

## **RX DISCOVERY 2011: Kenai Peninsula Borough, Floodplain Administrator Interview**

*Meeting Notes*

**January 28, 2011, 4:00 pm MT, interview via conference call**

**Attendees:** Dan Bevington, Floodplain Administrator (FPA), Kenai Peninsula Borough  
Chris Clough, GIS, Kenai Peninsula Borough  
Bill Halloway, GIS Manager, Kenai Peninsula Borough (limited participation)  
Matthew Johnson, STARR Discovery NFIP Specialist  
Bridget Belliveau, STARR Discovery GIS Coordinator

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***PREFACE: The Kenai Peninsula Borough has very unique flooding issues. FEMA should provide the Borough with site-specific type solution that will lay a solid foundation for floodplain management and prevent loss in this unorthodox riverine environment, which is not well suited for the traditional NFIP practices.***

***Hi Dan and Chris - thanks for taking the time to talk with us today. As you already know, FEMA's new Discovery process involves learning as much as possible about selected watersheds so that we can help the local officials identify the best projects for FEMA funding and implementation. Our goal with the interviews is to confirm the data we've collected so far with you, to find out other information about your community's flood-related issues, and to answer any questions you have about Discovery as best as we can.***

***Did you have a chance to look over the Fact Sheet, map, and contacts list we sent? How did the data look to you?***

Dan looked at the maps and he reviewed list of questions in the email, however he did not review the contacts sheet. It looked like the Borough area maps were focused on the Kenai Peninsula. At some point in the future the western side of the Borough will be added to the ordinance which may bring about concerns since the area is mostly recreational communities. It is planned that potentially all anadromous streams will be regulated by the habitat ordinance. It is a goal of the Borough to combine the habitat ordinance with the floodplain ordinance.

***As you see on the Fact Sheet, we found that you have been involved in several presidentially-declared disasters. Does your community have any flooding-related educational efforts or special programs to support folks who need flooding-related information or support?***

Yes, educational material is provided through the flood program that they have at the Kenai River Center. Seward/Bear Creek Flood Service Area is managed in part by the City of Seward. Residents visit both facilities to learn about flood risk, where National Flood Insurance Program (NFIP) documents, videos, and handouts are available. Dan Mahalak and Christina Schaeffer represent the Borough function.

***One indicator that an area may need a new study is a significant number of Letters of Map Amendment (LOMAs) along a flooding source. We found that you had Letters of Map Change (LOMCs) in the community - do you know if they were clumped together at all?***

No specific clusters are known.

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***We also saw that there were several mitigation projects. [Relocation of Kasilof River Road \$187k, Resurrection River flood control \$309K, new tsunami warning system \$454K, mobile warning system \$59K, and that the community contributed 25%. Are these the only mitigation projects that you know of? Using the reference map we sent, can you validate if they are in the correct locations (green crosses)?***

They all sound familiar to Chris. Other mitigation projects in Seward are led by Dan Mahalak to identify and prioritize mitigation efforts in the Seward area. The entire Seward area is on an alluvial fan.

***Follow-up on mitigation: are there other projects that you think are needed in your community? Where? Why? Would the community be willing to share costs for such a project? Have you worked with the State to request FEMA funds for the projects?***

Questions from Dan Bevington:

What is the range of definition for mitigation projects? What does FEMA consider mitigation?

The Flood Insurance Rate Map (FIRM) for the Kenai River was produced in 1981. The maps do not reflect the current risks in the area and are not helpful to regulate development.

A possible mitigation project would be to perform an accurate evaluation of the entire Kenai River floodplain to help regulate property owners from developing in extremely risky areas of the floodplain. Most of the development is residential and the Base Flood Elevations (BFEs) in the area have probably changed. There are several properties that could be affected by a flood. Another option of mitigation would be buying out property and homes.

Areas of concern are located where rapid recreational development is occurring. Extreme flood prone areas include: Big Eddy, Castaway Cove, River Quest, Poacher's Cove, Kenai Keys, Dowl Island, and Hawk's Ridge. Other areas of concern are coastal areas. There is mapping of V zones; however, the mapping was done with crude modeling efforts using data interpolated over a vast area. As an example: Tidal buoys from 100 miles away. In Seward, FEMA did not expand the Special Flood Hazard Area (SFHA) during the Map Mod project to known high hazard areas because they based everything off of the previous maps. They did not address the alluvial nature of the entire floodplain. Future projects need to meet the local resident's conditions and needs. This is the consensus of local officials throughout the Borough.

***I saw that there were no repetitive loss properties in the community - properties that had experienced flood problems enough to require repeat claims. Is this correct?***

Yes. There may be one official repetitive loss, but no one know where it is (there is no flood insurance on the property).

***It looks like there have been numerous claims made outside of the mapped floodplain. Is this correct?***

Yes, this confirms what they've been saying about inaccurately mapped SFHA. There are many residents that live in flood prone areas with insurance policies; however, they are not in a mapped SFHA, but they get flooded and file claims.

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***We collected levee data from the National Levee Database. From our understanding, Alaska's levee inventory has not yet been added to this database. Do you know of substantial levees or other flood control structures in the borough?***

To their knowledge, there are no accredited levees in the Borough. There are "levees" in Seward. Dan Mahalak indicated there are berms and sacrificial berms protecting residents. The material used for the berms is all alluvial. The strategy is to build the berms and maintain their effectiveness before floodwaters can wash the berms away.

***Following-up on levees: FEMA's requirement for levees is that communities provide documentation that the levee is compliant with the Code of Federal Regulations, Section 65.10, in order for the levee to be shown on new FIRMs as providing protection from the base flood. If these levees were determined to not be compliant with the requirements, what would be the impact on the residents, for example if the area behind a levee is below the BFE and the area was remapped as a SFHA?***

***We found that there are no tribal entities in the watershed, does that sound right to you?***

There may be a reservation near Tionik. The Tionik Native Association is the major landholder there. The reservation area is called Moquawkie. Alaska does not have many reservations because the native groups were defined as corporations. They have interest in the land and resources. Other native areas are Slodovia, Port Gram (Anwolik), and Fircrest.

***We did not find any Environmentally Sensitive Areas, like wetlands, or coastal areas requiring protection. Do you know of any that we may have missed?***

Most anadromous streams are protected. There is a map viewer online that will show which stream is protected. Most of these streams also have wetlands associated with them. The habitat protection ordinance (currently 50 streams, but hope to expand) prohibits building within 50 feet (plan to increase) of the banks.

***FEMA has a database of best available topographic data and that shows several Light Detection and Ranging (LiDAR) datasets. It looks like the National Park Service with the US Geological Survey (USGS) collected much of the data. Some data was collected for Homer Map Modernization (Map Mod) Project. Do you know of any other topographic data collection projects in the area?***

The Western lowlands and the Eastern Kenai Watershed LiDAR datasets were collected in 2007–2008 and were funded by a consortium of about 20 different agencies. Seward has multiple sets of LiDAR from 2006–2009, collected to study the dynamics of sedimentation over time.

***FEMA has been documenting areas where new studies may be needed in a data system called Coordinated Needs Management Strategy (CNMS). On the map we sent to you, these mapping needs are shown in red. There are several CNMS areas in Seward and one in Homer, but the rest of the Borough shows nothing. Is this consistent with your thoughts on new study needs?***

The Lower Kenai River has major problems. Development standards are implemented, but they don't fully understand the effects of what is being developed. The Borough is trying to get funding to restudy

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the entire river below Ski Lake, due to rapid development. The mouths of the Ninilchik, Kasilof, and Anchor Rivers are all areas of concern. A Russian community near the head of Kachemak Bay, called Kachemak Silo (population approximately 160), is built on an alluvial fan and has likely not been studied. Potentially a flood prone area near Hope is in need of a study (Not a priority, but it is there). Areas of concern are where rapid recreational development is occurring in extremely flood prone/high risk areas: Big Eddy, Castaway Cove, River Quest, Poacher's Cove, Kenai Keys, Dowl Island, and Hawk's Ridge. Other areas of concern are coastal areas where modeling efforts are based on large interpolations. Hawks beach is a coastal bluff erosion area that is being developed close to Anchor Point.

***Does the community have funding that they could contribute to a new study?***

Yes, they match resources with State and Federal grants constantly.

***Are you aware of any existing studies, maybe completed by the community or developers or the DOT? IF YES, we need to have those studies in hand before the Discovery meeting. Can you send us either a pdf or hard copy?***

There may be old studies in the files at the Borough, but no flood studies of which they are aware. The Kenai Watershed Forum may have additional studies.

***As you probably know, FEMA requires a mitigation plan for any community to be eligible to receive disaster assistance (funding). Our records indicate the plan for the Borough expired in August 2010. Has the borough submitted an updated plan to FEMA for review?***

The Kenai Borough All Hazard Mitigation Plan is not likely expired. Bill Halloway indicated Warren Finnely, the Code Compliance Officer, has been working on the plan for quite a while and must have finished and submitted it.

***Chris, we have collected a lot of GIS data, some from the Alaska Geospatial Clearinghouse and some from the KPB GIS website which has helped a lot. We appreciate including more local GIS layers like transportation layers, political boundaries, land use data, parcel data, building footprints, essential facility data, inundation areas from historic flooding, coastal data. Do you have local data and are you willing to provide that to us for the Discovery meeting?***

The Borough maintains an excellent website that allows users to view and download parcel data, wildfires, beetle kill, roads, etc. The aerial imagery for the Borough is not of public domain, so unfortunately not all of it is available. Bridget will coordinate with Chris to obtain additional local GIS data.

***Do you know of any recent transportation projects, like replaced bridges or culverts, or highway reconstruction that were in the floodplain? Many times transportation projects are not quickly reflected in the flood maps. Can you tell us the location and date?***

Strusin Creek Bridge near Anchor Point was replaced due to a flood. Bluff erosion near Mile Post (MP) 153 of the Sterling Highway at Ninilchik has caused the need for roadway repair.

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***Are there areas of rapid growth or development that may have affected the water runoff or areas that are close to floodplains? Were Letters of Map Revision (LOMRs) performed as part of the development? How about other land changes, like wildfires or landslides?***

It will be beneficial to bring in Kenai and Soldotna back to the NFIP. The planning department and mayor for both communities should get an invitation to the Discovery meeting.

***As part of Discovery, FEMA wants to support local officials in educating their residents about flood risk. We would like to ask a few questions about your community's communication strategies.***

***If new flood studies were performed for the high priority areas we discussed earlier, what is your sense of how the residents would receive the new flood study results and associated flood maps?***

They anticipate a full range in response with an equally strong voice.

***Because no two communities are alike and come in so many types and sizes, they all have unique outreach needs. We collected demographic data and found that [3% non-English speaker pop, 8% native pop, etc]. Does this seem correct to you? Have you found any particular type of outreach that works better to communicate risk to these groups?***

The Tionik native community is fairly isolated but other native communities are well integrated, however a Russian speaking community (Kachemak Silo) may need additional outreach.

***Each community has unique opportunities and challenges for outreach due to their local floodplain management programs and the local conditions that impact that community. The borough appears to have unique flooding issues. What is the current awareness level about this issue among your citizens? With FEMA's help, would you be willing to serve as a Subject Matter Expert on this topic?***

Yes. An extensive library of flood information is available. There is an increasing awareness among contractors and landowners to not build in flood prone areas, regardless of what the FIRM indicates. The Borough is proactive towards education and outreach, but would like to increase its current program to reach more citizens. The Kenai River Center and Seward/Bear Creek Flood Service Area have extended outreach and education to community members. These Borough functions host workshops on various topics such as bluff erosion, bank restoration, and wetland workshops. Additional facilities could be developed to increase the footprint of the outreach efforts. Also, the Kenai Watershed Forum has been involved with habitat and flooding issues among the citizens.

***We sent a list of local contacts we would like to notify about any future projects. Could you take a look and let us know:***

***a. Is the name/contact info correct?***

Did not review contact list.

***b. Is any group or organization missing?***

The Kenai Watershed Forum is missing from the list.

***c. Do you anticipate any concerns from anyone on the list? What would they be?***

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There is some concern that the Risk MAP effort will result similar to the Map Mod effort. During the Map Mod effort, FEMA requested data from the community and the community could map the hazards accordingly, however nothing came to fruition from this effort, so the Borough remains skeptical.

**d. Do you know any of these people personally? How often do you meet/speak with them?**

Dan did not review the list.

**e. Does the Mayor/Executive's Public Affairs office have these groups on his/her mailing list?**

**f.** Dan did not review the list. *Are there regular meetings that these stakeholder hold where a status on this project might be appropriate to add to the agenda?*

Yes, the planning department holds assemblies and there is an advisory planning council.

**g. If we provided information about the project to you/the Mayor/Executive, would your community be willing to send a letter inviting the community to a meeting or providing project update(s)? (you could get CRS points for outreach)**

They are definitely able to do that.

***At the end of a Risk MAP project, FEMA will provide you with new data and risk assessment tools that will help you and your residents better understand and visualize your risks. With customizable outreach tools and templates provided by FEMA, would you and/or your community be willing to take a proactive approach in educating people who live and work in your community about their risk and the steps they can take to protect themselves?***

Yes. More resources are always helpful. As mentioned, the River Center holds a vast array of NFIP documentation, some is relevant, and some may be slightly dated. They are willing to work with FEMA to expand outreach and education.

***Would you be willing to have a future call/meeting to discuss the community's capabilities and support resources that may be needed from FEMA?***

Yes.

***Who else should we include on that call that has knowledge about existing community outreach? Specifically, we would discuss things like website information and email lists; mailings to citizens and key stakeholders; press releases and media briefings; public meetings; and other outreach efforts.***

The Office of Emergency Management should be invited to the meeting, as well as the previously mentioned Kenai Watershed Forum. These groups have been forwarded the Discovery meeting email and have been added to the contact list.

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***That's about all the questions that we have. Is there anything else you think we should know or include on our map?***

No. However, an efficient and effective way to track development in flood prone areas was proposed: The Borough's parcel spatial information is updated on a weekly basis. Using this information with digital flood data and sensitive habitat information on field tablets, regulating development will be easy and accurate, without much guesswork involved.

***Thank you so much for spending the time to talk with us.***

***Dan Bevington sent two emails with corrections to the initial interview notes as shown above. These emails should be referenced for clarification.***

***Follow up email: Received by Kelly Durst from Dan Bevington on Thursday, April 7, 2011***

**From:** Bevington, Dan [mailto:dbevington@borough.kenai.ak.us]  
**Sent:** Thursday, April 07, 2011 5:37 PM  
**To:** Durst, Kelly  
**Cc:** Meyer, Jennifer C; Perkins, Dwight; Holt, Brett  
**Subject:** RE: KPB Discovery Interview Notes

Hi Kelly,

I did not see Karen Amrhein's contact info in your email. I've had a chance to look at the notes, thank-you for sharing those. I had asked the STARR contractor to give me a look before these got sent to FEMA so that we could correct any mistakes. Unfortunately, they did make a few mistaken interpretations. (I'll only speak to the interview with myself). I'm not sure if this information will be helpful to FEMA risk analyses, but I want to make sure to "get it out there" so that at least you have that information.

The western side of the borough is on the "West Side of Cook Inlet" this is the area of the borough that has a lot of critical oil and gas infrastructure as well as recreation. This is all within the borough's coastal zone. Oil and gas pipelines to/from oil platforms in the inlet itself land ashore and there are shore based facilities associated up and down the northwest of Cook Inlet within the borough. Also, we have a large oil tank farm at the outlet of Drift River, along with a loading facility to move oil onto ships. To the south is an important port (also on the west side) that is the subject of potential harbor creation to create a deep water port in Inskin Bay. The existing port is called "Williamsport" in an adjacent bay. Additionally, the borough is considering adding streams to its habitat protection ordinances for anadromous species. Likely, we will be tying floodplain to those additions.

"West Side Industry" is an important detail lost in the STARR interview notes.

Tyonek is a Native Alaskan village on the west side that is not spelled "Tionik" – it should be corrected for your purposes.

Starisky Creek is not spelled "Strusin Creek" and should be corrected for your purposes.

Our flood mapping for the Kenai River is significantly out of date, we are pretty sure flood levels have risen since the (roughly mapped) 1981 FIRM panels were created. The only recent panel is the 1999 panel for "Big Eddy" area on the Kenai River.

I'm sending this to you so that you can forward it to Karen as you see fit. I hope that this is a help. I'm very interested in helping in this process and anyone should feel free to contact me by whatever means they desire. My phone is 907-714-2464 and my email is [dbevington@borough.kenai.ak.us](mailto:dbevington@borough.kenai.ak.us).

Take care,

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Dan Bevington  
KPB Floodplain Administrator

***Follow up email: Received by Kelly Durst from Dan Bevington on Thursday, May 5, 2011***

**From:** Bevington, Dan [mailto:dbevington@borough.kenai.ak.us]  
**Sent:** Thursday, May 05, 2011 4:04 PM  
**To:** Durst, Kelly  
**Cc:** Meyer, Jennifer C; Perkins, Dwight; Holt, Brett; Amrhein, Karen L; taunnie.boothby@alaska.gov  
**Subject:** RE: Kenai Peninsula Borough Discovery Interview Notes

Hi Kelly,

There were some errors in the interview notes that your contractor should address in the process. I've attached reviews from the Dan Mahalak (who works with my office) and Brenda Ahlberg (who is the borough grant manager). Also, I noted the following corrections needed (and one bit of additional information).

- 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 (the interview notes suggest “several,” which is not what I would have said.)
- The Village of Tyonek is spelled incorrectly in the interview notes.
- Starisky Creek was spelled incorrectly in the interview notes.
- Kachemak Selo was spelled incorrectly in the interview notes.

**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.**

I hope this is a help.

Thanks,

Dan Bevington  
Resource Planner/Floodplain Administrator  
Kenai Peninsula Borough  
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