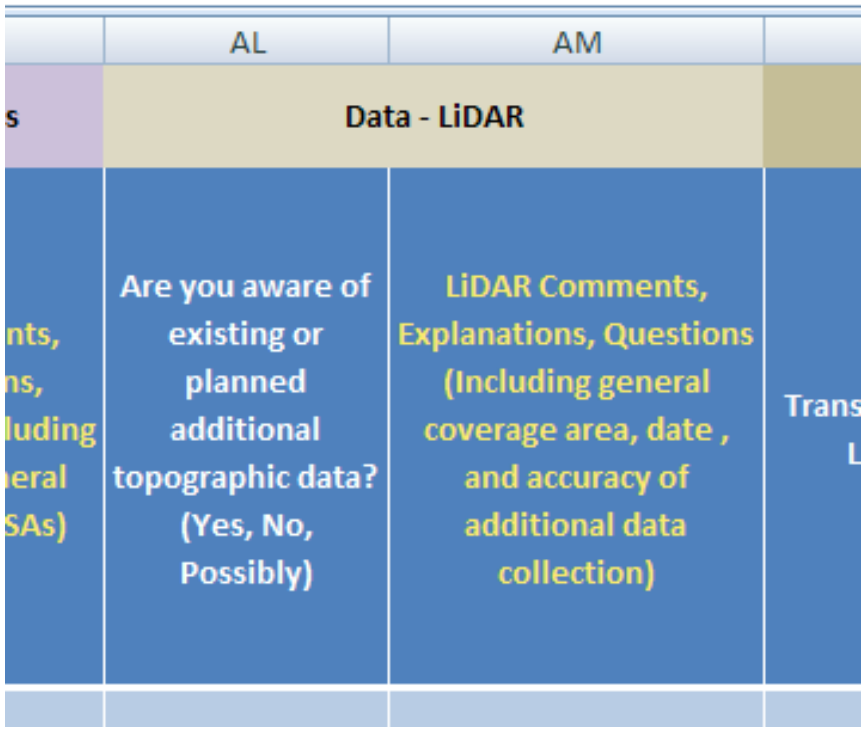
Mitigation Planning		
How would you describe your level of involvement with the development of the mitigation plan? (Considerable, Moderate, Minimal)	Do you need assistance with mitigation planning in your community? (Yes, No, Possibly)	Mitigation Planning Comments, Explanations, Questions

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?**

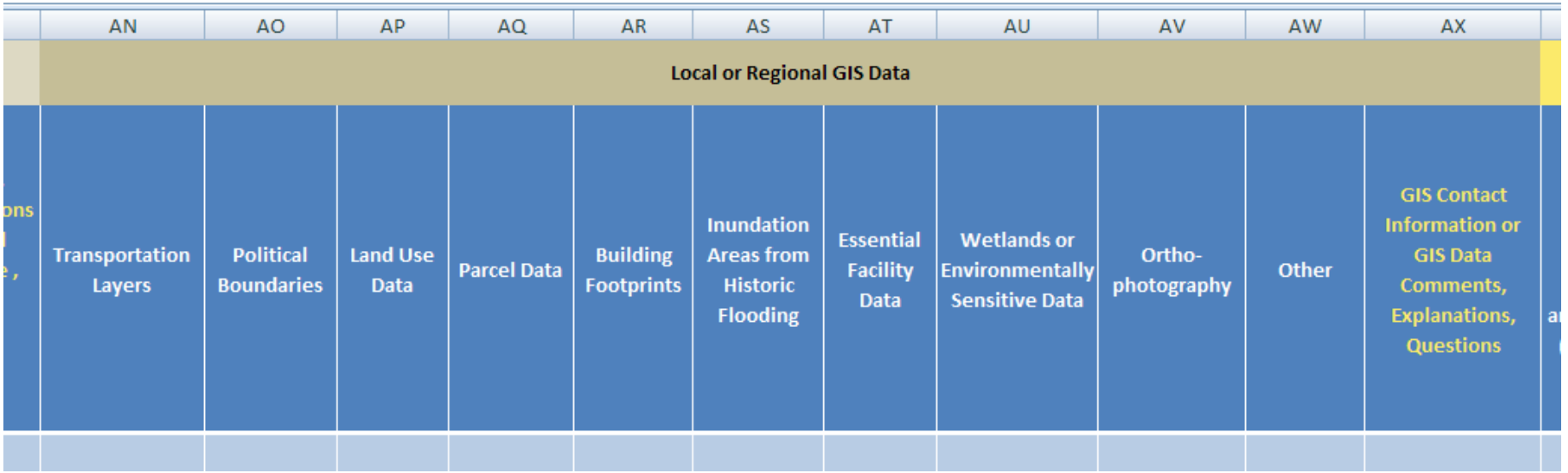
Topographic Data - LiDAR



	AL	AM	
s	Data - LiDAR		
nts, ns, luding neral 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



AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX
Local or Regional GIS Data										
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?**

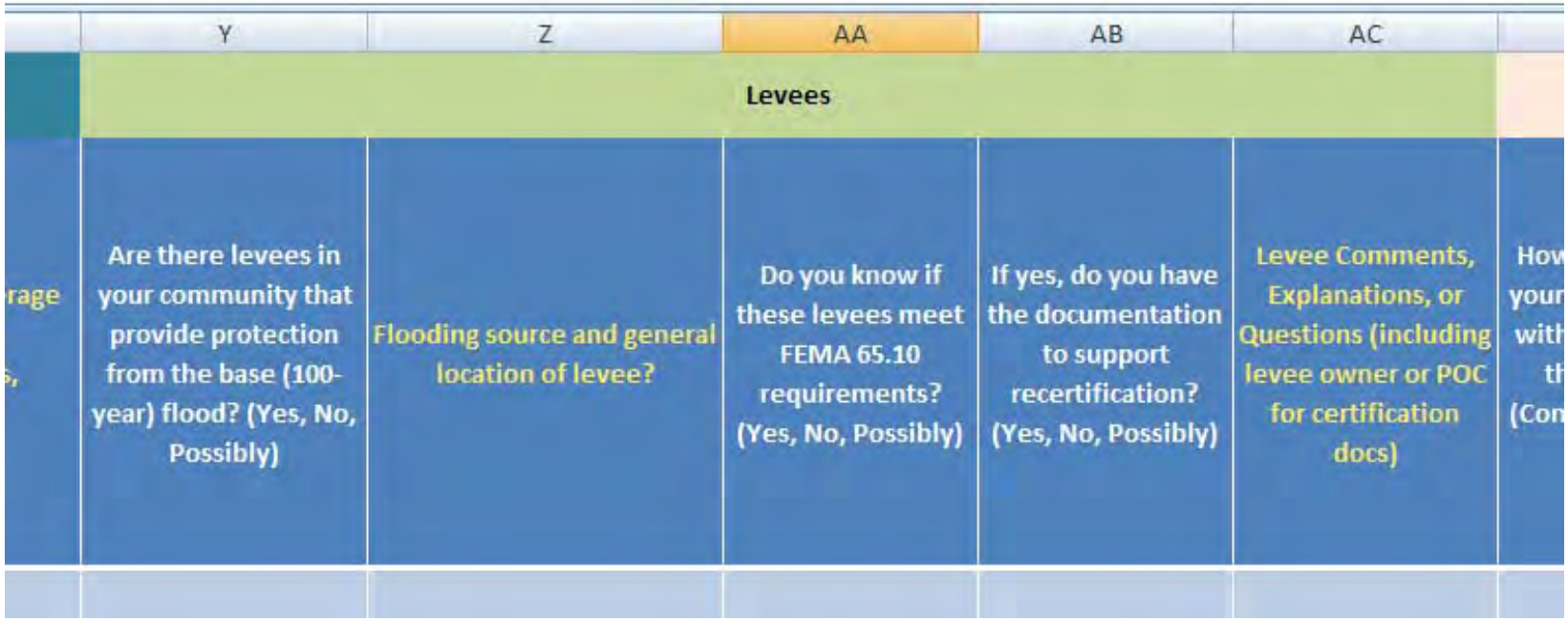
Local Hazards

- **Earthquakes**
- **Tsunami**
- **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**

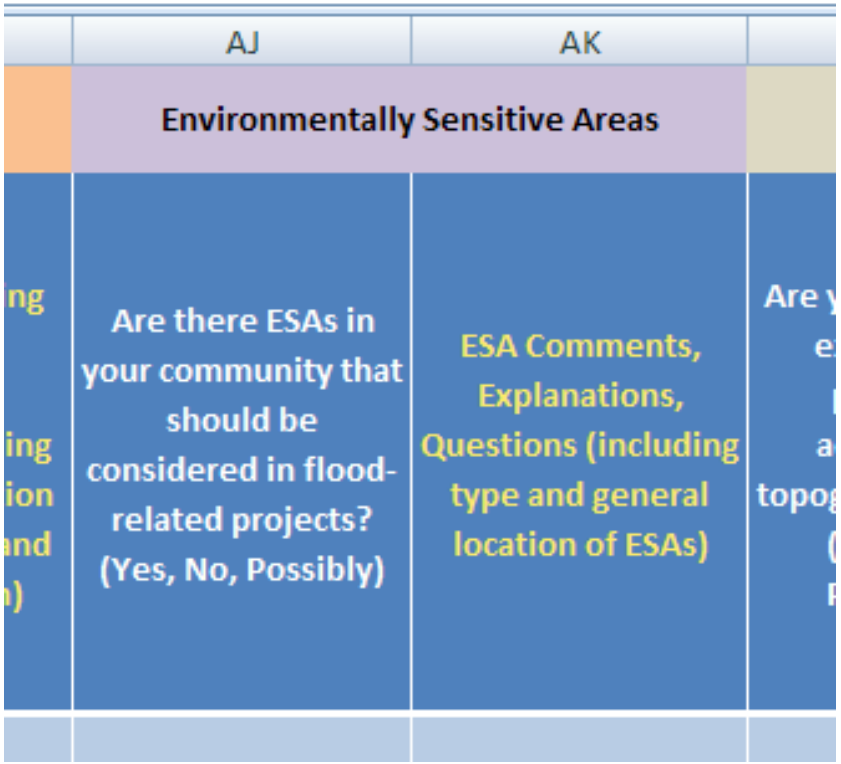
Levees



	Y	Z	AA	AB	AC	
	Levees					
rage ;,	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		
ng ing ion and)	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 (

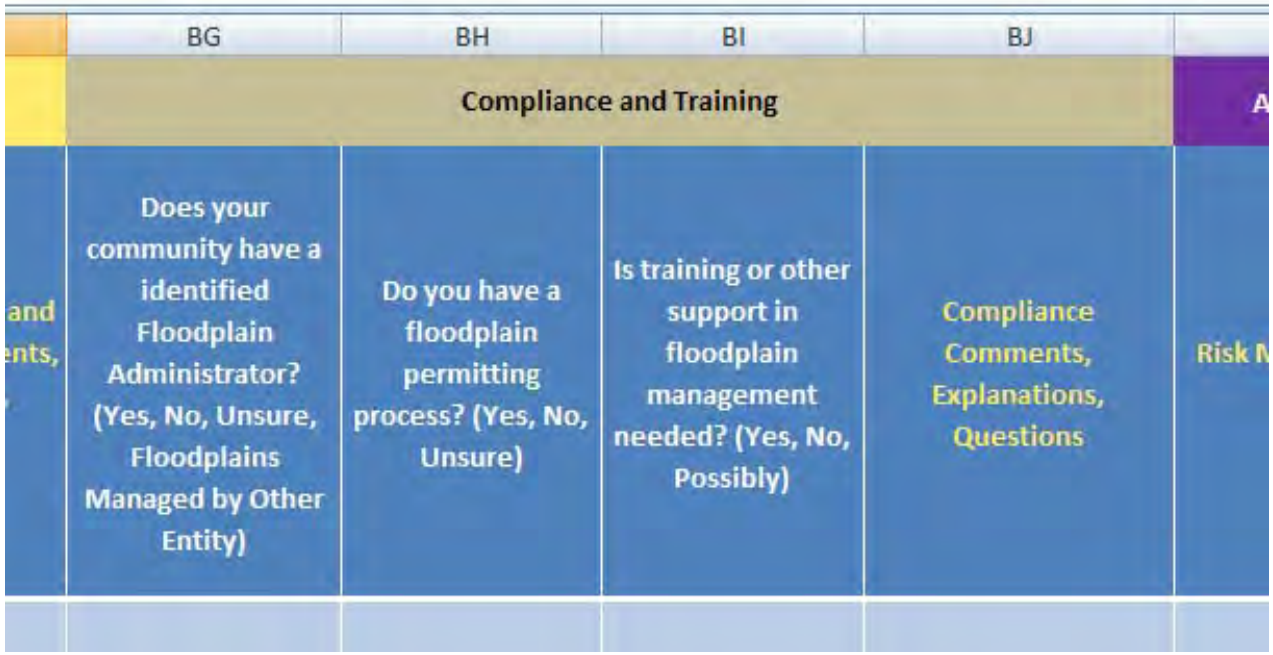
- **Any ESAs in your community?**
- **Locations and details welcome**

Communications and Outreach

	AY	AZ	BA	BB	BC	BD	BE	BF	
	Communications and Outreach								
t or s,	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	con A (Ye Ma

- **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 nts,	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**
- **Kristen Meyers, Mitigation Planner, kristen.meyers@fema.dhs.gov**
- **Dwight (Ted) Perkins, Regional Engineer, dwight.perkins@fema.dhs.gov**

Alaska

- **Sally Russell Cox , State Risk MAP Coordinator, sally.cox@alaska.gov**

STARR

- **Josha Crowley, josha.crowley@starr-team.com**
- **Emily Whitehead, emily.whitehead@starr-team.com**
- **Becca Croft, becca.croft@starr-team.com**