# Seward/Bear Creek Flood Service Area Regular Board Meeting 28 August 2017



Sawmill Creek Embankment and Restoration Project

Sea View Plaza Building
302 Railway Ave, Suite 122
Seward, Alaska
7:00 PM

The mission of the Seward/Bear Creek Flood Service Area is to provide flood planning, protection, and mitigation services in coordination with the appropriate agencies, to reduce the risk of flood damage to private and public property, through addressing issues that best reflect a fair use of the tax-levy for watershed-wide benefit.

### SEWARD/ BEAR CREEK FLOOD SERVICE AREA Regular Board Meeting Agenda

August 28, 2017

CALL TO ORDER A. Karl VanBuskirk В. **ROLL CALL** Board Member Term Expires 10/2017 C. APPROVAL OF AGENDA D. APPROVAL OF MINUTES Robert Reisner 1. July 10, 2017 pg. 1 Board Member Term Expires 10/2018 E. REPORTS & PRESENTATIONS 1. City of Seward 2. Kenai Peninsula Borough Jessica Gal 3. Kenai Peninsula Borough Comprehensive Plan Board Member Term Expires 10/2019 F. PUBLIC COMMENTS - LIMIT 3 MINUTES BOARD'S RESPONSE TO PUBLIC COMMENTS G. VACANT Board Member H. CORRESPONDENCE & REVIEW OF PAYMENT REQUESTS Term Expires 10/2017 1. Bill Purdue Letter Regarding Resurrection River pg. 8 2. Orson Scott Email Regarding Bear Lake pg. 15 Randy Stauffer Vice Chairman PERMITS FOR REVIEW Term Expires 10/2018 1. KRC 11984 Lamberson New Residence pg. 19 **UNFINISHED BUSINESS** J. VACANT Board Member K. **NEW BUSINESS** Term Expires 10/2019 Approval of SBCFSA Mitigation Action Plan Projects & Priorities List pg. 26 Mark Ganser 2. Clear Creek Channel & Embankment Restoration Project pg. 29 Board Member 3. KPB PIN 14406002 Carl Land Negotiation pg. 30 Term Expires 10/2019 4. Establish September Work Session Topics pg. 31 INFORMATIONAL ITEMS AND REPORTS (No action required) L. pg. 32 STARR Region X Newsletter 2. City of Seward Risk Map Resilience Meeting pg. 35 3. Joint Work Session with City Planning & Zoning Commission Rescheduled to September 19th pg. 39 PUBLIC COMMENT - LIMIT 3 MINUTES N. BOARD COMMENTS

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ADJOURNMENT

7:00 pm

KPB Seward Annex

### Regular Board Meeting Minutes

July 10, 2017

#### A. CALL TO ORDER

A regular meeting of the Seward/Bear Creek Flood Service Area board was held on July 10, 2017, at Suite 122, SeaView Plaza, Seward, Alaska. Acting Chair Randy Stauffer called the meeting to order at 6:00 p.m.

#### B. ROLL CALL

#### There were present:

#### **BOARD MEMBERS**

Randy Stauffer, Acting Chairman Karl VanBuskirk Jessica Gal Mark Ganser

Comprising a quorum of the flood service area board.

#### Also in attendance were:

Robert Reisner

Kenn Carpenter, Kenai Peninsula Borough Assembly Member Bryr Harris, Kenai Peninsula Borough Floodplain Administrator Stephanie Presley, Service Area Program Lead Heather Cinereski, Service Area Secretary

#### C. APPROVAL OF AGENDA (00:35)

MOTION TO APPROVE AGENDA: Ganser moved for approval of the agenda. Gal seconded.

Acting Chair Stauffer called for amendments to the agenda.

MOTION TO ADD TO AGENDA: Reisner moved to add to the agenda under H. Correspondence #2 August meeting schedule and August Work Session Topic #3 Surplus Items Auction.

VOTE TO APPROVE AMENDED AGENDA: Unanimous.

#### D. APPROVAL OF MINUTES (01:40)

#### 1. June 5, 2017

MOTION TO APPROVE MINUTES: Ganser moved for approval of the June 5, 2017 meeting minutes. Gal seconded.

Acting Chair Stauffer called for additions, corrections or deletions to the minutes with none offered.

VOTE TO APPROVE MINUTES: Unanimous.

#### E. REPORTS & PRESENTATIONS (02:15)

#### 1. City of Seward

Representative was not present.

#### 2. Kenai Peninsula Borough

Kenn Carpenter, Kenai Peninsula Borough Assembly Member reported

### Regular Board Meeting Minutes

July 10, 2017

a. On the Assembly, there is not much to report, they have a meeting July 18, but he has been working on a project with Dean Carl to acquire some land to the north of his property so that he can get his property built up. There have been bids in for Salmon Creek Section 205 project, where they are hardening the bank. There have been several contractors go up there and look at the jobs so they could put their bids in.

#### Bryr Harris, Kenai Peninsula Borough Floodplain Administrator reported

- a. That the borough is working with United States Geological Surveys (USGS) for another five years on River gauges. Initially, Grouse Creek was up for possibly not continuing funding. The Mayor asked for opinions on the value of the Grouse Creek gauge, and after she asked service area staff for some information and the Land Management Director spoke up, they will continue to be funded at a lower rate from the borough. It looks like USGS is going to pick up the remainder. So that gauge will continue to be operated.
- b. As a response to an inquiry the board made about a particular project, Jim Conant's project and the borough's requirements. It's confusing because there is a lot of digging that goes on in Seward creeks for which engineering is not required, but the Conant project is different in that he has a structure that he is proposing to build, and there has been a lot of development on that property over the last few years. So when I looked at the most recent application with the structure going up in addition to further dredging, it's come at a difficult time for the Borough Floodplain Management Program. Right now, the River Center is under review and audit from FEMA and the number one feedback we've gotten is that we need to enforce our floodway analysis requirements or be up to their standard. What that requires is, if you read the code, and it's very strict, it reads "any development in the floodway requires an Engineer to perform a conveyance calculation to make sure that the development doesn't cause a danger to upstream or downstream and it doesn't cause a rise in the flood waters in a hypothetical flood event that pretty much define a floodplain. In Seward, from a regulatory prospective, she stated she doesn't believe that it's fair, practical or anything else to require a conveyance calculation for digging in the stream. Seward doesn't have a flooding problem, it has a gravel problem because of the tremendous sediment that comes down. So digging and getting that out of there is necessary, even though from FEMA's perspective the code is clear that there should be engineering for anything that happens in the flood way, the River Center is not going to require it for just digging and moving the gravel out. She would prefer that whatever material is moved out of the streambed is located someplace outside of the floodplain, but even that, like the work that was done on Sawmill Creek just moved the gravel in the channel into a berm toward the edge of the floodway and that seems fine. The Conant project is different, because from aerial photography, and from what has been found in the long history of the River Center on his projects, there has been a lot more complicated things done. There has been a dike built, they are moving material from here to there, there is a structure, there is a giant metal bridge in the middle of the floodway. So what is being required is because of the Floodplain Administrator's central function, and she has two functions: to communicate flood safety, any information we have to the

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members of the public, and to protect the borough to make sure that with any proposed development that happens that there is enough information to assure us that it is not causing danger and it is not changing the FEMA maps. FEMA wants us to make sure that development doesn't change how the water behaves in a flood event. There has just been enough that has gone on around the Conant properties to where it is thought that there probably have been changes to the map, which puts the borough in a position with FEMA that is really difficult. If FEMA comes and audits our permits and says "here's the Conant property has applied for this kind of development, what makes you think this hasn't changed the map?" And we say there is a No-Rise Certification from a few years ago submitted that is clearly not up to the same standards that you require. We are not going to be able to sell that to them. So what is being required and this is not for dredging, if it was just dredging that would be fine, but because he's putting in an additional structure, we are requiring him to go through a traditional letter of map revision process. Where he has to get an engineer to use the software that FEMA uses, which is free, to create a computer model or an engineer can get the model from FEMA showing how the maps were made. The engineer has to take that model, enter in the development that has happened since the flood study in 2005, and compare that to what the applicant is proposing to do, to show that there is no change in the behavior of the flood waters, no rise in flood waters. Once he does that and FEMA gives him the sign off on it, then she can write a permit. If we can see there is no change to the map, then it is approved. If there is a change to the map, FEMA can change it so it reflects current conditions. If his application is just for dredging, that is not a problem and not going to require engineering. When there are structures involved or obstructions to the floodway of any kind, then that triggers these extra requirements for the borough.

### Stephanie Presley, Service Area Program Lead reported

- a. On the US Army Corps of Engineers Section 205 project on Salmon Creek, the Corps put out advertising June 16<sup>th</sup> for the thirty-day advertisement period. The contractor site visit was June 26<sup>th</sup>. There were three contractors in person and one who called in for the briefing. Proposals are due July 19<sup>th</sup> by 8:00 a.m. As the only Section 205 project in the nation currently in the implementation phase, we have funds in hand ready for award. We remain on schedule for an award date of July 31<sup>st</sup>. The option has been given to contractors to use this construction season to make the needed armor rock with construction next spring, or to complete all the work this fall.
- b. On Lost Creek, Metco placed the borough rock that was available onsite between the confluence of Lost Creek and Grouse Creek. They didn't have additional rock available in the timeframe we had to work with. The added cost to the Lost Creek project was \$1,400.
- c. On the Salmon Creek embankment restoration north of Clear Creek, Metco completed work before the holiday. Total cost was \$9,250, which was a great deal for us. Metco's D9 had broken down and they did the work with the D8. It took longer, but the cost to us was the same. Metco has a new D9 in route to Seward.

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- d. The Backlund family has contacted the service area in regards to the possibility of acquiring several parcels in the floodplain south of Questa Woods. The service area had worked with them and the Kachemak Heritage Land Trust several years ago on floodplain acquisition, before the State navigability determinations, and the land trust ended up pulling out of the project. I am following up with The Conservation Fund to see if they would be interested in partnering on this project and will bring more information next month.
- e. On the channel and embankment restoration project on Sawmill Creek, quotes ranged from \$26,000 to \$62,000. Metco was awarded the contract and has submitted their permit application to CIRI for access to their property. The permit is expected by the end of the week. Metco will restore the breached berms upstream on CIRI land and clean out the channel approximately 1,200 feet upstream from the bridge, transitioning to the area dredged by the State Department of Transportation in the Nash Road bridge right-of-way.
- f. Matt Balazs, the UAF graduate student conducting the Sediment & Mass Wasting Study for the service area will be down on the 24<sup>th</sup> to provide data to staff and give a short presentation. Staff requests you add his presentation to the work session topic for July.
- g. The FEMA Risk Map community resiliency meetings have been scheduled for August  $22^{nd}$  in Seward, from noon to three, at the Seward Fire Station. Please let staff know if you are interested in attending so we can post public notice.
- h. We received two qualified applications for the permanent half time Secretary position and will conduct interviews later this month.

### F. PUBLIC COMMENTS – LIMIT 3 MINUTES (23:00)

Acting Chair Stauffer called for public comment.

Mark Danielson on Salmon Creek, commented on Oliver Kunitake's project that was started in 2006. His complaint is that in 2008 he extracted some gravel from the creek. He piled it up on the river bed and has not removed it since. He actually disappeared in 2008 and hasn't operated a machine until last year. Then Metco did some work for him and leveled off some gravel but the problem is none of this, his project, is happening. He's stalled in the creek with the so-called gravel he's extracted. He's fifty feet into the river bed and there's a no rise certification here that it's on a 100-year floodplain stream with floodway elevation, floodway stream elevations, and we haven't had any floods since 2008. So it hasn't washed away. By the way, I did look at the project Metco did downstream on Salmon Creek, it's fantastic. You know it looks like some intelligent foresight right there. But Mr. Kunitake just stalled. He showed the board a little drawing, this is all river and he's got this pile. This is basically a survey marker and this is all riverbed. He's got equipment parked here and his original survey, from what I can remember, is right in between his D9 CAT and excavator and wheel loader. He's also stock piling boulders which I assume he's going to be shoving in the creek one of these days. But to me it looks like a bait and switch, he has this one perfect plan and he hasn't complied with any of it that I can see.

G. BOARD'S RESPONSE TO PUBLIC COMMENTS (29:40)

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Acting Chair Stauffer called for board member comment.

Board Member Reisner thanked Mr. Danielson for showing up and making the board more aware. Without public input it is harder for the board to take in the full flavor of what is really going on out there. He added he has known Mr. Kunitake for a number of years and is quite sure with his being a former scientist, he's probably changed course and his trajectory is now off and this is what we're dealing with.

Ms. Harris asked if Mr. Kunitake lives in town.

Acting Chairman Stauffer answered in and out. You never quite know when he's going to be in and as was said he sometimes will disappear for months at a time and then will show up again. Thank you for your presentation Mr. Danielson, please get with Ms. Harris. That would be your next step.

### H. CORRESPONDENCE & REVIEW OF PAYMENT REQUESTS (31:05)

1. KPB Attorney Response Regarding Election of Officers

There was no action taken on this item.

#### I. PERMITS FOR REVIEW (35:55)

1. RC 11968 Taylor Yard & Ditch Fill

MOTION TO COMMENT: Reisner moved to contact the River Center with a letter of no objection. Gal seconded.

VOTE ON MOTION: Unanimous

2. State Department of Transportation Seward Hwy Pavement Preservation Project MOTION TO COMMENT: Ganser moved to note that the culverts need inspected and repairs are necessary. Gal seconded.

VOTE ON MOTION: Unanimous.

3. State Department of Transportation Liquefaction Evaluation of Gravel There was no action taken on this item.

#### J. UNFINISHED BUSINESS (45:30)

1. Election of Officers

MOTION TO POSTPONE: Gal moved to postpone elections until November. Ganser seconded.

VOTE ON MOTION: Unanimous

#### K. NEW BUSINESS (46:45)

1. Establish July Work Session Topic

MOTION TO ESTABLISH WORK SESSION: Ganser moved set the July work session topic: Hazard Mitigation Plan Update.

MOTION TO AMEND MOTION: Gal moved to amend the motion to change from the Hazard Mitigation Planning to SBCFSA Mitigation Projects & Priorities along with the report from UAF about Sedimentation & Mass Wasting Study. Reisner seconded.

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VOTE ON AMENDMENT: Unanimous

VOTE ON MOTION: Unanimous.

#### 2. August Meeting Schedule & Establish August Work Session Topic

MOTION TO SET SCHEDULE: Reisner moved to hold a joint regular meeting and work session on August 28<sup>th</sup>. Ganser seconded.

VOTE ON MOTION: Unanimous.

MOTION TO ESTABLISH WORK SESSION: Reisner moved to establish the August work session topic the SBCFSA Mitigation Plan Update. Gal seconded.

VOTE ON MOTION: Unanimous.

#### 3. Surplus Items at Borough Auction

MOTION TO SELL SURPLUS ITEMS AT BOROUGH AUCTION: Ganser moved that we approve items that staff has recommended for auction. Gal seconded.

VOTE ON MOTION: Unanimous

#### L. INFORMATIONAL ITEMS AND REPORTS (57:10) (No action required)

- 1. SBCFSA Approved FY18 Budget
- 2. STARR Region X Newsletter
- 3. Notice of SBCFSA Board Vacancies

#### M. PUBLIC COMMENT – LIMIT 3 MINUTES (01:06:50)

Acting Chair Stauffer called for public comment with none offered.

#### N. BOARD COMMENTS (1:07:00)

Acting Chair Stauffer called for board member comments.

Board Member Gal commented it was a good meeting. She thinks the board got a lot accomplished. Thanks to everyone who was here and thanks to staff and Mrs. Cinereski for their recruiting skills.

Board Member Ganser had no comment.

Board Member Reisner commented that he'd like to thank staff and Mrs. Cinereski in particular for the fine work that they are doing here as our staff members allow this board to move forward. It is hard to get good staff. He added he thinks the service area got real lucky. He also thanked Mr. Danielson who was here at the last work session meeting and, that was the reason he made the comment about more gravel and water. He is aware of his situation and what Mr. Kunitake has been up to. He also thanked Kenn Carpenter for showing up while he was here; it was kind of nice having him here in the room as always, and staff for a fine report of where we are and what we are up too.

Acting Chair Stauffer commented he would reiterate that staff is doing a good job and this is why we wanted to change things when we lost Mr. Mahalak, and we knew we had these things to finish up and how we were going to do that. So far it has pretty much worked out the way we have wanted and he thinks the service area is at a point now with this

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board where, when we had a hydrologist, there was a time when we needed that, but now we need a little bit different staff to complete these projects and get everything done. He thinks the board is doing that and that it has worked out well. He added the board is knocking off several of these projects. If Sawmill Creek gets done, shortly, and we get started on the 205 project on Salmon Creek, the board will have completed a number of projects. It is time now to think about where we go from here and what is next. So we have these work sessions coming up and that's what we need to do. We have our staff in place, we have our budget in place and where do we go from here. He thanked everyone.

### O. ADJOURNMENT (01:10:15)

MOTION TO ADJOURN: Gal moved to adjourn the meeting. Reisner seconded.

VOTE ON MOTION: Unanimous.

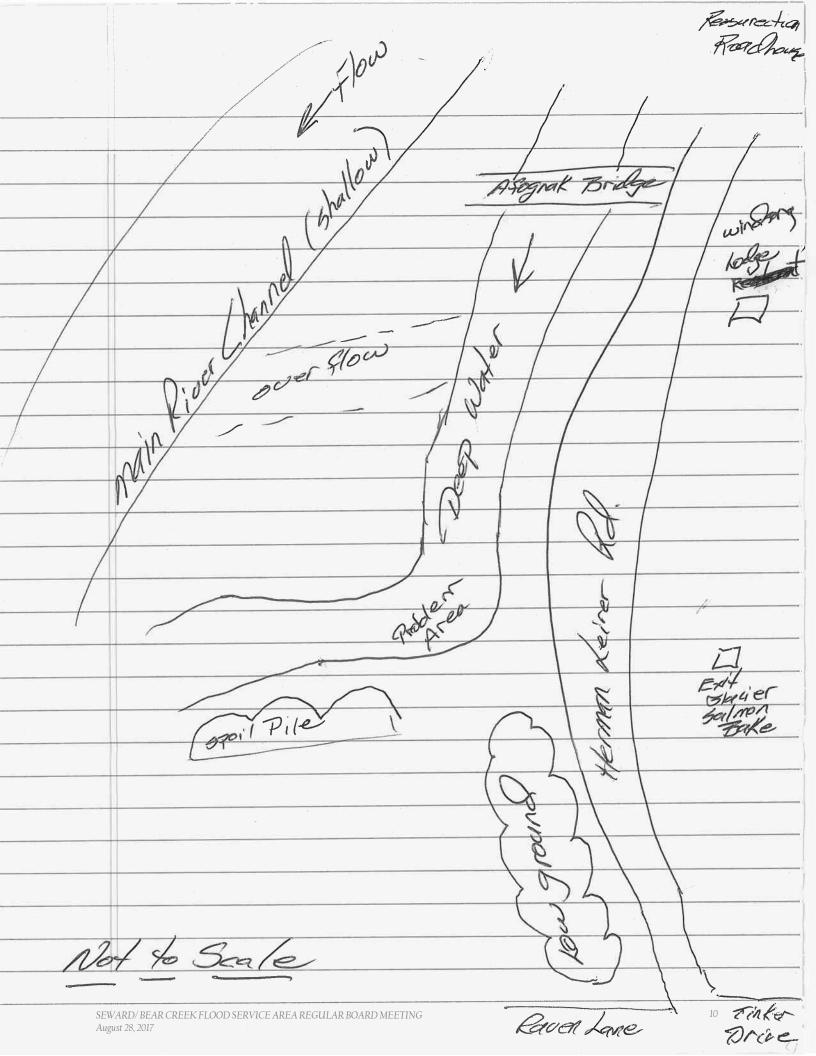
With no further business to come before the board, Acting Chair Stauffer adjourned the meeting at 7:10 pm.

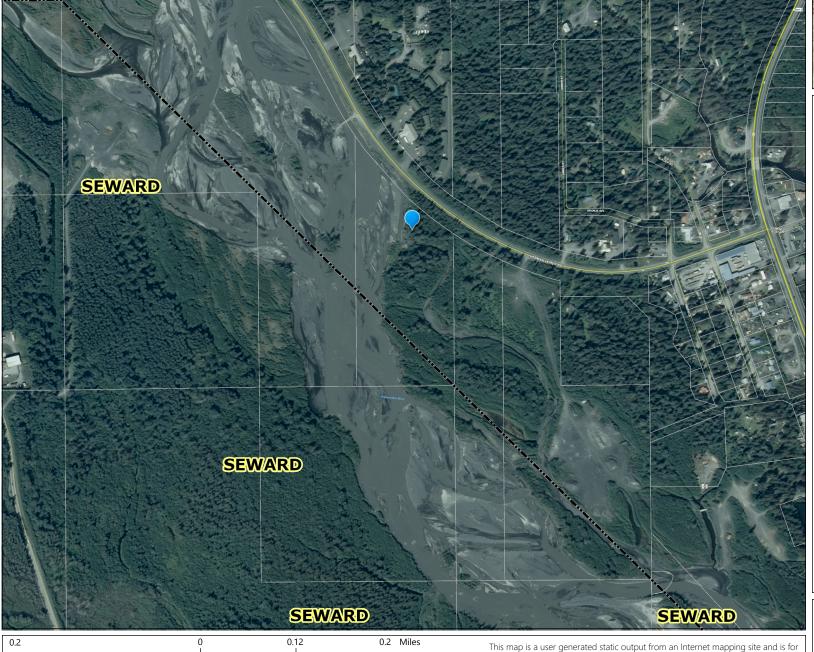
The next regular board meeting is scheduled for Monday, August 28, 2017 at the Sea View Plaza Building, Suite 122 at 7:00 pm.

The next board work session is	scheduled for Monday, July 24, 2017 at the Sea View Plaza
Building, Suite 122 at 6:00 p.m.	
Secretary	Date of Approval

To the members of the SBCFSA Board I would like to bring to your attention a development that I perceive as a threat to tolz subdivision and the adjacent area, including Kaven Lane, where I reside. Recent aggregate material removal in the Ressurection River Bed in the area across Herman Leiger Koda From the Resurrection Koadhouse have in my view adversely affected past efforts to keep the river in it's main channel I am requesting my observations be reviewed by a hydrologist and corrective action deemed necessary be taken before our not to be underestimated September rains Thank You Bill Herdue Pox 3344

August 3, 2017 Hephanie Trestey and SBCFA Frank I am in receipt of your letter Sated 8/1/2017 Thank You for your Please see the enclosed sketch that I hope will help you see what I think is a developing problem. I hope you will walk out on the pair of flateurs I refer to as the Afograk Bridge and look down stream. - Thank You Bill Herder





Legend

CITY LIMITS

Tax Parcels

Notes

Enter Map Description

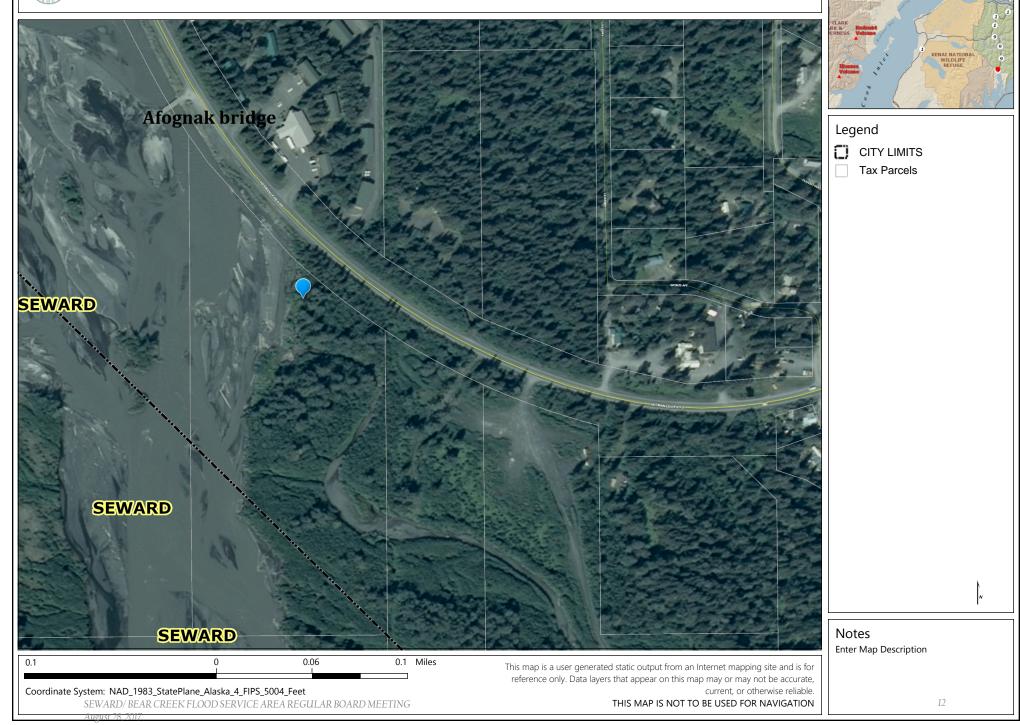
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current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION

reference only. Data layers that appear on this map may or may not be accurate,

SEWARD/ BEAR CREEK FLOOD SERVICE AREA REGULAR BOARD MEETING

Coordinate System: NAD\_1983\_StatePlane\_Alaska\_4\_FIPS\_5004\_Feet





Resurrection River from Afgognak Bridge



**From:** Orson Smith [mailto:orsonpsmith@gmail.com]

Sent: Tuesday, August 01, 2017 10:07 AM

To: <a href="mailto:sbcfsa@arctic.net">sbcfsa@arctic.net</a>; <a href="mailto:billwilliamson@arctic.net">billwilliamson@arctic.net</a>; <a href="mailto:mount10man@alaskan.com">mount10man@alaskan.com</a>; <a href="mailto:karl@stormchasersmarin">karl@stormchasersmarin</a>

e.com; bob.reisner@yahoo.com; orcaz@outlook.com; mark.ganser.ak@gmail.com

Subject: Bear Creek and Bear Lake erosion

Friends and neighbors of the Seward-Bear Creek Flood Service Area Board,

I am writing to make you and, I hope, other resource managers of the Kenia Peninsula Borough aware of erosion and related issues occurring at the outlet of Bear Lake on Old Sawmill Road off Bear Lake Road.

A thunderstorm with heavy rainfall a few weeks ago induced drainage from Old Sawmill Road to form a gulley into Bear Creek (photos 1 and 2). This erosion has since been exacerbated by public use of the creek bank for launching canoes, kayaks, paddleboards, sailboats, and power boats, as well as for viewing and wading around among spawning salmon in the creek.

The end of Old Sawmill Road is an unmanaged turnaround that provides public access to both Bear Creek and Bear Lake. The lake side is a cut bank with old timbers and rusty steel cables sticking out (photo 3). The bank is receding at this point, mainly due to intense public use. Little kids ride bikes there on warm days and swim unsupervised. The area is frequently the scene of picnics and noisy gatherings of people with four-wheelers, motorcycles, and other vehicles, leaving trash and rutting up the unpaved turnaround. Toilet paper and dog poop usually present are obvious signs of public health hazards. Gunshots have been heard from this vicinity.

I know you specialize in addressing erosion and flood control problems. I feel in this case, a primary cause of erosion is the growing use of this site as the only public access to Bear Lake. This warrants your attention and that of resources managers of the Borough.

I was recently involved with an effort led by the Seward Rotary to plan for pending transfer of land from the State of Alaska to the Borough, further up the lakeshore. Restrictions on lakeshore development and a public park were proposed during this discussion. These ideas will take years and a lot more discussion to pursue. I heard references during meetings of the Rotary group to a Bear Lake home-owners association that allegedly has responsibility for the lake access at the end of Old Sawmill Road. No one has taken any responsibility for this critical outlet of Bear Lake, nor does the homeowners association appear to have ever existed.

Bear Lake is a public resource. Public access to Bear Lake is at the end of Old Sawmill Road and has been for decades. I am suggesting that the Borough, in collaboration with the State, take responsibility for keeping this access from washing away as it continues to draw more and more visitors. I suggest also that some efforts be made by responsible agencies to manage the activities of visitors to this site in the interest of public safety. I am ready and willing to help with this work on a volunteer basis.

Please forward this letter and attachments to anyone you feel would be interested in the concerns expressed.

Thanks,

Orson P. Smith, PE 33765 Bear Lake Rd., Seward, AK 99664 907-632-0343







## Floodplain Development Permit Application



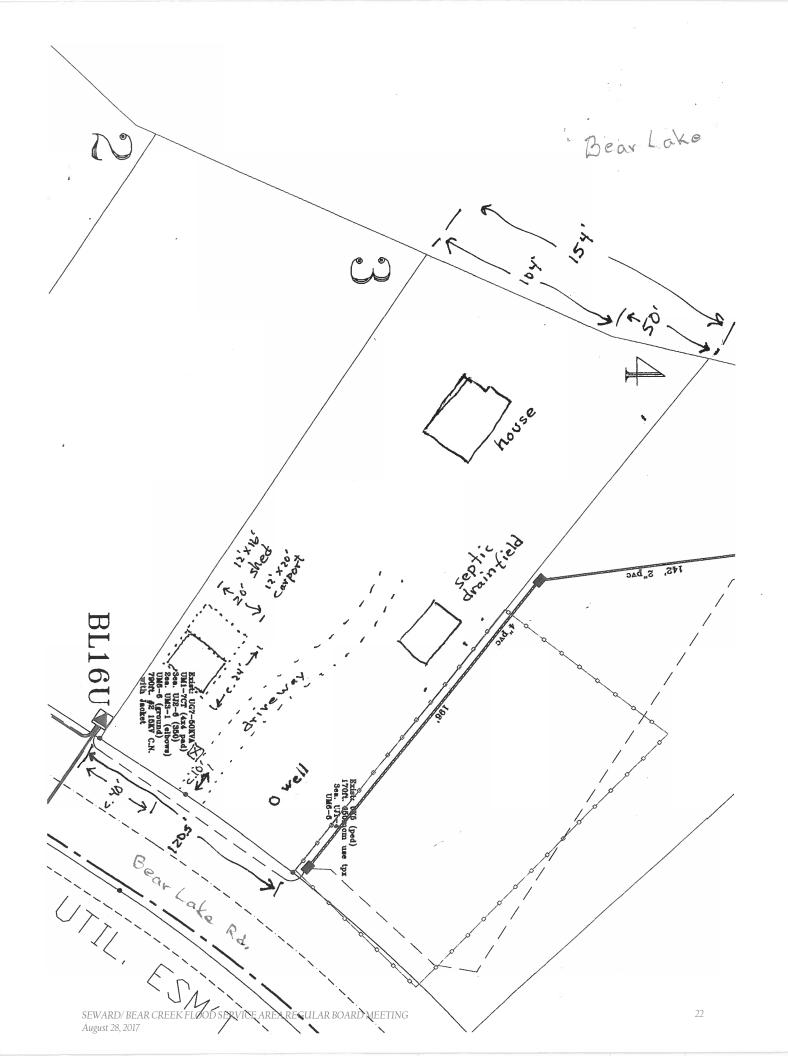
Applicant Information:	Agent Information:
Name:  Albert J. Lamberson  Owner? Yes No	Name:
Mailing Address: P.O. Box 861 Seward, AK 99664	Mailing Address:
Phone (Home/Work):	Phone (Home/Work):  Cell Phone:  Fax & E-Mail:
Project Location:  Subdivision: Bear Lake	
KPB Parcel Number: 12538023 Township:	Range: Section:
Physical Address: 33860 Bear Lk Rd	Nearest waterbody: Bear Lake
Willie Giles lot 3	If additional space is needed, please attach a supplemental list:
Is any portion of the project located within the regulatory If Yes, a \$300 permit fee and a "no-rise" statement, step may be required. This application will not be considered Administrator for more information at (907) 714-2460.  Project Description	y floodway? Yes No Unknown -backwater analysis, and a conveyance compensation computation I complete without this information. Contact the KPB Floodplain
1) Provide a detailed description of your entire project as Attach additional pages if needed.  Private residence - excavation rock fill for 30' × 45' house site construct house with 1st floor bed septic system. Installation	2' above BFE. Installation of raised-
2) Proposed project start date: 7-15-17 P	Proposed project completion date: 6-1-18

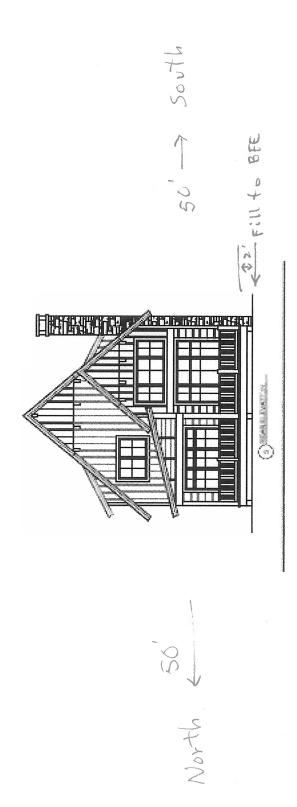
Floodplain Development Permit Application – Pa	age 2
3) Directions to the site: Mile 7 Seward Hwy to	urn east on Bear LkRd, go past
end of pavement to 3rd drineway or	alett.
4) Is any portion of the work already complete? 🖾 Yes 🗌 No	If yes, describe the completed work:
permitted septic field being installed	I now. Well casing in place.
Type of Development  Please check all that apply Placement of Structures Indicate # of Structures:  Placement of Fill Materials  Manufactured Home Removal of Materials	idential Commercial Accessory  Addition/Reconstruction of Existing Structure Construction/Repair of roads/bridges/etc.  Other
Residential or Commercial Structures	
1) What is the diagram number for the foundation type? (see attack	hed FEMA diagrams) 5
2) What are the dimensions of the proposed structure(s)? 26' >	× 40 '
3) Will utility systems, including water, sewer, gas, etc. be developed in the second system electric service installed.  Where will utilities such as furnace, water heaters, and electrication main floor	m being installed now, well casing is in,
Accessory Structures	
1) What are the dimensions of the proposed structures(s)?	
2) Describe the type of foundation to be used:	
3) Will this structure potentially be or used for human habitation(e	e.g. bunkhouse, sleeping quarters)? Yes No
Fill	
	2) Type of fill rock I gravel
3) Surface area to be filled 30' x 45'	4) Depth of fill
5) Fill within wetlands?  Yes No Unknown	If Yes, amount of fill
Addition to/Reconstruction of Existing Structure	
1) What is the appraised value of the structure to be reconstructed	or remodeled?
2) What is the estimated cost of the proposed improvements?	
3) Will utility systems, including water, sewer, gas, etc. be develous If Yes, describe:	oped on the property?  Yes No

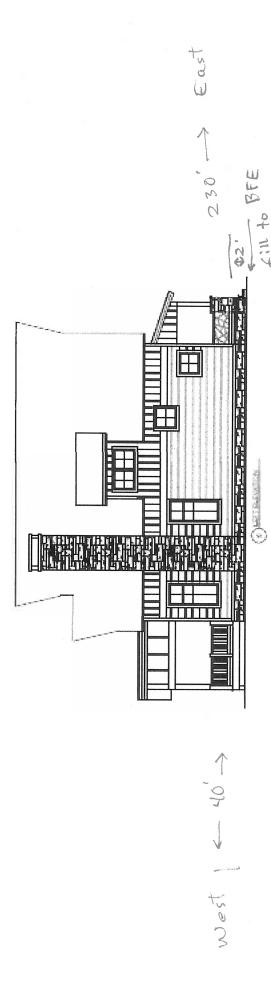
### Floodplain Development Permit Application - Page 3

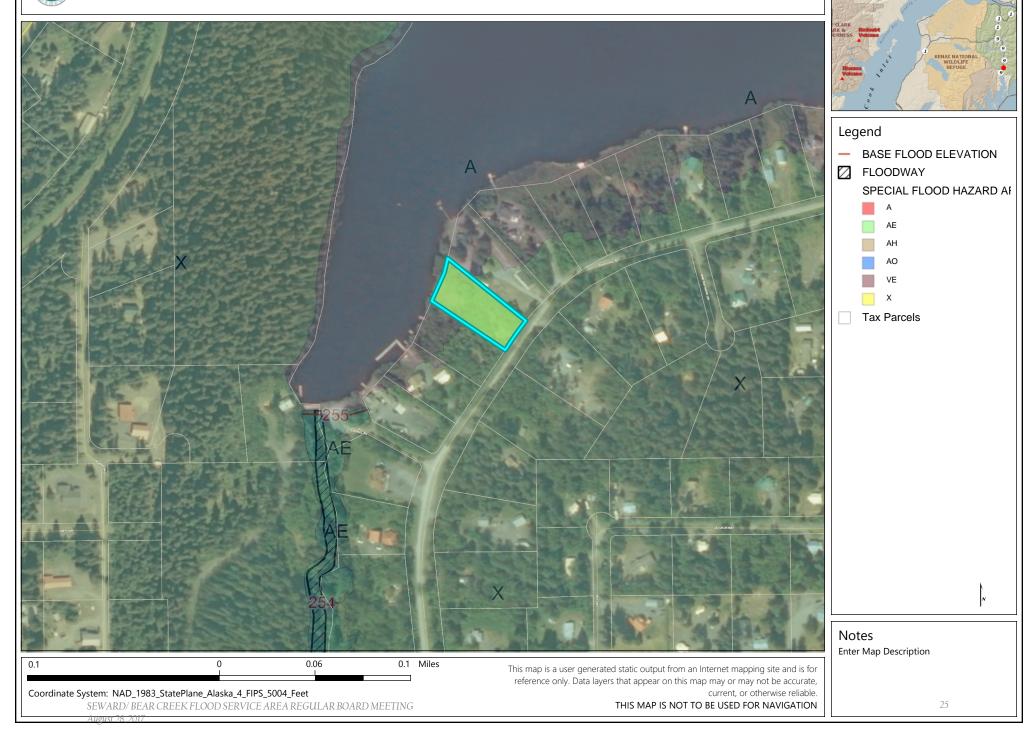
### **Manufactured Homes** 1) Will the structure have a permanent foundation? Yes No If no, will structure be anchored? Yes No 2) Will utility systems, including water, sewer, gas, etc. be developed on the property? Yes No If Yes, describe: 3) Manufactured home is on a Private Lot Mobile Home Park Material Removal 1) Amount of material to be removed \_\_\_\_\_ 2) Type of material\_\_\_\_\_ 3) Dimensions of affected area 4) Where will removed material be deposited? Other Development 1) If a subdivision, will the development be at least 50 lots or five acres? Yes No 2) Will the proposed project result in any altercation of the watercourse? Yes No 3) Will the proposed project result in placement of new roads or bridges? Yes No 4) Will the proposed project include any repair of roads, bridges, or spans? Yes No **Submittal Information & Checklist** Submittal Checklist: Detailed Site Plan with Top View and Elevation or Side View. Engineering analysis for development within the floodway, if applicable. X \_ Clbert J. Landerson Signature of Applicant STATEMENT OF AUTHORIZATION I hereby authorize to act on my behalf as my agent in the processing of this application and to furnish, upon request, information in support of this permit application. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein. SIGNATURE OF APPLICANT DATE

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.









### Seward Bear Creek Flood Service Area Mitigation Action Plan Projects & Priorities List

Priority Rank	M.A.P. Action ID	Project Description	Potential Funding	Responsible Entity	Time- frame	Benefit Costs Technical Feasibility	* Project Costs Appropriated
1	MH 1.14 FL 6.6	Annual Embankment & Channel Maintenance  • Clear Creek (CC1)  • Lost/Salmon Confluence (SC 7-8)  • Salmon Creek (KC4) WDS	SBCFSA Contract Services or Fund Balance	SBCFSA	Annually	BC undetermined Technically feasible	\$TBD \$TBD \$15,000
2	MH 1.14 FL 6.3 FL 6.7 FL 6.9 FL 6.10 FL 6.14	Sediment Management Plan (Channel Maintenance & Basin Debris Removal Plan)  Sawmill Creek Salmon Creek	SBCFSA Fund Balance, Partnership Funding, State Capital Project Request	SBCFSA DOT KPB RSA (DNR)	1-2 years	BC not applicable	undetermined
3	MH 2.6 FL 6.9 FL 6.14	Strategic Property Agreements/ Easements/ Acquisition  Bardarsons Backlund Rough Offret Dimond Blvd	SBCFSA Fund Balance, Partnership Funding, The Conservation Fund, Private Owners Donations, State Capital Project Request, Hazard Mitigation Grant	KPB SBCFSA Private Owners	2-3 years, ongoing	BC undetermined Property Owner Agreements Required	undetermined
4	ER 5.1 ER 5.4 FL 6.6	Box Canyon Creek Project Planning	KPB & CIRI Co-applicants for Hazard Mitigation Grant, State Capital Project Request, Future USACE Section 205	CIRI, KPB, SBCFSA, USNFS	1-2 years	BC undetermined Requires CIRI, USNFS agreements, Costs higher than typical HMGP grant	undetermined
5	FL 6.7 FL 6.8 FL 6.9 FL 6.13	Old Nash/ Nash Road Conveyance (Culvert Installation/ Floodwater Easements/ Sediment Management)	SBCFSA Fund Balance, State Capital Project Request, Hazard Mitigation Grant, State DOT, Kenai Watershed Forum	DOT, SBCFSA, Private Owners	TBD	BC undetermined, Property Owner Agreements Required, DNR Site Specific Permit needed for debris removal	undetermined

### Seward Bear Creek Flood Service Area Mitigation Action Plan Projects & Priorities List

Priority Rank	M.A.P. Action ID	Project Description	Potential Funding	Responsible Entity	Time- frame	Benefit Costs Technical Feasibility	* Project Costs Appropriated
6	ER 5.1	Clear Creek Rip Rap Embankment	SBCFSA Contract Services or Fund Balance, State Capital Project Request, State DOT	SBCFSA	1-2 years	BC undetermined Technically feasible	undetermined
7	FL 6.8	Bridge & Culvert Conveyance Maintenance	SBCFSA Fund Balance, State Capital Project Request, KPB Roads Service Area, State DOT	SBCFSA, City, KPB Roads, State DOT	TBD	BC undetermined Technically feasible	undetermined

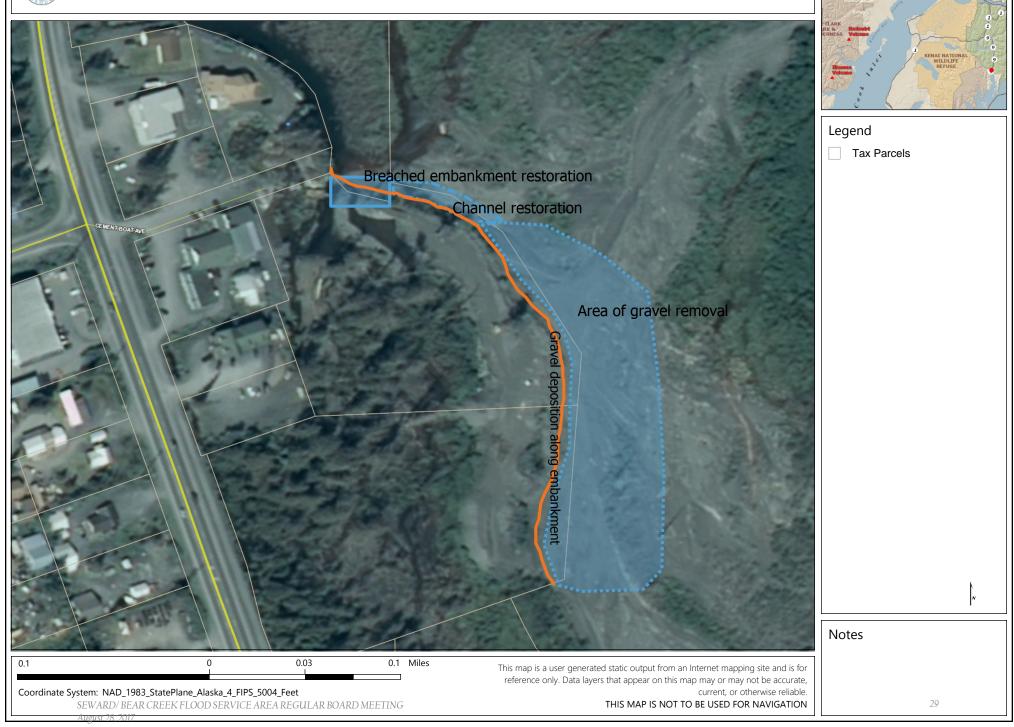
Cooperative City Projects						
MH 2.6 FL 6.13	Second Avenue Culvert Optimization	SBCFSA Fund Balance, City Funding	CITY SBCFSA	1-2 years	BC undetermined	undetermined

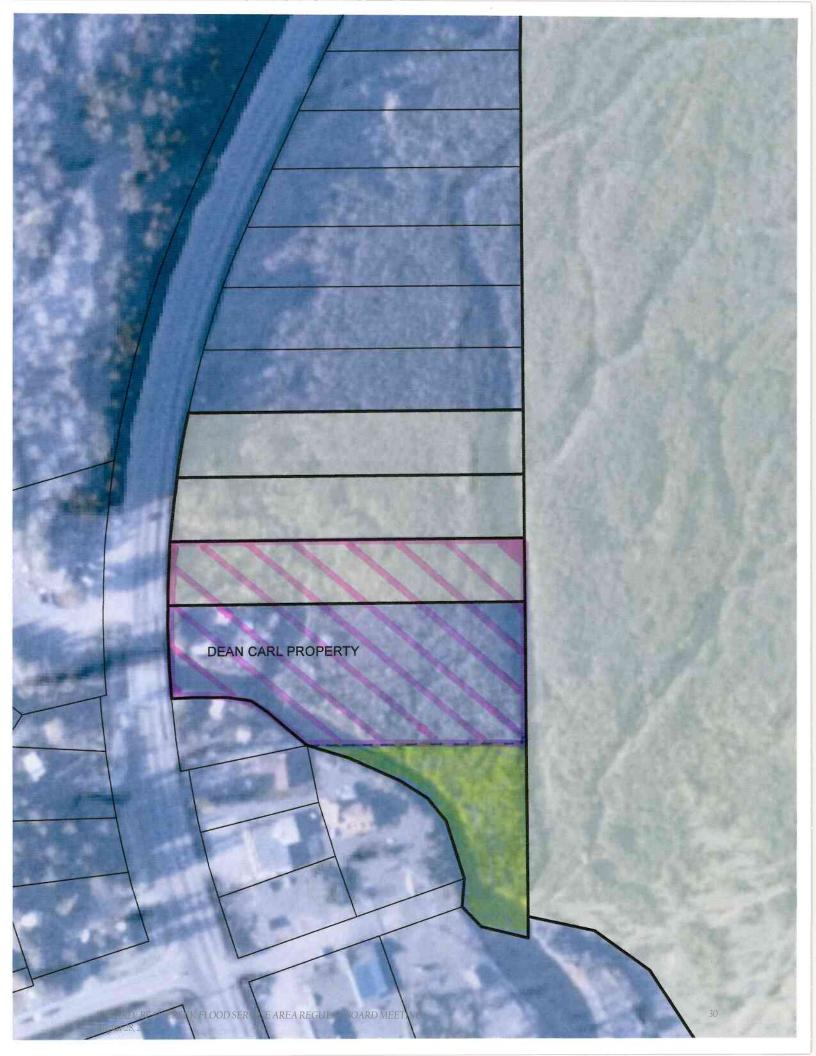
Projects In Progress								
						BC ratio: 3.9 to 5.6		
		Salmon Creek USACE Section	USACE,		Construc	Alternatives and technical		
	ER 5.1	205 Flood Control Project	<b>State Flood Mitigation Grants</b>		tion	feasibility, engineering/		
Construc-	ER 5.4	Construction match	(14-DC-070) (15-DC-090),	USACE,	season	design included in USACE	Total	
tion	FL 6.6	\$1,160,000	SBCFSA Fund Balance	SBCFSA	2017	feasibility study	\$1,160,000	

Completed Projects						
M.A.P. Action ID	Project Description	Funding Sources	Responsible Entity	Completed Year	Benefit Costs Technical Feasibility	Project Costs Total
ER 5.1 ER 5.4 FL 6.6	Salmon Creek USACE Section 205 Flood Control Project Feasibility Study	USACE, State Flood Mitigation Grant (14-DC-070)	USACE, SBCFSA	2015	BC ratio: 3.9 to 5.6 USACE feasibility study	Funded \$255,882
MH 1.2 MH 1.13 FL 6.6 FL 6.13	City Dairy Hill Drainage Project  • Funding assistance \$98,666.50  • Land acquisition assistance \$77,300	State Flood Mitigation Grant (14-DC-070)  HMGP grant awarded, SBCFSA grant awarded, SBCFSA Fund Balance	City	2014	BC determined for HMGP Engineering/ design completed Technically feasible	Funded \$175,966.50 Total Project Costs \$146,306.82
ER 5.1 FL 6.6	Kwechak Creek (KC9) Bank Stabilization/ Revetment • \$220,000	State Flood Mitigation Grant (14-DC-070)  HMGP application not funded, State Capital Project Request FY13 not funded	SBCFSA, KPB	2014	BC ratio: 5.54 Engineering/ design completed Technically feasible	Funded \$242,000 Total Project Costs \$127,017.84
ER 5.1	City Coastal Erosion Project • Partnership match from City \$50,000	City Funded SBCFSA match	City	2016	Engineering/ design completed Technically feasible	Funded \$50,000 Total Project Costs \$100,000



### Kenai Peninsula Borough Parcel Viewer Clear Creek Channel & Embankment Restoration





## September 2017 Work Session Topic

State Capital Improvement Project Requests & SBCFSA Hazard Mitigation Plan Update

Possible Topics for Upcoming Work Sessions:

Sedimentation/Mass Wasting Study

SBCFSA Mitigation Projects & Priorities



August 2017 Volume 7, Issue 8

#### Inside this Issue

- 2017 Hazard Mitigation Assistance Grants
- NORFMA News
- 2 CRS Recertification Schedule
- 3 Online Training Calendar

Strategic Alliance for Risk Reduction FEMA Region 10 Service Center 20700 44th Avenue West, Suite 110 Lynnwood, Washington 98036 (425) 329-3699

# News from Region 10

# **2017 Hazard Mitigation Assistance Grants**

The Federal Emergency Management Agency (FEMA) is announcing that \$250 million in funding is available through two Mitigation Assistance Hazard (HMA) grant programs: Flood Mitigation Assistance (FMA) and Pre-Disaster Mitigation (PDM). These competitive grant programs assist state, local, tribal, territorial governments strengthening our nation's ability to reduce disaster losses and protect life and property from future disaster damages.

As required in the Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), FEMA will provide the remainder of grant funding allocations to states and territories. These funds will be awarded on a competitive basis. FEMA's highest priority competitive sub-applications multi-state/tribal mitigation In addition, FEMA's initiatives. funding priorities are intended to avoid duplication of programs by providing pre-disaster funding to areas without post-disaster funding available through the Hazard Mitigation Grant Program (HMGP); and funding mitigation activities that cannot be funded by the FMA grant program.

Beginning June 10, potential applicants can review the specifics of the FY17 FMA and PDM programs in the Notice of Funding Opportunity (NOFO) which includes details such as eligibility, funding guidelines and evaluation criteria. The NOFO for FMA and PDM is available online at

### **Ask the Help Desk**

The FEMA Region 10 Service Center is here to help local community officials and stakeholders with technical, training, mitigation, and mapping questions. Send your questions to RegionXHelpDesk@starr-team.com.

<u>www.grants.gov</u> and additional information is available at <u>www.fema.gov</u>.

FEMA will open the FY17 HMA application period August 14. Eligible applicants must apply for funding through the Mitigation eGrants system on the FEMA Grants Portal accessible at <a href="https://portal.fema.gov">https://portal.fema.gov</a>. All applications must be submitted no later than 3 p.m. Eastern Standard Time (EST) on Nov. 14.

Further information on these grant programs is available at <a href="http://www.fema.gov/hazard-mitigation-assistance">http://www.fema.gov/hazard-mitigation-assistance</a>.

#### **NORFMA News**

#### **Board Position Nominations**

NORFMA would like to encourage you to consider nominating or running for one of their open positions. Currently, the positions of Treasurer. Chair. and 2017 State/Provincial Representatives for OR, AK, and BC (Canada), are open. These positions serve a two-year term and are a great way to become more engaged in floodplain management issues.

Continued on next page



NEWS FROM REGION 10 Page 2

#### NORFMA (cont.)

The Board has monthly conference calls and hosts an annual conference. This is a very informal, yet productive group within a very supportive environment, which will give you the opportunity to develop relationships with great people in similar fields.

As Chair, some of the responsibilities of the position include but are not limited to, presiding over all meetings, executing contracts and agreements, and appointing committee chairs and members.

The Treasurer shall have custody and control of the funds of the Association, and will report the state of the finances at each meeting. Duties of the Treasurer include but are not limited to preparing annual financial statements, filing tax information, issuing payments, and maintaining the membership list.

A State/Provincial Representative must be a full member in good standing and cannot serve as an Officer concurrently.

If you have questions, or for a full position description, you can email Hans Hunger, Chair of Northwest Regional Floodplain Management Association at <a href="mailto:hhunger@co.pierce.wa.us">hhunger@co.pierce.wa.us</a>. If you would like to nominate a person, email vice chair Michelle Gilbert at michelle.gilbert@ecy.wa.gov.

For more information about NORFMA, visit <u>www.norfma.org.</u>

#### **Newsletter Ideas?**

Want to spread the word about an upcoming event or recent success story? Let us know what you to want to see in future issues!

Articles can be up to 500 words and may include pictures. Email RXNewsletter@starr-team.com .

#### **New Members Forum Event**



The NORFMA New Members Forum (NMF) is a networking group within the Northwest Regional Floodplain Managers Association. The Forum has been established to bridge the gap often experienced between those new to the profession the available wealth of information and resources necessary for effective floodplain management. It is geared for professionals who, regardless of age or background, would like to learn from those with several years' experience in an informal, social setting. The Forum provides access to information, training, and mentors who can help new members navigate the complex regulations and understand the many roles and disciplines necessary for successful floodplain management. The NORFMA NMF is open to anyone with an interest in floodplain management.

On July 13th the NMF hosted its fourth event at Pyramid Alehouse next to the stadiums in Seattle. The theme of the event was the Lower White River - managing a river where flooding is worsened by significant and ongoing sediment deposition. The event consisted of four presentations, including a overview general of geomorphology of the White River by Kristin Jaeger of USGS, planning level efforts along the river in Pierce County by Hans Hunger of Pierce Public Works, County Countyline Levee Setback Project by Chris Brummer of King County, and

hydraulic and sediment modeling along the river in the City of Sumner by Henry Hu of West Consultants. The event was a great success, hosting over thirty people who left satiated from floodplain management content and pizza!

Next up for the NMF will be an evening event during the Annual NORFMA Conference in Seaside, OR September 26-29. Details to come!

For further information on the NMF group, or general questions or comments please contact Jesse Reynolds at jesse.reynolds@otak.com.

# **CRS Recertification Schedule**

This summer/fall, the Community Rating System (CRS) program will implementing new annual recertification dates for communities which will include a centralized collection and review of recertification submittal documents and Elevation Certificates (ECs). All CRS communities are required to recertify annually, however, the recertification deadline dates will now vary by state. For Alaska and Idaho, the recertification date will be August 1. with recertification packages being distributed by June 15. For Oregon and Washington the recertification date will be October 15, with the recertification packages being distributed by September 1. In addition, communities that have cycled under the 2013 CRS Coordinator's Manual are required to submit a Permit List and all ECs collected for the previous year with their annual recertification.

Continued on next page



NEWS FROM REGION 10 Page 3

#### CRS (cont.)

ISO has 2 new ISO/CRS Resource Specialists, Mr. Keith Harper and Ms. Christina Turpin, coordinating the centralized recertification. Keith will work with communities that recertify on August 1. Christina will work with communities that recertify on October 15.

The CRS Resource Specialists will be processing the ECs collected at cycle verification visits starting January 1, 2018. ISO has developed a work and communication flow for the cycle visit EC review process as they work with communities to meet the required verification threshold of 90% correct. Results of the review

will be sent to the community and the ISO/CRS Specialists. This process allows the community time to correct the ECs by the next verification cycle visit. The 90% threshold must be met only at the cycle verification visit.

If you have any questions, please don't hesitate to contact your ISO/CRS Specialist.

#### **Online Training**

(All times Pacific)

#### **NFIP Basics**

August 3, 10 am Online – 1 CEC

### Floodplain Development Permit Review

August 10, 9 am Online – 1 CEC

### Inspecting Floodplain Development

August 10, 10:30 am Online – 1 CEC

### **CRS: Preparing an Annual Recertification**

August 15, 10 am Online – 1 CEC

August 28, 2017

## CRS: Flood Warning and Response (Activity 610)

August 16, 10 am Online – 1 CEC

### How to Review a "No-Rise" Certification

August 17, 10 am Online – 1 CEC

## Incorporating Climate Adaptation into Natural Hazards Mitigation Planning

August 25, 10 am Online – 1 CEC

### CRS: Preparing an Annual Recertification

September 19, 10 am Online – 1 CEC

## CRS: Floodplain Management Planning (Activity 510)

September 20, 10 am Online – 1 CEC

#### **CRS: Introduction to CRS**

October 17, 10 am Online – 1 CEC

### CRS: Developing a Program for Public Information (PPI)

October 18, 10 am Online – 1 CEC

#### **Elevation Certificates**

October 26, 10 am Online – 1 CEC

To register for online courses, visit STARR's training site online at j.mp/starronlinetraining, or email RXTraining@starr-team.com.





From: <u>KenaiCoastalPMR@starr-team.com</u> on behalf of <u>RSCX</u>

To: <u>Presley, Stephanie</u>

Subject: Risk MAP Project Quarterly Report for Kenai Peninsula Borough, Alaska

**Date:** Tuesday, August 15, 2017 7:18:01 AM

#### Greetings,

My name is Matt Witosky and I am part of the Kenai Peninsula Borough Risk Mapping, Assessment, and Planning (Risk MAP) Project Team, working with the Strategic Alliance for Risk Reduction (STARR II), a contractor for the Federal Emergency Management Agency (FEMA). This email is being sent to you as a status update for work completed on this project as of August 15, 2017. Detailed status updates like this are sent quarterly and include the overall project status, changes to the scope or schedule of the project, and a detailed overview of the individual technical tasks associated with the project.

#### **Project History**

FEMA is responsible for preparing Flood Insurance Rate Maps (FIRMs) that delineate flood hazard zones and Base Flood Elevations (BFEs) in the United States. Because of the importance of understanding the nation's coastal flood risk, FEMA has initiated coastal flood risk studies for the populated coastline as part of its Risk MAP effort. Through the Risk MAP effort, FEMA is updating the nation's coastal Flood Insurance Studies (FISs) and FIRMs, where appropriate, and publishing new FIRMs in densely populated areas that were not previously mapped. For more information, please visit <a href="https://www.fema.gov/coastal-flood-risks-achieving-resilience-together">https://www.fema.gov/coastal-flood-risks-achieving-resilience-together</a>.

The State of Alaska identified the Kenai Peninsula Borough as a priority for FEMA's Risk MAP program. The State determines its priorities based on population at risk to hazards, recent events, and community interest. FEMA, State, and Local stakeholders participated in a Risk MAP Discovery Meeting held March 2, 2011 where community concerns were identified. These concerns were captured in the Risk MAP Discovery Report and delivered to the communities in the borough. After the Discovery Meeting, community concerns were researched and analyzed, in order to develop a scope of work that includes multi-hazard risk assessment products and updates to the communities' regulatory flood maps based on community-identified resilience needs.

**Project Milestones and Deliverables** 

Meeting/Deliverable	Point of Contact	Actual/Projected Date
Risk MAP Discovery Meeting	Tom Tufts	March 2, 2011
Flood Study Kick-Off Meeting	Tom Tufts	July 23-26, 2012
Flood Risk Review Meeting (FRR)/Draft Maps	Tom Tufts	August 27-28, 2013
Preliminary DFIRM/FIS Release	Tom Tufts	June 13, 2014
Consultation Coordination Officers (CCO) Meeting	Ted Perkins	September 9-11, 2014
Public Meeting/Workshop	Ted Perkins	September 9-11, 2014
Appeal Period Starts	Matt Witosky	1 <sup>st</sup> Start: January 28, 2015 2 <sup>nd</sup> Start: August 12, 2015
Appeal Period Ends	Matt Witosky	1 <sup>st</sup> End: April 28, 2015 2 <sup>nd</sup> End: November 10, 2015
Letter of Final Determination	Matt Witosky	April 20, 2016
Draft Multi-Hazard Risk Report	Cynthia McCoy	October 6, 2016
Maps and FIS become Effective	Ted Perkins	October 20, 2016
Risk MAP Resilience Workshop	Cynthia McCoy	August 22-24, 2017
Delivery of Final Risk Report and Risk Assessment Database	Cynthia McCoy	Fall 2017*

<sup>\*</sup>All projected dates are subject to revision as the project progresses.

#### **Recent Activity**

The flood study has concluded and went effective on October 20, 2016.

FEMA funded its contractor, STARR II, to develop a multi-hazard Risk Report for the Kenai area as part of the ongoing Risk MAP study. Risk assessments have been completed for tsunami, dam failure, erosion, and flood hazards and have been compiled into a draft Risk Report. The State Risk MAP Coordinator, Sally Cox, sent the

Risk Report out for review on October 6 and requested comments back by October 28. If there are any additional comments, please be sure to submit them as soon as possible before we finalize the Risk Report.

FEMA and the State held a webinar to review the data and results of the Risk Report on August 14, 2017.

#### **Next Steps**

Three Resilience Workshops have been scheduled at the following locations:

Seward – August 22, 12:00pm – 3:00pm in the Seward Fire Hall Training Room; 316 4th Ave, Seward, AK

Soldotna - August 23, 9:00am - 12:00pm in the Kenai River Center; 514 Funny River Rd, Soldotna, AK 99669 Homer - August 24, 9:00am - 12:00pm in the City Council Chambers at Homer City Hall, 491 E. Pioneer Ave, Homer, AK 99603

Additional information on this project including the project area and Risk MAP contacts can be found online at: http://www.starr-team.com/starr/RegionalWorkspaces/RegionX/Kenai Coastal/SitePages/Home.aspx

NOTE: If you have trouble downloading or are prompted for credentials when clicking the file name on the website, cancel the prompt and instead right-click the file name and choose "Save As" or "Save Target As".

#### **General Information**

If you have questions about this Risk MAP project, please contact the State Risk MAP Coordinator, Sally Russell Cox, <u>sally.cox@alaska.gov</u>, (907) 269-4588.

The STARR II Region X Help Desk is another resource available to answer project-related guestions. STARR II staff will route and research your question, and respond within three business days. Submit your questions via email, the address is RegionXHelpDesk@starr-team.com.

If you want to keep up with what's happening around Region X, get project status updates, or learn about upcoming events and training opportunities, subscribe to the Region X monthly newsletter. For more information or to subscribe, email rxnewsletter@starr-team.com.

Current and past issues of the newsletter, project status updates, announcements, upcoming events, and training opportunities are also available online at the STARR II website, www.starr-team.com (shortcut link: http://j.mp/starrrxnews).

I hope you found this status update email helpful. If you would like to be removed from the distribution list, or if you feel there is someone that should be added to the list, please reply to this email. If you have any questions, or if there is information that you would like to see in future updates, please feel free to contact me by phone or email. My contact information is below.

Sincerely,

#### Matt Witosky

Project Manager

#### STARR II - Strategic Alliance for Risk Reduction

5565 Centerview Drive, Suite 107

Raleigh, NC 27606 Tel: (919) 532-2308 Fax: (919) 851-8393 matt.witosky@stantec.com

This message was sent by RSCX to the following

Alex Fonteyn - Risk MAP and CTP Project Lead - State of Alaska

Amanda Siok - Mitigation Planner - FEMA Region X RAB Aurora Lehr - Government Affairs - FEMA Region X

Ben Wagner - Assistant Engineer - Division of Mining, Land & Water, Alaska Department of Natural Resources

Brent Nichols - State Hazard Mitigation Officer - State of Alaska

Brian Gabriel - Mayor - City of Kenai Bryan Zak - Mayor - City of Homer

Bryr Harris - Floodplain Administrator - Kenai Peninsula Borough Charlie Cobb - Dam Safety Engineer - Division of Mining, Land & Water, Alaska Department of Natural Resources

Crane Johnson - Senior Hydrologist - Alaska - Pacific River Forecast Center - NOAA

Cynthia McCoy - Risk Analyst - FEMA Region X RAB De Anne Stevens - Geologist - State of Alaska

## KENAI PENINSULA BOROUGH, ALASKA

May 2017

FEMA's Risk MAP Program helps strengthen communities by identifying actions they can take now to reduce their hazard risk, enhances local planning, improves outreach through risk communications, and increases local resilience to natural hazards. Below is an overview of some key items documented in the Risk Report.



KPB can expect \$5.8 million in building loss during a 1-percentannual-chance flood event.

**Homer and Seward** would have building loss ratios at 12-percent and 10-percent.

The unincorporated community of Lowell Point would have a building loss ratio over 16-percent.



Cook Inlet coastal erosion threatens 166 improved parcels between the Kasilof **River and Ninilchick** River totaling over \$36 million in assets at risk.



The USACE is conducting a Hybrid Risk Assessment of the **Lowell Creek Dam to** determine the most creditable failure models.



An earthquake risk assessment of a M9.2 **Great Alaska Earthquake** scenario projected over \$400 million in building and content losses.



**Twelve Presidential Disaster Declarations** have been declared for the Borough for fire, flooding, freezing, and severe storms dating back to 1986.



Tsunami Risk Assessments are available for Homer, Seldovia, and Seward.

Over 220 parcels have improvements in an identified tsunami inundation zone.

**Seldovia and Seward** have over 13-percent of their improved parcels in a tsunami inundation zone.



The risk report highlights critical facilities that are most vulnerable to hazard events and includes suggested mitigation strategies.



**Cooper Landing, Happy** Valley, Homer, Kenai, and **Seward have newly** created flood depth grids. 



338 flood insurance policies are in effect with almost \$87 million in coverage.

KEEPING KENAI PENINSULA BOROUGH SAFE: Your Risk MAP Timeline

YOU ARE HERE

**Discovery Meeting** 

**Project Kickoff** 

Over 250 educational.

health, and government

facilities were assessed

for earthquake loss.

Flood Study Review

CCO and Public Meetings

Resilience Meeting

**Effective Maps** 

### FEMA Region 10 Risk MAP Process

- MAPPING: Flood Insurance Rate Maps and Flood Insurance Studies
- A ASSESSMENT: Hazard risk assessment and modeling
- PLANNING: Strategy implementation and plan integration

#### **YEAR** 1



#### **PRE-DISCOVERY**

FEMA works with the State. community, and tribes to understand needs, resources, and capabilities to support the community in risk reduction and resilience efforts.





to support risk reduction



NEW REGULATORY FLOOD MAP NOT NEEDED.

technical assistance or risk and vulnerability assessments

If the data and research does not support the need for a Regulatory Flood Map project, the final Discovery Report is updated to reflect that decision. In lieu of a Flood Map, State, local and tribal officials may request

### **DISCOVERY MEETING**

FEMA and the State meet in-person with communities and tribes to gather information on their perspective about local natural hazards and their risk. This information is used to prioritize future mapping, risk assessment, and mitigation planning assistance.



#### **Stakeholder Coordination**

Data Analysis

## **YEAR**















#### **DATA COLLECTION AND ANALYSIS**

Funding secured, local multi-hazard data collected, and quarterly updates distributed.





#### FLOOD RISK REVIEW MEETING

The purpose of this meeting is to address technical issues on FEMA's flood mapping, as well as areas that have been added or removed to the floodplain, and developed risk assessments.

### **YEAR** 4-5

O Draft Regulatory Flood Map

- O Prelim Released
- O Draft Map Appeal Period Begins
- O Draft Map Appeal Period Ends
- Letter of Final Determination



#### **CCO MEETING**

A meeting with community officials that determines how they want to communicate flood risk and regulatory changes to constituents.





#### **PUBLIC MEETING**

The community hosts an open house-style public meeting with assistance from FEMA. The public learns the results of the updated regulatory flood maps, as well as the appeal period and map adoption timelines. The meeting also highlights local multi-hazard risks and resources available from the state, FEMA, and other partners to reduce risk.



#### **RESILIENCE MEETING**

FEMA, state, local and tribal officials, and subject matter experts work with the community to identify and review resilience strategies, planning options, and potential actions to reduce risk.





#### **YEAR** 5+



The community will utilize the information and resources obtained through the Risk MAP process to update plans, reduce risk, and increase local resilience to disasters.















	September								
S	S M T W T F S								
					1	2			
3	4 Labor Day Holiday	5	6	7	8	9			
10	11 18 Work Session 6:00 pm Regular Meeting	19 Joint Work Session with City P&Z	13	14	15	16			
17	7:00 pm	6:00 pm	20	21	22	23			
24	25	26	27	28	29	30			