



Project Name:	<i>FEMA Region X Discovery</i>
Meeting:	<i>Homer Spit/Kenai Peninsula Borough Project Area Discovery Meeting</i>
Date and Time:	<i>Wednesday, March 2, 2011, 9 am – 4 pm AKST</i>
Place:	<i>Kenai River Center, 514 Funny River Road, Soldotna, AK 99669</i>
Facilitator:	<i>David Ratté, Region X FEMA</i>

Discovery Meeting Notes

Attendees

- Dotti Harness-Foster, City of Homer, FPA/Planning Technician
- Dan Mahalak, Kenai Peninsula Borough, Seward/Bear Creek Flood Service Area, Water Resource Manager
- Dan Bevington, Kenai Peninsula Borough, Kenai River Center, FPA/Resource Planner
- Brenda Ahlberg, Kenai Peninsula Borough, Community & Fiscal Projects Manager
- Dan Park, Kenai Peninsula Borough, Capital Projects Director
- John Mohorcich, Kenai Peninsula Borough, Kenai River Center, Manager
- Donna Glenz, City of Seward, Planner
- Kevin Lyon, City of Kenai, Capital Projects Manager, Acting Public Works Director
- Kyle Kornelis, City of Soldotna, City Engineer
- Robert Ruffner, Kenai Watershed Forum, Executive Director
- Lynnda Kahn, U.S. Fish and Wildlife Service, Fish & Wildlife Biologist
- George Kalli, U.S. Army Corps of Engineers, Engineer
- Dave Casey, U.S. Army Corps of Engineers, Kenai Field Office Supervisor
- Taunnie Boothby, Alaska National Flood Insurance Program Coordinator
- Sally Cox, Alaska Risk MAP Coordinator
- Roberta Carney, Alaska DHS&EM, Deputy Director
- Mark Roberts, Alaska DHS&EM, State Hazard Mitigation Officer
- David Ratté, FEMA RX Discovery Engineer
- Tom Tufts, STARR Coastal Specialist
- James Huffines, STARR GIS Analyst

Introductions

David Ratté opened the meeting and all attendees introduced themselves. A pre-populated sign-in sheet was distributed for attendees to initial their attendance and check and correct contact information. Mr. Ratté described the RiskMAP program and objectives.

Coastal Risk MAP and Discovery Products

Mr. Ratté reviewed the main objectives for the meeting. He provided an overview of Risk MAP and explained how Risk MAP is different than Map Mod. Mr. Ratté expressed that FEMA is “thinking outside the box” and the new maps are more than just insurance products. He explained that among other new products and benefits of Risk MAP, communication between FEMA and the communities would be enhanced during Risk MAP projects. Dan Mahalak asked if Risk MAP provided new regulatory products in addition to the DFIRM and FIS. Mr. Ratté explained that all of the new products were informational and non-regulatory; they are provided by FEMA to assist the communities in



making informed decisions in aspects of planning including land use, mitigation, and emergency management. Taunnie Boothby added also comprehensive planning.

Mr. Ratté requested that the group prioritize mapping needs during the meeting, possibly by placing them in tiers of high, moderate, and low priority. Mr. Ratté noted that, based on guidance from FEMA Headquarters and Congress, coastal studies are the primary focus of all new mapping projects for the coming year. He stated that the group would still look at and document areas of riverine and lacustrine flooding for potential future studies.

Prior to reviewing the GIS data, Mr. Ratté invited the group to ask any general questions.

Mrs. Boothby brought up an on-going issue with the Japp Creek study in Seward and the Map Mod product deliverables. She was worried that FEMA keeps delaying the issuance of new maps. Mr. Ratté said they are running concurrently. He explained that delays in the Map Mod study were due to the fact that FEMA had changed the contractor structure of flood mapping from one National Service Provider (NSP) to three Production and Technical Services (PTS) contractor teams and that we identified issues with lack of communication regarding study status and were evaluating ways to improve. Mrs. Boothby expressed that people get confused on why so many maps are coming out at different times.

The areas currently being studied include the Japp Creek Alluvial Fan funded in 2009 and the following flooding sources studied under Map Mod: Grouse Creek, Bear Creek, Kwechak Creek, several Salmon Creek flows, Sawmill Creek, and Resurrection River.

Mrs. Boothby indicated that more efficient and comprehensive study planning is needed in order to communicate better to the public. Mr. Ratté explained that the Japp Creek study reflects a test pilot to perform alluvial fan modeling in this geographic area and the Homer coastal study related to issues cited by NFIP compliance staff; nevertheless, he concurred and indicated that is one reason for this meeting. John Mohorcich stated that the Borough is governed by the Assembly and they produce a list of what Federal funding they would like to see provided each year. The Borough Assembly must be involved in setting the study priorities.

Mark Roberts asked if tsunami hazards were considered for the ongoing studies in Homer. Tom Tufts explained that tsunami hazards are not included in FEMA floodplain studies. Further discussion on tsunamis is presented below.

Dan Mahalak inquired about acquiring a scope of work for the Japp Creek study. Mr. Ratté answered that STARR and FEMA will develop a scope summary to distribute.

Coastal Conversations

Dan Bevington expressed his concern that FEMA did not have a clear understanding of the Borough's needs. The group viewed the GIS data presented by James Huffines, and began conversations about the issues facing the Borough.



Kenai Peninsula Borough

The community of Hope is located along the northern coast of the borough. Mr. Bevington explained that the community has both coastal and riverine flooding issues. He requested a *detailed coastal study* along Hope Highway in the populated area

Mr. Bevington identified the need for *detailed coastal study* on the east side of Cook Inlet near the community of *Nikiski*, as well as for the area from the mouth of the Kenai River south along *Kalifornsky Beach Road* to just north of Cohoe. Another Cook Inlet coastal study was identified for the coastline from *Happy Valley* south.

Coastal study needs were also identified for the *Seldovia* area from the south side of Seldovia proper, north and east along the coast to just past Seldovia Village to the headland. In *Port Graham*, a study is desired along Graham Road and 1st Street. A study is also requested at *English Bay* near the Nanwalek Airport.

On the *west side of Cook Inlet*, along the stretch of coastline from the northern border of the Kenai Peninsula Borough near Tyonek to the border of Lake Clark Park & Wilderness was identified for a *detailed study*. Small industrial villages exist along this coastline.

The community mentioned the Drift River Oil Storage Terminal as being located in the outflow area of Mount Redoubt, an active volcano. No mitigation or specific mapping needs are requested or planned.

A detailed coastal study was requested near Williamsport for flooding from Iliamna Bay. There is a detailed coastal analysis done for the area and commercial fishing entities in the area would benefit from this study being incorporated into an updated DFIRM.

The Russian village Kachemak Selo has coastal risks.

In a follow up email from Dan Bevington to Kelly Durst dated May 5, 2011, Dan indicated:

“Additional Information that is very valuable info to the “coastal” emphasis in the new funding initiative. Susan Saupe, scientist for the Cook Inlet Regional Citizen’s Advisory Council (<http://www.circac.org/joomla/index.php>) is just completing a coastal spill response tool that involves high resolution videography and more than 14,000 high resolution images of the coastline. This will all be served via a “Flash Tool” and she is willing to provide any agency the data. They have collected a TREMENDOUS amount of data on fates and effects, cook inlet currents, coastal habitats, etc. I highly recommend that your team contact her at 907-283-7222.”

City of Homer

The City of Homer desires a *detailed coastal study* for the area west of the spit, where the land has been modified by erosion.



City of Seward

A high priority *coastal study* need exists for the entire coastline within the corporate limits of *Seward*, due to alluvial fans, flow release, uncertified levees, and the potential impact on over \$12 million dollars in private infrastructure.

Mr. Mahalak indicated that there is digital tsunami data available and he is the point of contact. Incorporating this data into the non-regulatory risk assessment datasets will be beneficial. He added that stillwater elevations from 1981 are not accurate. The University of Alaska-Fairbanks may have additional tsunami data to include in the study. Mr. Mahalak also possesses some coastal surge data from December 2009.

Riverine Conversations

Kenai Peninsula Borough

The USACE is completing studies at Cooper Landing, Anchor Point, and Ninilchik. Mr. Ratté and Mr. Mohorcich agreed to have an additional discussion about the resulting data and the incorporation of the studies into a Risk MAP project as well as developing floodways.

In the northern community of Hope, an *approximate study for Resurrection Creek* was requested.

Mr. Bevington requested a *detailed study* at Moose Pass, where *Upper Trail Lake* flooding affects the railroad tracks and highway. It is currently mapped with an approximate Zone A.

An *approximate study* is needed on *Cooper Creek*, from Cooper Lake to the Kenai River, due to development pressure for vacation homes fronting the river. The lake contains a hydroelectric dam and the dam owner should have an Emergency Action Plan and possibly a dambreak model.

Borough representatives explained that there is ongoing development near Sterling, and that the current mapping for Kenai River is inaccurate. A *detailed study* from Soldotna to Skilak Lake is requested. The borough has newer LiDAR data for about 50 square miles. The area around the meander of Big Eddy is of significant concern and ice jams present issues on the Kenai.

In the community of Soldotna, there is need for a *detailed study of the Kenai River*. The community of Soldotna is not participating in the NFIP at this time (sanctioned). This was identified as a lower priority study.

The City of Kenai is also not-participating in the NFIP (sanctioned); however, mapping needs were identified in this community as well. A high priority *mitigation project* is the need to address *bluff erosion* along the coast near the mouth of the river. In addition, Beaver Creek would benefit from a restudy because the stream centerline shown on the effective floodplain is inaccurate, the floodplain may be wider than necessary. This study may be considered a lower priority.

The *North Fork of Anchor River* was identified for a *detailed study*. It was noted that structures have experienced flood damage in the past along this reach. This is fish habitat and is experiencing some development.



On the west side of Cook Inlet, *Drift River* was identified for an *approximate* study from the coast to near Redoubt Volcano.

In a follow up email from Dan Bevington to Kelly Durst dated May 5, 2011, Dan indicated:

“Most of our FIRM mapping (borough –wide) is inadequate in modern-day terms, with possible exception to the “Big Eddy” area of the Kenai River (mapping completed in 1999). However, in the latter, I’ve noted that our local surveyors mapped waterlines following the 1995 flood that are around 4 feet higher than the FIRM’s BFEs. I’m not sure that flood was more than the 1% flood event, so, the mapping may need to be revisited there. Many properties were affected by that flood.”

City of Homer

Beluga Lake, which is currently an approximate Zone A flood hazard area, and the community desires a *detailed study* for the lake to provide base flood elevations. There has been some development on the south side of the lake.

City of Seward

Mr. Mahalak discussed there being confusion between the State of Alaska stream naming conventions and Federal naming conventions.

For the ongoing Japp Creek study, a developer plans to complete a levee this summer. The state and city expressed concerns that the developer may have the expectation that the levee will provide flood protection and be shown on the FIRM. However, they suspect that the levee will not likely be certified per 65.10. Presumably, the development triggers the requirement for a CLOMR and LOMR, as appropriate, and review of the levee and associated 65.10 requirements would be addressed through the review of that request. An inquiry regarding timelines was made. FEMA projects release of preliminary data this winter.

A discussion of levees prompt Mr. Ratté to describe potential risk assessment products that could potentially look at non-standard failure modes of a levee system or at other flood events such as the overtopping flood or effects of the structure on smaller events. The group generally expressed little interest; however, Ms. Carney advised that the borough and cities acquire as much data as possible in order to improve opportunities for mitigation project funding in a post disaster setting. Additionally, information regarding affects on critical facilities is valuable.

A high priority issue for the city is the *Lowell Creek Diversion*. It was built in 1941 by the USACE, and the city has spatial data to reflect various flooding scenarios. The USACE has taken over tunnel maintenance for the remainder of its lifespan. There may be funding available for a risk analysis from the City of Seward. The group agreed that a Level 2 HAZUS run would be very beneficial. Mr. Ratté indicated that FEMA will coordinate with the USACE on their ongoing efforts. USACE developed a dam break analysis with one-dimensional modeling.

The area has LiDAR from 2006 prior and post a major flood event and the data suggest need for more channel migration studies. Existing channel migration analyses are available from Mr. Mahalak.



The group reviewed the 2006 flood shapefiles for the Fourth of July Creek and levees; however, no mapping needs were identified.

On *Lost Creek*, just north of the current ongoing studies on the northeast side of the city, there are high sediment deposits and a *detailed* study is needed. Outside city limits, in the KPB Seward Bear Creek Flood Service Area, the borough is using federal monies to acquire and destroy at least six homes that have been flooded from Lost Creek in the Old Mill Subdivision.

Of lower priority is an *approximate* study for *Spruce Creek* from the mouth upstream affecting the Lowell Point area.

Additional areas of study need included *Salmon Creek* from the headwaters to the existing study. This stream includes an earthen berm, affects infrastructure, characterizes an alluvial fan, and carries debris loads. The Bear Creek FSA ranks this reach as the highest priority.

An *approximate* study is needed for the *Box Canyon Area* due to surge release, the alluvial fan, and an uncertified levee.

The Alaska Railroad may be an interested stakeholder in any studies and possibly have supporting data. Mr. Roberts can provide a contact upon request.

Summary of Desired Mitigation Projects

- Bluff Erosion – a project to address erosion is desired by the City of Kenai (sanctioned)
- Lowell Creek Diversion Channel – funding to perform a Level 2 HAZUS run is requested

Summary of Desired Study Areas

Some areas were identified as needing a detailed coastal, detailed riverine, or approximate study. These desired studies are grouped below in order of priorities set by Congress for Risk MAP, which is that coastal studies are higher priority. All study areas are shown on the Final Discovery Map. Please note that these priorities are not finalized, as the Borough Assembly will be providing their recommendations on prioritization of studies.

Prioritization of Desired Studies based on Risk MAP Goals

- Cooper Landing, Ninilchik, Anchor Point - incorporate USACE riverine and coastal studies for 13.6 miles
- Seward Coastal – VE study for 12.9 miles within corporate limits
- Kalifornsky Coastal – VE study for 9.0 miles near Nikiski on the Cook Inlet
- Nikiski Coastal – VE study for 12.7 miles near Nikiski on the Cook Inlet
- Homer Coastal – VE study for 0.8 miles of shoreline on west coast within corporate limits
- Happy Valley Coastal - VE study for 5.9 miles near Happy Valley on the Cook Inlet
- Hope Coastal – VE study for 2.9 miles along Hope Highway
- Seldovia Coastal – VE study for 13.0 miles
- Port Graham Coastal – VE study for 1.9 miles
- English Bay Coastal – VE study for 3.1 miles
- West Cook Inlet Coastal – VE study for 101.7 miles along non-Federal land of borough coastline
- Williamsport Coastal – VE study for 6.9 miles (some existing data available)
- Resurrection Creek – Zone A study for 2.6 miles from the coast upstream in Hope



- Kenai River/Borough (and Soldotna) – AE study for 50.7 miles from the coast to Skilak Lake
- Moose Pass – AE study of Upper Trail Lake for 2.7 miles near Grant Lake Trail
- North Fork Anchor River – AE study for 17.1 miles from coastline upstream
- Beluga Lake – AE study for 2.5 miles of shoreline
- Drift River – Zone A study for 23.4 miles from the coast to just north of Redoubt Volcano
- Box Canyon – Zone A study for 3.6 miles from the confluence with Resurrection River to just north of the corporate limits
- Lost Creek – AE study for 0.8 miles from the confluence with Grouse Creek upstream
- Cooper Creek – Zone A study for 4.7 miles from Cooper Lake to the confluence with Kenai River
- Beaver Creek – AE study for 3.0 miles from the confluence with Kenai River to the upstream end of the effective study (just outside the corporate limits of Kenai, which is sanctioned)
- Spruce Creek – Zone A study for 2.3 miles from the mouth upstream

Communications Conversations and Other Discussions

The communities expressed the importance of communications and their interest in how mapping needs were being documented, prioritized and considered for future study funding. They expressed that they would like to have more frequent updates on ongoing and upcoming projects.

Ms. Boothby asked Mr. Ratté if FEMA had to use the PTS contractors or if local Alaska contractors could do new study work. Mr. Ratté explained that FEMA has three options for study work: the Production and Technical Services contractor for FEMA, through Cooperating Technical Partner (CTP) contracts, and other Federal agencies. In addition to a formal map update, Mr. Ratté explained that communities request incorporation of new information into the maps through Letters of Map Revision at any time. Mr. Ratté mentioned that he felt it would be beneficial to all if the USACE was more involved in the Alaska projects.

The local jurisdictions requested a copy of the CNMS data to have as a reference. Mr. Ratté will coordinate with STARR and Alaska DCCED to determine options to share these data.

The group discussed the CTP program. Ms. Boothby mentioned that the State is data poor and the more that communities could do to help in the cost of providing better information the easier it would be for them to obtain new studies. She also mentioned that the State Data Mapping Initiative is looking into acquiring 10-meter resolution topographic data in the near future.

Next Steps

Mr. Ratté explained that meeting notes would be provided to the community that would document the areas of study discussed at the meeting. He explained that the Region makes decisions about funding projects after priorities are set. He explained that because the Kenai Peninsula Borough has data to share, they may be more strongly considered for new studies in the upcoming budget year. Ms. Boothby explained that the State's business plan prioritizes study areas, and that the Borough is high on that list. Mr. Ratté stated that FEMA would be looking into which projects to begin the funding cycle on in April 2011.

In addition to meeting notes, a draft Discovery Map showing the identified mapping needs, contact information, and outreach materials to the group following the meeting. An example Project Charter will be sent to the communities; the final customized Project Charter will be developed once FEMA RX determines the final scope of work for a project and obtains funding.