

# Seward/ Bear Creek Flood Service Area Regular Board Meeting 16 July 2018

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Kwechak Creek South of Bruno Bridge  
June 18, 2018

Sea View Plaza Building  
302 Railway Ave, Suite 122  
Seward, Alaska  
6:00 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

7:00 pm

July 16, 2018

KPB Seward Annex

A Regan Schwertfeger  
Board Member  
Term Expires 10/2020

B Robert Reisner  
Board Member  
Term Expires 10/2018

C Jessica Gal  
Board Member  
Term Expires 10/2019

D Dwayne Atwood  
Board Member  
Term Expires 10/2020

E Randy Stauffer  
Chairman  
Term Expires 10/2018

F Orson Smith  
Board Member  
Term Expires 10/2019

G Mark Ganser  
Vice Chairman  
Term Expires 10/2019

A. CALL TO ORDER

B. ROLL CALL

C. APPROVAL OF AGENDA

D. APPROVAL OF MINUTES

1. June 4, 2018

pg. 1

E. REPORTS & PRESENTATIONS

1. City of Seward

2. Kenai Peninsula Borough

F. PUBLIC COMMENTS – LIMIT 3 MINUTES

G. BOARD'S RESPONSE TO PUBLIC COMMENTS

H. CORRESPONDENCE & REVIEW OF PAYMENT REQUESTS

I. PERMITS FOR REVIEW

1. RC 12219 Ronne Lost Creek Harvest & Haul

pg. 7

2. RC 12234 Fry Lost Creek Add to Existing Fill

pg. 19

3. RC 12013 SBCFSA Lost Creek Channel & Embankment Restoration

pg. 30

J. UNFINISHED BUSINESS

K. NEW BUSINESS

1. Kwechak Creek Channel and Embankment Restoration

pg. 45

2. Lost Creek Channel and Embankment Restoration

pg. 49

3. Sawmill Creek Channel and Embankment Restoration

pg. 50

INFORMATIONAL ITEMS AND REPORTS (No action required)

1. Starr Region X Newsletter

pg. 55

2. KPB Hazard Mitigation Plan Update

pg. 58

L. PUBLIC COMMENT – LIMIT 3 MINUTES

M. BOARD COMMENTS

N. ADJOURNMENT

# SEWARD/ BEAR CREEK FLOOD SERVICE AREA

## Regular Board Meeting Minutes

June 4, 2018

### A. CALL TO ORDER

A regular meeting of the Seward/Bear Creek Flood Service Area board was held on June 4, 2018, at Suite 122, SeaView Plaza, Seward, Alaska. Chairman Randy Stauffer called the meeting to order at 6:00 p.m.

### B. ROLL CALL

There were present:

#### BOARD MEMBERS

Randy Stauffer, Chairman

Robert Reisner

Jessica Gal

Orson Smith

Regan Schwertfeger

Dwayne Atwood

Comprising a quorum of the flood service area board.

Also in attendance were:

Andrew Bacon, City of Seward Assistant Planner

Bryr Harris, Kenai River Center Administrator

Stephanie Presley, Service Area Program Lead

Heather Cinereski, Secretary

### C. APPROVAL OF AGENDA (00:45)

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

Chairman Stauffer called for amendments to the agenda.

VOTE TO APPROVE AMENDED AGENDA: Unanimous.

### D. APPROVAL OF MINUTES (01:10)

#### I. May 7, 2018

MOTION TO APPROVE MINUTES: Smith moved for approval of the May 7, 2018 meeting minutes as read. Gal seconded.

Chairman Stauffer called for additions, corrections or deletions to the minutes.

VOTE ON MINUTES: Unanimous.

### E. REPORTS & PRESENTATIONS (01:40)

#### I. City of Seward

Andrew Bacon, City of Seward Assistant Planner reported

a. There have been no new floodplain development applications submitted to Community Development in the last month.

b. In other news from recent City manager reports, the public crane has arrived in Seward, which will be installed at SMIC.

c. The oil rig across the bay will be departing soon.

d. The city has issued building permits for three new single family dwelling and one building permit for rooftop installation of solar panels.

2. Stephanie Presley, Service Area Program Lead reported



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- a. On the US Army Corps of Engineers Salmon Creek Revetment, we are waiting on the access road gate to arrive and then Hamilton will install it at the east end of the cul-de-sac. They have completed the new trail and placed rocks at the end of the borough roads. We met with the private property owner to discuss the drainage issue from the old access road onto their yard at the corner of Romack. Hamilton revegetated the old access road entrance that ran adjacent to the yard, and created a drainage catchment on the new access trail, so that issue should be resolved. We can schedule a board member field trip this month.
- b. The Seward High School UAV flyers went up Friday to photograph the new revetment. They sent four photos for your viewing pleasure.
- c. On the Sawmill Creek Channel & Embankment Maintenance project, Metco was awarded the contract with a bid of just under \$25,000. We were able to coordinate with State of Alaska Department of Transportation (DOT) to restore the active channel under the Nash Road bridge and downstream to the high tide line. DOT contracted with Hamilton Construction, and the operators were able to work together on the project. DOT sent an email to thank the service area for the cooperative effort. The downstream property owner was also happy with the work. Staff hopes that next year we will be able to harvest and haul materials out of the upstream section, with approval from State Department of Natural Resources (DNR). At the last meeting, the board had briefly discussed hiring a surveyor for cross sections on Sawmill. This item is on the agenda for your consideration.
- d. On the Clear Creek Channel & Embankment Restoration project, staff met with Great Northern Construction last week. We are expecting them to mobilize in the next week or two to complete the restoration of the breached berm. The purchase of the Conant property has not yet been completed, but the new property owner would still like to armor the restored section in the near future. Great Northern is currently sorting rock at the borough quarry. The total project cost, with the channel extraction last fall, will be \$22,000.
- e. Staff would like to board to consider a channel and embankment maintenance project on Lost Creek, in the section upstream of the Forest Road bridge, in the near future. There are three areas of erosion that are a concern. If there is a high water event in the fall, waters could breach and inundate the Willow Drive area.
- f. There are two newly constructed homes on Resurrection Blvd and Phoenix Road, in the approximate A zone, from an overflow channel of Scheffler Creek. The waters off the mountainside run through culverts and drainage ditches along Phoenix. If they overtop at the corner of Barwell Street, they run down an abandoned swale toward the Kenai Fjord Tours parking area. The property owners have brought in fill and built their homes, and are wanting to remove their properties from the flood zone. City and service area staff will be assisting them with the Letter of Map Revision (LOMR) online process through the FEMA map center. This will be the first time in a long while that someone has attempted a LOMR, so we'll see how it goes.

# SEWARD/ BEAR CREEK FLOOD SERVICE AREA

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- g. The City Public Works Director and staff took a look at the drainage ditches and culverts in the industrial area north of Port Avenue. We are waiting to hear back from the Alaska Railroad on a question of the outlet to the bay. This is a possible ditch and culvert cleanout project for the city and service area to work on cooperatively.
- h. Staff met with personnel from the Alaska Railroad to discuss the two culverts north of Nash Road and the possibility of replacing those as part of the cooperative project with US Fish & Wildlife Service with potential funding from the Exxon Valdez Oil Spill (EVOS) monies. It sounded like there was some interest in the possibility, but no definitive answer as of yet. We have asked the Alaska State Fish & Game to provide input on the possible culvert replacements.
- i. Staff has had no time to work on the Kwechak Creek (KC12) Sediment Management project, downstream of the channelized area south of Bruno Road bridge. The item is on the agenda under unfinished business. Staff would recommend Salmon Creek Sediment Management Plan be a future work session topic.

### F. PUBLIC COMMENTS – LIMIT 3 MINUTES (13:10)

Chairman Stauffer called for public comment with none offered.

### G. BOARD'S RESPONSE TO PUBLIC COMMENTS (13:15)

### H. CORRESPONDENCE & REVIEW OF PAYMENT REQUESTS (13:20)

#### I. UAV High School Flyers Request for Funds

MOTION TO APPROVE: Reisner made a motion to fund the flyers. Gal seconded.

MOTION TO AMEND MOTION: Smith made a motion to amend the motion to specify that the funding for the flyers comes from contract services. Gal seconded.

VOTE ON AMENDED MOTION: Unanimous

### I. PERMITS FOR REVIEW (18:40)

#### 1. RC 12186 Herndon Rip Rap Bank Stabilization

MOTION TO COMMENT: Smith made a motion to recommend approval with comments that it is not evident how long lasting the construction will be based on the drawings, and that a good practice would be to specify the grade of rip rap being used, what foundation material is being used below the armor rock and will there be grading of the natural bank? Gal seconded.

VOTE ON MOTION: Unanimous

#### 2. RC 12186 Herndon Kwechak Creek Sediment Management

MOTION TO COMMENT: Gal made a motion to recommend approval without comment. Schwertfeger seconded.

VOTE ON MOTION: Unanimous

#### 3. RC 12125 ZPA Seward Brewery New Construction

# SEWARD/ BEAR CREEK FLOOD SERVICE AREA

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MOTION TO COMMENT: Gal made a motion to postpone recommendation until there is a complete application. Reisner seconded.

VOTE ON MOTION: Unanimous

### **4. RC 12188 Bair Driveway**

MOTION TO COMMENT: Reisner made a motion to recommend approval without comments. Schwertfeger seconded.

MOTION TO AMEND: Smith made a motion to recommend approval with the comment that they consider the lower portions of their structure to be flood resistant. Gal seconded. Bob added "Woo-Hoo!"

VOTE ON AMENDED MOTION: Unanimous

VOTE ON MOTION: Unanimous

## **J. UNFINISHED BUSINESS (56:10)**

### **1. SBCFSA Kwechak Creek Sediment Management Project**

MOTION TO POSTPONE: Gal made a motion to postpone and make the sediment management project a future work session topic. Reisner seconded.

VOTE ON MOTION: Unanimous

## **K. NEW BUSINESS (58:30)**

### **1. SBCFSA Sawmill Creek Cross Sections**

MOTION TO APPROVE: Gal made a motion to pursue and set aside up to \$100,000 for a LIDAR study and looking into the analysis at a later time. Schwertfeger seconded.

MOTION TO AMEND MOTION: Reisner made a motion to that \$100,000 for a LIDAR data collection to be taken from the fund balance. Gal seconded.

VOTE ON AMENDED MOTION: Unanimous

### **2. Establish June Work Session Topic**

MOTION TO ESTABLISH: Gal made a motion to establish the June work session topics as KPB Media Relations with KPB staff and SBCFSA Hazard Mitigation Plan Flood Section Update. Reisner seconded.

VOTE ON MOTION: Unanimous

### **3. July Meeting Schedule**

MOTION TO APPROVE: Gal made a motion to combine July meetings and have one meeting on the 16<sup>th</sup>. Schwertfeger seconded.

AMENDED MOTION: Gal amended to add the work session topics to include Hazard Mitigation Plan Update and No Adverse Impact Floodplain Management. Reisner seconded.

VOTE ON AMENDED MOTION: Unanimous

## **L. INFORMATIONAL ITEMS AND REPORTS (01:37:25) (No action required)**

### **1. Starr Region X Newsletter**

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2. Reminder of Joint Work Session with City Planning & Zoning June 5<sup>th</sup>
3. KPB Emergency Services Organizational Chart Draft 5/10/18

**M. PUBLIC COMMENT – LIMIT 3 MINUTES (01:40:40)**

Chairman Stauffer called for public comments.

Jessica Gal- Troll Drive. Ms. Gal attended an amazing Geo-Science course last week in Anchorage and will now be doing a class at the Middle school level, 8<sup>th</sup> grade hopefully if all goes well. She got approval today from the principal to do it. One of the things Ms. Gal would like to do is to incorporate some projects that kids can get involved in in the local community so they get more knowledge about not only the flooding and the sediment and glaciers, and the amazing things we have here like earthquakes, tsunamis and volcano information, but real local information. Ms. Gal wanted to give a heads up that she will probably be coming in to discuss some of that with the board, or have some of the kids present to the board, to try to do some group projects as far as some of the walks. The board had talked about putting together some sort of historical flood walk at one point, quite a while ago now. Trying to do it not only for local residents, but for folks coming into town.

**N. BOARD COMMENTS (01:42:25)**

Chairman Stauffer called for board member comments.

Board Member Reisner commented he would like to thank Staff, they certainly keep busy, Mr. Reisner also wanted to thank Ms. Harris and Mr. Bacon for showing up and board members once again thanks for showing up. Mr. Reisner thinks the board is going in the right direction.

Board Member Atwood commented he would like to thank the city for coming and giving the reports; single family home starts and development. It is good to hear about that, its why the board is here. Planned and safe development. Mr. Atwood appreciates that.

Board Member Schwertfeger commented thank everyone for showing up, for all the hard work and for the reminder calls. Mr. Schwertfeger thanked the board and apologized for when he's on night shift, it's very hard to get here. But thanked everyone for what they do, even when he's not here. Mr. Schwertfeger appreciates it and stated that it's a pleasure to be here.

Board Member Gal commented ditto. Thank you for the reminder calls, they are lifesavers. Thank you Mr. Bacon for coming. Ms. Harris, Ms. Presley and Mrs. Cinereski you are wonderful and thank you. Ms. Gal stated she felt like this was a productive meeting and she is learning new things every day.

Board Member Smith commented that he is proud to be part of this team. It is a good group of board members; excellent and highly qualified, an efficient staff and we are doing good things. Mr. Smith stated he is very happy to be part of this.

Chairman Stauffer commented agrees that this is a good diverse board that is at a full complement of 7. There are different expertise and different backgrounds so everyone brings different things to the table. That is exactly why there is a board with multiple

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members on it so there can be different opinions. It is very difficult when in those times when there are only four or five board members to really discuss things because there is not enough diversity. Chairman Stauffer appreciates everyone being here. Starting at the end of the month, our staff is going to ¾ time each. When Ms. Presley was questioned today, because she has been very busy, about what happens when she goes to ¾ time. Basically her answer was that Mrs. Cinereski will pick up a lot of the work. The office is still at a staff level of 1.5. As long as Chairman Stauffer has been associated with the board there has been a never ending list of things to work on. There has never been a situation where the board has had staff members knitting or whatever. Thank you Ms. Harris for all your work. Just like here you know that this board is very active. It is committed to solving the problems in our Service Area and the board appreciates you representing the borough. You have been a big help. Obviously there are a lot of complicated permits here and complicated things going on.

O. **ADJOURNMENT** (01:47:10)

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

VOTE ON MOTION: Unanimous.

With no further business to come before the board, Chairman Stauffer adjourned the meeting at 7:45 pm.

The next regular board meeting is scheduled for Monday, July 16, 2018 at the Sea View Plaza Building, Suite 122 at 7:00 pm.

The next board work session is scheduled for Monday, June 18, 2018 at the Sea View Plaza Building, Suite 122 at 6:00 p.m.

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Secretary

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Date of Approval

# Multi-Agency Permit Application



# RIVER CENTER

Please answer all questions completely.

## Applicant Information:

Name: Esther Ronne  
Owner? ☒ Yes ☐ No

Mailing Address:  
(permits will be mailed to this address)

PO Box 723  
Seward, AK 99664

Phone (Home/Work): NA  
Cell Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_

E-Mail: \_\_\_\_\_

## Agent Information:

Name: Kevin Dunham

Mailing Address:

25975 Primrose Rd  
Seward AK 99664

Phone (Home/Work): 907-288-2412  
Cell Phone: 907-748-4449  
Fax: \_\_\_\_\_

E-Mail: kevin.dunham19@gmail.com

## Project Location:

Please complete all information including the legal description of the property or site location. This information can be found on your tax bill or by visiting the KPB Assessing Department website at [www.borough.kenai.ak.us/assessingdept/default.htm](http://www.borough.kenai.ak.us/assessingdept/default.htm).

Waterbody Name: Lost Creek (NHD Name) AWC# 231-30-10080-200-3065

River Mile: ? ☐ Right or ☐ Left bank (looking downstream) NA

Subdivision: Ronne Subd. Lot: Tract A Block: \_\_\_\_\_

Township: T1N Range: R1W Section: 12

KPB Parcel Number: 12503319 Physical Address: 14835 Seward Hwy

Directions to the site: T1N1W Sec 12 Seward Meridian SW that portion of the N1 Seward Hwy to Mile 7, turn W onto private drive

## Please Complete the Following:

1) This activity is a: ☐ new project ☒ modification, addition, repair, or replacement to an existing project

2) What is the purpose of this project? Remove bed load to alleviate flooding,



## Multi-Agency Permit Application – Page 2

3) Provide a detailed description of your entire project and all related activities. Attach additional pages if needed. Please be sure that your description contains all of the following:

- ☐ The location and dimensions of all existing and proposed development, including buildings, roads/driveways, pathways, building pads, accessory structures, and fill, as well as the location of any water bodies.
- ☐ The type(s) and amount(s) of fill material to be used for the project. Include the location/source of the fill material.
- ☐ The measurements of all new development, including platforms, walkways, structures, and bank restoration techniques. Please include measurements from water bodies and lot lines.
- ☐ The area and volume of material to be dredged and the location of the disposal site.
- ☐ A description of the waterbody, including wetlands to be filled. Include the types and volumes of each type of fill material.
- ☐ A description of construction methods and types of equipment to be used.
- ☐ If you are withdrawing water from a waterbody, a description of water use including location, methods of withdrawal, rate of withdrawal, and the total quantity of water required.
- ☐ If fuel storage is required for your project, indicate the location, quantities, and types of fuel.
- ☐ If vegetation or trees must be cleared as a result of your project, indicate the location, amount, and type of vegetation to be cleared.
- ☐ The type(s) and amount(s) of material that will be excavated for the project. Include the location the excavated material will be placed.

Remove sediment from Lost Creek on NE  
corner of Ronne Tract A adjacent to Seward  
Highway. Material will be deposited on upland  
portions of Ronne property and across the  
highway on Marawsky property (Lot 2B, Block 3  
in upper right of attached map)

4) Proposed project start date: ASAP Proposed project end date: July 15

Estimated number of actual construction days: 7?

5) If this project is within the limits of an incorporated city, please indicate city: NA

6) Is the project located within 50 feet of ordinary high water (OHW) or mean high water (MHW) of a stream or waterbody? ☐ Yes ☐ No ☐ Not sure where OHW or MHW line is



### Multi-Agency Permit Application – Page 3

7) Does any portion of the project cantilever or extend over the OHW or MHW of the stream or waterbody?  
☐ Yes ☒ No ☐ Not sure where OHW or MHW line is

8a) Does any portion of the project extend below the OHW or MHW of the stream or waterbody?  
Yes ☒ Yes ☒ No ☐ Not sure where OHW or MHW line is

8b) Will a structure (e.g., culvert, bridge support, dike) be placed below OHW, MHW, or High Tide Line (HTL) of the waterbody?  
☐ Yes ☒ No

9) Will material be extracted or dredged from

☒ Floodplain of a river, lake, or ocean

☐ Tidal or non-tidal waters

If you checked one of the above boxes, what type of material? River run sediments  
What amount of material? 2,000 to 3,000 cubic yards  
Where will the material be deposited? On Renne and Murawski property

10) Will material (including spoils, debris or overburden) be deposited in a

☐ Mapped floodplain or velocity zone of a river, lake or ocean

☐ Tidal or non-tidal waters

If you checked one of the above boxes, is the fill temporary ☐ or permanent ☐?

If temporary, how long will it be in place? \_\_\_\_\_

What type of material is it? \_\_\_\_\_ Amount? \_\_\_\_\_

Identify the location(s) of any deposited material on the attached top-view site plan drawing.

11) What is the surface area (in acres) that would be filled, excavated, or dredged of any waters, including areas below the HTL or MHW of tidal waters, below the OHW of non-tidal waters and/or wetlands adjacent to tidal or non-tidal waters? Appx. 1/2 acre

12a) List all motorized equipment to be used in this project, including access route to site and any stream or waterbody crossings:

Excavator, dump truck + loader

12b) How long will motorized equipment be used below OHW, MHW, or the HTL? one or two weeks

13) Are there any threatened or endangered species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work? ☐ Yes ☒ No If yes, list all species: \_\_\_\_\_

## Multi-Agency Permit Application – Page 4

14) Are there any historic properties that may be affected by the proposed work? ☐ Yes ☒ No If yes, state which property or properties may be affected and/or attach a vicinity map including the location of the historic property or properties.

15) Is any portion of the work already complete? ☒ Yes ☐ No If yes, describe the completed work:

Removed several hundred yards of material under  
River Center permit # 11582 in 2017

16) Will utility systems, including water, electric, gas, etc. be developed? ☐ Yes ☒ No If yes, describe:

### Application Checklist

☒ Are pages 1 through 4 completely filled out? If a question does not pertain to your activity, write 'N/A'

☒ Did you include a detailed project description?

☒ Did you complete the Top View & Elevation/Side View drawings? Be sure to review the instructions for site plans and make sure all relevant information is included.

☐ Did you include your permit fee (if applicable)? If your project is within State Park Boundaries or cantilevers over a State Park (which includes the Kenai River) a \$100 fee is required at the time of application. Make checks payable to 'State of Alaska.' If you are not certain if a fee is required, contact State Parks at the River Center at (907) 714-2470.

☒ Did you sign your application? If you have designated an agent to work the agencies on your behalf, they must also sign the application.

Is this project under consideration for a USFWS Cost Share Project? yes or no no

Application is hereby made for a permit or permits to authorize the work described in this application form. I certify the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

X Esther Ranne  
Signature of Applicant

by DK Duckman  
POA

6/20/18  
Date

If you designated an agent, both the applicant and agent must sign this application.

X DK Duckman  
Signature of Agent

6/20/18  
Date

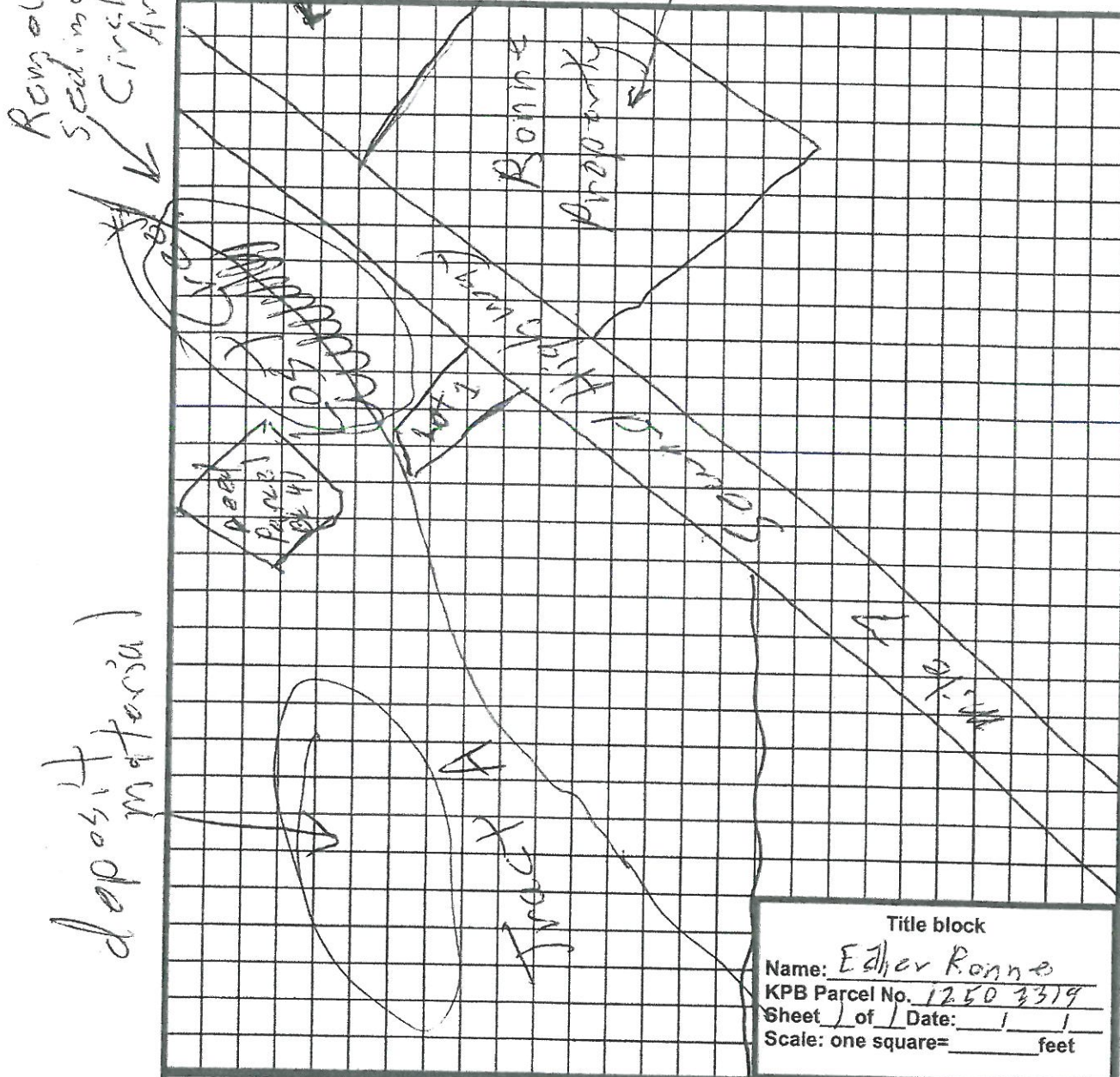


Remove sediment circled Area

Mikawsky Property

Deposit material

# SITE PLAN: ELEVATION OR SIDE VIEW



Additional Comments or Descriptions:





# Donald E. Gilman River Center

514 Funny River Road, Soldotna, Alaska 99669 • (907) 714-2460 • (907) 260-5992 Fax



*A Division of the Planning Department*

Charlie Pierce  
Borough Mayor

## FLOODPLAIN DEVELOPMENT PERMIT

6/29/2018

Esther Ronne  
PO Box 723  
Seward, AK 99664

RC Number: 12219

Issued: 6/29/2018

Expires: 12/31/2019

Dear Esther Ronne:

Pursuant to KPB Chapter 21.06, Floodplain Management, this is the approved floodplain development permit for your proposed project. Please review the entire document, as you are responsible for meeting all terms and conditions contained herein. See below for any additional documentation you are required to submit complete this permit. Any required documentation must be submitted prior to the expiration date shown above for your project to be in compliance.

### Project Location

KPB Parcel ID: 12503328  
Legal Description: T 01N R 1W SEC 12 SEWARD MERIDIAN SW 2016007 GROUSE CREEK  
SUB 2016 ADDN TRACT B  
Physical Address: 14835 SEWARD HWY

### Floodplain Determination

Map Panel: 020012-4534D  
Effective Date: 9/27/2013  
Flood Zone(s): AE,Floodway,SMFDA,X

### Project Description

Authorization is requested to remove gravel from nearly the entire stream length of Lost Creek along the Ronne property (approximately 2000 feet) for the purpose of maintaining a stream channel and protecting properties from flood events. The channel will be dredged approximately 2-3 feet deep and 24 feet wide. Excavated gravel will be removed and placed in an appropriate upland location outside of the regulatory floodway.

### Permit Conditions

The proposed project within the special flood hazard area must be built to the following minimum requirements, in accordance with KPB Chapter 21.06.050:

Project activities may not result in an increase in base flood elevations above, within or below the project limits and they may not alter the course of a waterway. If your project causes a rise in base flood elevations or alters the waterway such that other properties are affected, you may be held liable for any damage.

Material removed must be placed in an upland location outside of the regulatory floodplain unless specifically described in the project description of this permit. No material may be placed in the regulatory floodway without first submitting a conveyance calculation, or "no-rise" certification, from a licensed and registered engineer demonstrating that such placement of fill will not increase the base flood elevation.

Stockpiling of material, dike or berm construction, and/or any placement or storage of any objects or equipment are not authorized by this permit unless expressly described in the project description.

Material will be removed in shallow, even lifts so as not to create depressions that might entrap fish. Gravel removal will only be allowed on dewatered bars within the boundaries of the above-referenced parcel. No alteration of the watercourse is permitted; any alteration of the water course must be immediately corrected.

All work will occur within the existing streambanks. Streambank vegetation shall not be disturbed.

#### **Required Additional Documentation**

No additional documentation is required to complete the permitting process. River Center staff may request to perform a final inspection after work is complete.

#### **Advisories**

Federal regulation 44 CFR §59 states that this floodplain development permit is valid until the expiration date above, provided that work on this project begins within 180 days of the issue date. If work does not begin within 180 days, this permit will expire at the end of that period and you will be required to resubmit your application.

KPB Chapter 21.06 states that all proposed construction or development in the flood hazard areas of the Kenai Peninsula requires a floodplain development permit. "Development" means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

All encroachments in the regulatory floodway, including fill, new construction, substantial improvements, and other development are prohibited unless certification by an engineer or architect, licensed and registered in the State of Alaska, is provided demonstrating, through hydrologic and hydraulic analyses, that these encroachments will not result in any increase in flood levels during the occurrence of the base flood discharge. This certification is known as a conveyance calculation or a "no-rise" certification and must be submitted and verified before a floodplain development permit will be issued.

The permittee named above is responsible for the actions of the contractors, agents, and any other persons who perform work to accomplish the approved plan. For any activity that deviates from the approved plan, the permittee shall notify the River Center and obtain written approval before beginning the activity.

Compliance with the conditions and stipulations of all other necessary local, state and federal permits is

required. The permittee is solely responsible for obtaining all necessary local, state, and federal permits before beginning work.

Flood information used to issue this permit is based on the regulatory floodplain maps for the Kenai Peninsula Borough. This permit does not imply the referenced project areas will or will not be free from flooding or damage. Larger floods can and will occur on rare occasions. This information does not create liability on the part of the Borough, its officers or employees, or the Federal Insurance Administration, for any damage that results from reliance on this information.

Please contact me with any questions or modifications to the permitted project activities at (907) 714-2464 or bharris@kpb.us.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bryr Harris', with a stylized flourish at the end.

Bryr Harris  
Floodplain Administrator, CFM





**FISH HABITAT PERMIT FH18-V-0183**

ISSUED: June 25, 2018  
EXPIRES: December 31, 2019

Esther Ronne  
Kevin Dunham  
PO Box 723  
Seward, AK 99664

Dear Ms. Ronne & Mr. Dunham:

**Re: Dredging & Channel Maintenance**  
Lost Creek – Stream No. 231-30-10080-2010-3065  
Section 12, T 1N, R 1W, S.M.  
Kenai Peninsula Borough Parcel No. 125-033-19  
River Center Tracking No. 12219

Pursuant to AS 16.05.871(b), the Alaska Department of Fish and Game (ADF&G), Division of Habitat, has reviewed your proposal to remove gravel and sediment to maintain a stream channel on Lost Creek at the referenced location. The stream at this location experiences gravel deposition during high water events and is susceptible to quick shifts in channel flow.

**Project Description**

Heavy equipment will be used to remove gravel for nearly the entire stream length on the Ronne property (approximately 2,000 feet) for the purpose of maintaining a stream channel and protecting properties from flood events. The channel will be dredged approximately 2 feet to 3 feet deep and 24 feet wide. A temporary gravel access path will be constructed at the bridge upstream of the work area. Excavated gravel will be placed into a dump truck and deposited on approved uplands.

**Anadromous Fish Act**

Lost Creek has been specified as being important for the migration, spawning and rearing of anadromous fish pursuant to AS 16.05.871(a). Lost Creek provides spawning and migration habitat for Chinook, sockeye, pink, and coho salmon and other species of resident fish.

In accordance with AS 16.05.871(d), project approval is hereby given subject to the project description above and the following stipulations:

1. The Division of Habitat shall be contacted at (907) 714-2475 three days prior to project initiation.
2. Gravel shall be removed in shallow even lifts to avoid the creation of fish entrapment basins. All depressions and potholes created by the gravel removal shall be leveled to avoid fish entrapment.
3. The dredged channel shall accommodate the efficient passage and movement of fish, both upstream and downstream.
4. Streambanks and streambank vegetation shall not be altered or disturbed during gravel removal operations.

You are responsible for the actions of contractors, agents, or other persons who perform work to accomplish the approved project. For any activity that significantly deviates from the approved plan, you shall notify the Division of Habitat and obtain written approval in the form of a permit amendment before beginning the activity. Any action that increases the project's overall scope or that negates, alters, or minimizes the intent or effectiveness of any stipulation contained in this permit will be deemed a significant deviation from the approved plan. The final determination as to the significance of any deviation and the need for a permit amendment is the responsibility of the Division of Habitat. Therefore, it is recommended you consult the Division of Habitat immediately when a deviation from the approved plan is being considered.

For the purpose of inspecting or monitoring compliance with any condition of this permit, you shall give an authorized representative of the state free and unobstructed access, at safe and reasonable times, to the project site. You shall furnish whatever assistance and information as the authorized representative reasonably requires for monitoring and inspection purposes.

This letter constitutes a permit issued under the authority of AS 16.05.871 and must be retained on site during project activities. Please be advised that this determination applies only to activities regulated by the Division of Habitat; other agencies also may have jurisdiction under their respective authorities. This determination does not relieve you of your responsibility to secure other permits; state, federal, or local. You are still required to comply with all other applicable laws.

In addition to the penalties provided by law, this permit may be terminated or revoked for failure to comply with its provisions or failure to comply with applicable statutes and regulations. The department reserves the right to require mitigation measures to correct disruption to fish and game created by the project and which was a direct result of the failure to comply with this permit or any applicable law.

You shall indemnify, save harmless, and defend the department, its agents, and its employees from any and all claims, actions, or liabilities for injuries or damages sustained by any person or property arising directly or indirectly from permitted activities or your performance under this

permit. However, this provision has no effect if, and only if, the sole proximate cause of the injury is the department's negligence.

This permit decision may be appealed in accordance with the provisions of AS 44.62.330-630.

Any questions or concerns about this permit may be emailed to [brian.blossom@alaska.gov](mailto:brian.blossom@alaska.gov) or call (907) 714-2481.

Sincerely,

Sam Cotten, Commissioner

*Brian Blossom*

By: Brian Blossom  
Kenai Peninsula Area Manager  
ADF&G, Division of Habitat

cc: KRC File

By email only:

AWT Seward  
ADF&G Anchorage

KPB Floodplain  
COE-KFO

# Multi-Agency Permit Application



# RIVER CENTER

Please answer all questions completely.

## Applicant Information:

Name: Cristan Fry  
Owner? ☒ Yes ☐ No

Mailing Address:  
(permits will be mailed to this address)  
14550 Willow Cir  
Seward, AK 99664

Phone (Home/Work): 907-362-7788  
Cell Phone: 907-362-7988  
Fax: N/A

E-Mail: alaskanluka@gmail.com

## Agent Information:

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone (Home/Work): \_\_\_\_\_  
Cell Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_

E-Mail: \_\_\_\_\_

## Project Location:

Please complete all information including the legal description of the property or site location. This information can be found on your tax bill or by visiting the KPB Assessing Department website at [www.borough.kenai.ak.us/assessingdept/default.htm](http://www.borough.kenai.ak.us/assessingdept/default.htm).

Waterbody Name: Lost Creek

River Mile: 4 ☒ Right or ☐ Left bank (looking downstream)

Subdivision: Old Mill Lot: 5A Block: \_\_\_\_\_

Township: 01N Range: 1W Section: 12

KPB Parcel Number: 12537016 Physical Address: 14550 Willow Cir.

Directions to the site: Exit Seward HWY at Que Sera (~ mile 7) take first left over bridge (after mailboxes) take first left at Willow Circle, look for Green and Grey Cabin at the end of road on left side.

## Please Complete the Following:

1) This activity is a: ☐ new project ☒ modification, addition, repair, or replacement to an existing project

2) What is the purpose of this project? To replace sediment lost during a recent high water event.

## Multi-Agency Permit Application - Page 2 Questions.

1) lost creek overflow runs right through the back of my property, there is an existing 8 foot tall gravel barrier which my house (sole structure) is built, about 50 yards from closest gravel barrier. this barrier (which is all of my usable land) is now only 20 feet from the new "route" of the lost creek post-bridge overflow. Currently the only water in the creek is groundwater, but as soon as the overflow collects water again, I'll have a torrent of water a few feet from my gravel barrier. I propose to enhance and fortify my existing gravel barrier, with more gravel and possibly "root walls" to prevent erosion. Additionally, I'd like to replace sediment that was washed away during the high water event in June.

2) Fill material used would be gravel and possibly tree roots. I have no idea where the roots might come from, but the gravel will come from Metco Inc. And sourced from my property and the surrounding area.

3) ~~New~~ New Developments: I do not intend to make my gravel barrier/pad any taller, just a few feet deeper, and possibly add tree roots to prevent property loss. also fill in low-lying areas that were washed away.

4) I have no idea, several dump truck loads.  
Sourced from Lost Creek

5) an unknown amount of gravel to fill in marshy, eroded low-lying, personal property.

6) Shovels, carts, maybe a John Deere used to move fill to desired location.

7) N/A no withdrawal of any water

8) N/A no fuel storage required

9) Small patches of Devil's Club, dogwood, water melon berries, and other ferns ~~and shrubs~~ and shrubs. No living trees.

10) Several dump truck loads of fill placed on top of my gravel pad/barrier, will be moved to lower ~~eroded~~ eroded areas nearby.

## Multi-Agency Permit Application – Page 2

3) Provide a detailed description of your entire project and all related activities. Attach additional pages if needed.

**Please be sure that your description contains all of the following:**

- 1) ☐ The location and dimensions of all existing and proposed development, including buildings, roads/driveways, pathways, building pads, accessory structures, and fill, as well as the location of any water bodies.
  - 2) ☐ The type(s) and amount(s) of fill material to be used for the project. Include the location/source of the fill material.
  - 3) ☐ The measurements of all new development, including platforms, walkways, structures, and bank restoration techniques. Please include measurements from water bodies and lot lines.
  - 4) ☐ The area and volume of material to be dredged and the location of the disposal site.
  - 5) ☐ A description of the waterbody, including wetlands to be filled. Include the types and volumes of each type of fill material.
  - 6) ☐ A description of construction methods and types of equipment to be used.
  - 7) ☐ If you are withdrawing water from a waterbody, a description of water use including location, methods of withdrawal, rate of withdrawal, and the total quantity of water required.
  - 8) ☐ If fuel storage is required for your project, indicate the location, quantities, and types of fuel.
  - 9) ☐ If vegetation or trees must be cleared as a result of your project, indicate the location, amount, and type of vegetation to be cleared.
  - 10) ☐ The type(s) and amount(s) of material that will be excavated for the project. Include the location the excavated material will be placed.
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4) Proposed project start date: as soon as permitted 7/15/18 Proposed project end date: 7/30/18

Estimated number of actual construction days: 1-3

5) If this project is within the limits of an incorporated city, please indicate city: N/A

6) Is the project located within 50 feet of ordinary high water (OHW) or mean high water (MHW) of a stream or waterbody? ☒ Yes ☐ No ☐ Not sure where OHW or MHW line is



### Multi-Agency Permit Application – Page 3

7) Does any portion of the project cantilever or extend over the OHW or MHW of the stream or waterbody?  
☐ Yes ☒ No ☐ Not sure where OHW or MHW line is

8a) Does any portion of the project extend below the OHW or MHW of the stream or waterbody?  
☐ Yes ☒ No ☐ Not sure where OHW or MHW line is

8b) Will a structure (e.g., culvert, bridge support, dike) be placed below OHW, MHW, or High Tide Line (HTL) of the waterbody?  
☐ Yes ☒ No

9) Will material be extracted or dredged from

☒ Floodplain of a river, lake, or ocean

☐ Tidal or non-tidal waters

If you checked one of the above boxes, what type of material? gravel

What amount of material? Unknown, several dump trucks

Where will the material be deposited? to replace lost sediment by gravel barrier

10) Will material (including spoils, debris or overburden) be deposited in a

☐ Mapped floodplain or velocity zone of a river, lake or ocean

☐ Tidal or non-tidal waters

If you checked one of the above boxes, is the fill temporary ☐ or permanent ☐?

If temporary, how long will it be in place? \_\_\_\_\_

What type of material is it? \_\_\_\_\_ Amount? \_\_\_\_\_

Identify the location(s) of any deposited material on the attached top-view site plan drawing.

11) What is the surface area (in acres) that would be filled, excavated, or dredged of any waters, including areas below the HTL or MHW of tidal waters, below the OHW of non-tidal waters and/or wetlands adjacent to tidal or non-tidal waters? >1

12a) List all motorized equipment to be used in this project, including access route to site and any stream or waterbody crossings:

Metco drops gravel on my property and I move it ~~some~~ a few feet away, which is also on my property. More than likely no motorized equipment

12b) How long will motorized equipment be used below OHW, MHW, or the HTL? None

13) Are there any threatened or endangered species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work? ☐ Yes ☒ No If yes, list all species: \_\_\_\_\_

## Multi-Agency Permit Application – Page 4

14) Are there any historic properties that may be affected by the proposed work? ☐ Yes ☒ No If yes, state which property or properties may be affected and/or attach a vicinity map including the location of the historic property or properties.

15) Is any portion of the work already complete? ☒ Yes ☐ No If yes, describe the completed work:

the fill dirt is already deposited on my land,  
I only need permission to move it

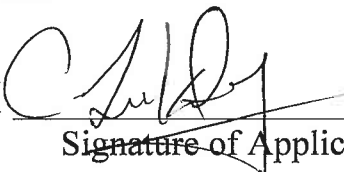
16) Will utility systems, including water, electric, gas, etc. be developed? ☐ Yes ☒ No If yes, describe:

### Application Checklist

- ☐ Are pages 1 through 4 completely filled out? If a question does not pertain to your activity, write 'N/A'
- ☐ Did you include a detailed project description?
- ☐ Did you complete the Top View & Elevation/Side View drawings? Be sure to review the instructions for site plans and make sure all relevant information is included.
- ☐ Did you include your permit fee (if applicable)? If your project is within State Park Boundaries or cantilevers over a State Park (which includes the Kenai River) a \$100 fee is required at the time of application. Make checks payable to 'State of Alaska.' If you are not certain if a fee is required, contact State Parks at the River Center at (907) 714-2470.
- ☐ Did you sign your application? If you have designated an agent to work the agencies on your behalf, they must also sign the application.

Is this project under consideration for a USFWS Cost Share Project? yes or no

Application is hereby made for a permit or permits to authorize the work described in this application form. I certify the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

X   
Signature of Applicant

7-9-18  
Date

If you designated an agent, both the applicant and agent must sign this application.

X \_\_\_\_\_  
Signature of Agent

\_\_\_\_\_  
Date

Page 5

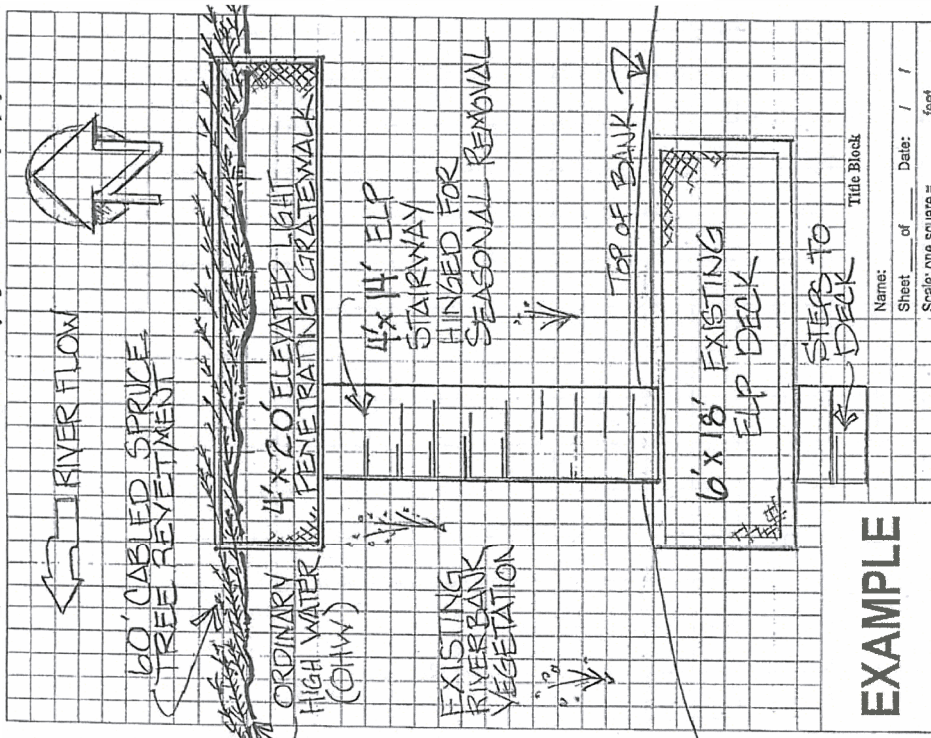
# Site Plan Examples



# RIVER CENTER

## PROJECT PLAN: TOP VIEW

Please note all dimensions and the location of Ordinary High Water in relation to your project.



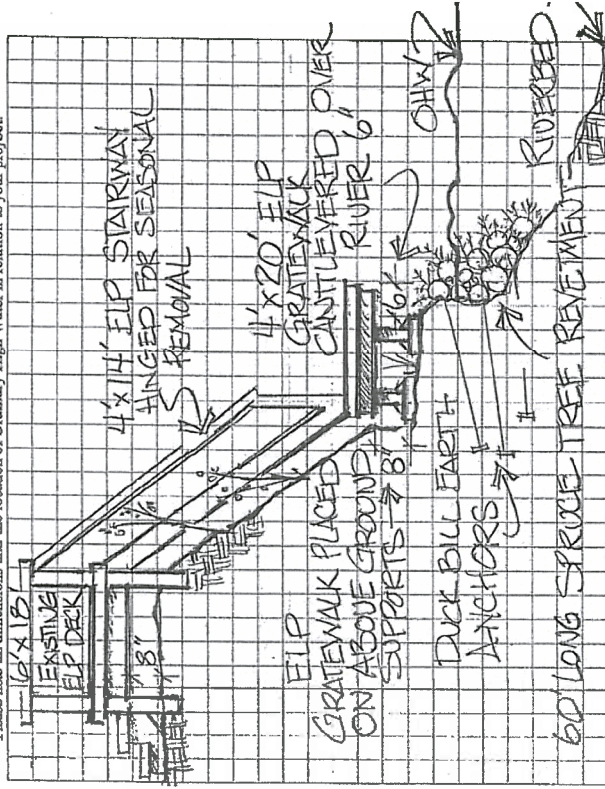
**EXAMPLE**

Title Block

Name: \_\_\_\_\_  
 Sheet: \_\_\_\_\_ of \_\_\_\_\_  
 Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
 Scale: one square = \_\_\_\_\_ feet

## PROJECT PLAN: ELEVATION or SIDE VIEW

Please note all dimensions and the location of Ordinary High Water in relation to your project.



**EXAMPLE**

Title Block

Name: \_\_\_\_\_  
 Sheet: \_\_\_\_\_ of \_\_\_\_\_  
 Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
 Scale: one square = \_\_\_\_\_ feet

Additional Comments or Descriptions:

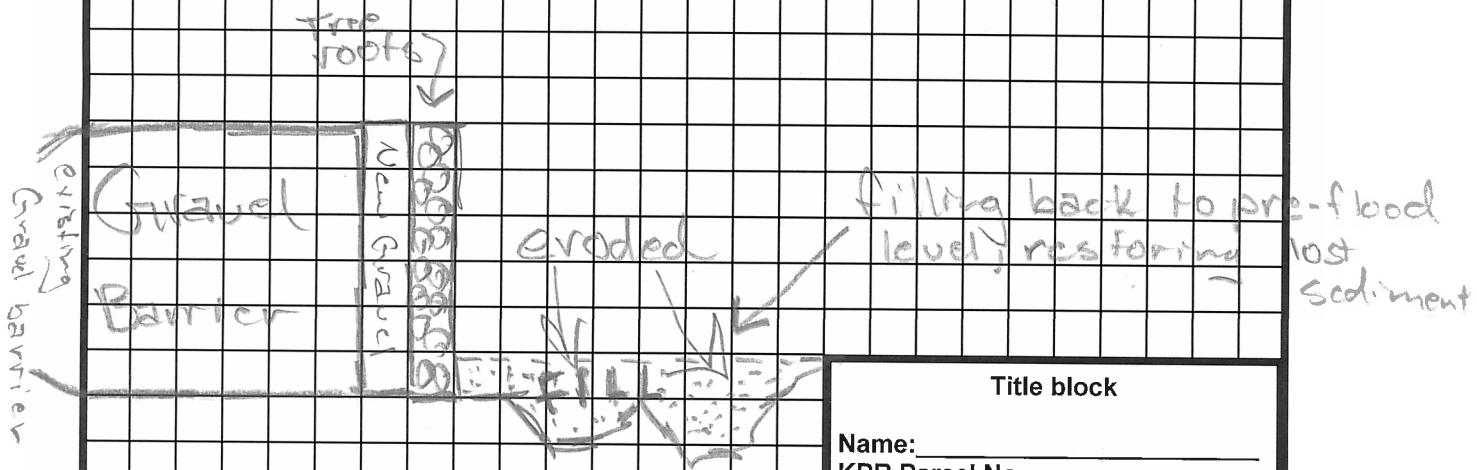
- 1) 4' x 14' ELP stairway built with aluminum frame and aluminum bar grating. Structure will be supported at top by galvanized driven pipe (part of existing ELP gratewalk) and at bottom by ELP gratewalk, and hinged at both midpoint and top for seasonal removal.
- 2) 4' x 20' ELP gratewalk built with aluminum frame and aluminum bar grating. Structure will be supported on adjustable, footed legs and entire structure will be seasonally removed. Gratewalk will cantilever 6" over OHW.
- 3) 60' of cabled spruce tree revetment will be installed.

For additional site plan examples, please visit [www.kenairivercenter.org/application](http://www.kenairivercenter.org/application)

# SITE PLAN: TOP VIEW

The site plan is drawn on a 20x20 grid. The top half of the grid is mostly empty. A horizontal line is drawn across the grid at approximately the 12th row from the top. Below this line, the text "Restore Erosion" is written in a large, cursive font. To the right of this text, the handwritten note "20-30 feet" is present. Below "Restore Erosion", a horizontal line is drawn at approximately the 14th row. Between this line and the one below it, the text "NEW TREE ROOTS" is written. To the right of this text, the handwritten note "> 3 feet" is present. Below "NEW TREE ROOTS", a horizontal line is drawn at approximately the 15th row. Between this line and the one below it, the text "NEW GRAVEL" is written. To the left of this text, the handwritten note "2 feet of Additional gravel" is present. Below "NEW GRAVEL", a horizontal line is drawn at approximately the 16th row. Below this line, the text "GRAVEL PAD" is written. The bottom half of the grid, from the 16th row down to the bottom, is filled with diagonal hatching lines. In the bottom right corner of the grid, there is a rectangular box labeled "Title block" containing the following text: "Name: \_\_\_\_\_", "KPB Parcel No. \_\_\_\_\_", "Sheet \_\_\_ of \_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_", and "Scale: one square = \_\_\_ feet".

# SITE PLAN: ELEVATION OR SIDE VIEW



## Title block

Name: \_\_\_\_\_  
KPB Parcel No. \_\_\_\_\_  
Sheet \_\_\_\_ of \_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
Scale: one square=\_\_\_\_ feet

Additional Comments or Descriptions:



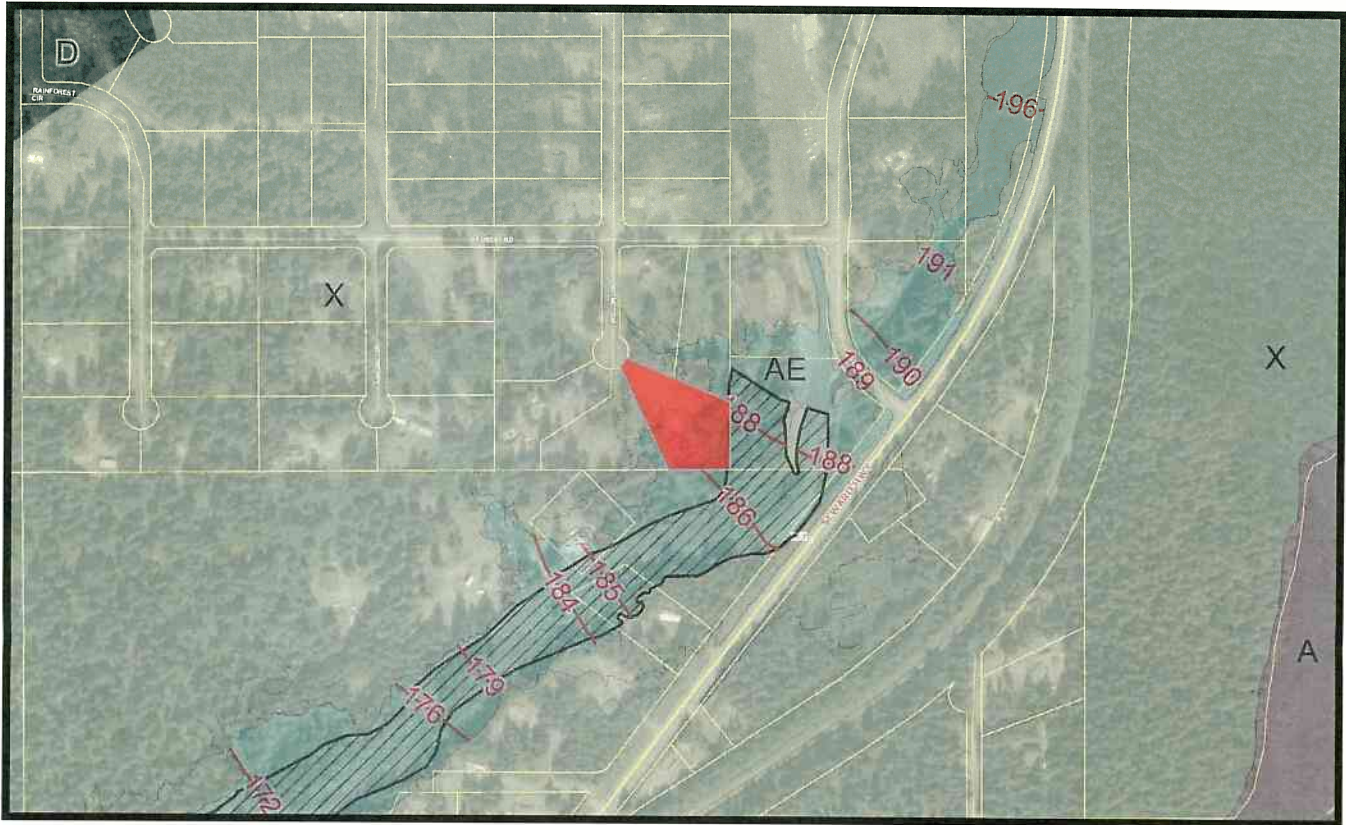


## PARCEL REPORT

6/27/2018 11:13

**PARCEL ID: 12537016**

**Total Acreage: 1.34**



**LEGAL DESCRIPTION:**

T 01N R 01W SEC 12 SEWARD MERIDIAN SW 2015016 OLD MILL SUB 2015 ADDN LOT 5A

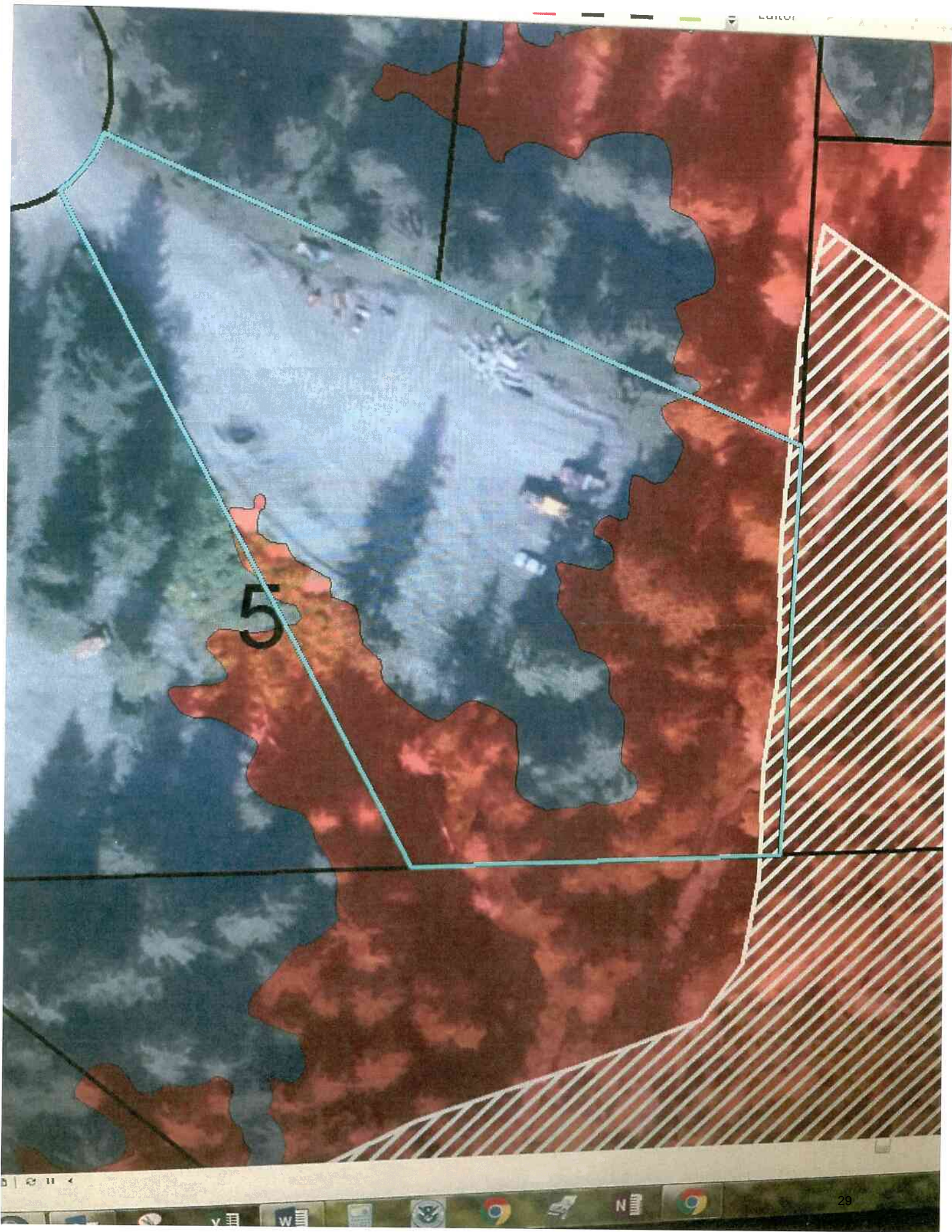
<b>LAND VALUE:</b>	\$34,700	<b>ASSESSED VALUE:</b>	\$111,500
<b>IMPROVEMENT VALUE:</b>	\$76,800	<b>TAXABLE VALUE:</b>	\$61,500

**OWNER:**

FRY CRISTAN LUKE  
14550 WILLOW CIR  
SEWARD, AK 99664

The data displayed herein is neither a legally recorded map nor survey and should only be used for general reference purposes. Kenai Peninsula Borough assumes no liability as to the accuracy of any data displayed herein. Original source documents should be consulted for accuracy verification.





5



# Multi-Agency Permit Application



**Please answer all questions completely.**

## Applicant Information:

Name: \_\_\_\_\_

Owner? ☐ Yes ☐ No

Mailing Address:

(permits will be mailed to this address)

\_\_\_\_\_  
\_\_\_\_\_

Phone (Home/Work): \_\_\_\_\_

Cell Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-Mail: \_\_\_\_\_

## Agent Information:

Name: \_\_\_\_\_

\_\_\_\_\_

Mailing Address:

\_\_\_\_\_  
\_\_\_\_\_

Phone (Home/Work): \_\_\_\_\_

Cell Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-Mail: \_\_\_\_\_

## Project Location:

Please complete all information including the legal description of the property or site location. This information can be found on your tax bill or by visiting the KPB Assessing Department website at [www.borough.kenai.ak.us/assessingdept/default.htm](http://www.borough.kenai.ak.us/assessingdept/default.htm).

Waterbody Name: \_\_\_\_\_

River Mile: \_\_\_\_\_ ☐ Right or ☐ Left bank (looking downstream)

Subdivision: \_\_\_\_\_ Lot: \_\_\_\_\_ Block: \_\_\_\_\_

Township: \_\_\_\_\_ Range: \_\_\_\_\_ Section: \_\_\_\_\_

KPB Parcel Number: \_\_\_\_\_ Physical Address: \_\_\_\_\_

Directions to the site: \_\_\_\_\_  
\_\_\_\_\_

## Please Complete the Following:

1) This activity is a: ☐ new project ☐ modification, addition, repair, or replacement to an existing project

2) What is the purpose of this project? \_\_\_\_\_  
\_\_\_\_\_

## Multi-Agency Permit Application – Page 2

3) Provide a detailed description of your entire project and all related activities. Attach additional pages if needed.

**Please be sure that your description contains all of the following:**

- ☐ The location and dimensions of all existing and proposed development, including buildings, roads/driveways, pathways, building pads, accessory structures, and fill, as well as the location of any water bodies.
- ☐ The type(s) and amount(s) of fill material to be used for the project. Include the location/source of the fill material.
- ☐ The measurements of all new development, including platforms, walkways, structures, and bank restoration techniques. Please include measurements from water bodies and lot lines.
- ☐ The area and volume of material to be dredged and the location of the disposal site.
- ☐ A description of the waterbody, including wetlands to be filled. Include the types and volumes of each type of fill material.
- ☐ A description of construction methods and types of equipment to be used.
- ☐ If you are withdrawing water from a waterbody, a description of water use including location, methods of withdrawal, rate of withdrawal, and the total quantity of water required.
- ☐ If fuel storage is required for your project, indicate the location, quantities, and types of fuel.
- ☐ If vegetation or trees must be cleared as a result of your project, indicate the location, amount, and type of vegetation to be cleared.
- ☐ The type(s) and amount(s) of material that will be excavated for the project. Include the location the excavated material will be placed.

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4) Proposed project start date: \_\_\_\_\_ Proposed project end date: \_\_\_\_\_

Estimated number of actual construction days: \_\_\_\_\_

5) If this project is within the limits of an incorporated city, please indicate city: \_\_\_\_\_

6) Is the project located within 50 feet of ordinary high water (OHW) or mean high water (MHW) of a stream or waterbody? ☐ Yes ☐ No ☐ Not sure where OHW or MHW line is

Heavy equipment will be used to restore the Lost Creek active channel and embankments following the June 18-20 high water event caused by the remnants of typhoon Maliksi. Approximately 75% of the existing embankments were eroded during the event and large quantities of sediment were transported in the system. The project will have two sections:

- 1) A bulldozer will be used to push streambed material from mid-channel to the eroded berms to restore the embankments upstream of the Forest Road bridge to approximately 10-12 feet wide, and 6-12 feet tall. Efforts will be made to move the active channel to one side so work can be completed on the other bank in mostly dry conditions to lessen the effects of sediment transportation downstream. The river right embankment is approximately 1,900 feet long, from the top of the Tongass Ln cul-de-sac, which was almost half eroded, to the Forest Road bridge. The river left embankment will be restored along approximately 1,300 feet, upstream of the bridge.
- 2) Streambed material will be removed from 100 feet upstream, under the Forest Road bridge, and 300 feet downstream, along the section of Que Sera Dr. The channel will be dredged 6-8 feet deep, and 50 feet wide, on average, with a smooth transition to the existing channel. An excavator or front-end loader will be used to place gravel in dump trucks. Approximately 6,000 cubic yards of gravel will be removed. Material will be hauled and placed in an upland or permitted location within the neighborhood, to be determined by the awarded contractor.

## Multi-Agency Permit Application – Page 3

7) Does any portion of the project cantilever or extend **over** the OHW or MHW of the stream or waterbody?

☐ Yes ☐ No ☐ Not sure where OHW or MHW line is

8a) Does any portion of the project extend **below** the OHW or MHW of the stream or waterbody?

☐ Yes ☐ No ☐ Not sure where OHW or MHW line is

8b) Will a structure (e.g., culvert, bridge support, dike) be placed below OHW, MHW, or High Tide Line (HTL) of the waterbody?

☐ Yes ☐ No

9) Will material be extracted or dredged from

☐ Floodplain of a river, lake, or ocean

☐ Tidal or non-tidal waters

If you checked one of the above boxes, what type of material? \_\_\_\_\_

What amount of material? \_\_\_\_\_

Where will the material be deposited? \_\_\_\_\_

10) Will material (including spoils, debris or overburden) be deposited in a

☐ Mapped floodplain or velocity zone of a river, lake or ocean

☐ Tidal or non-tidal waters

If you checked one of the above boxes, is the fill temporary ☐ or permanent ☐?

If temporary, how long will it be in place? \_\_\_\_\_

What type of material is it? \_\_\_\_\_ Amount? \_\_\_\_\_

Identify the location(s) of any deposited material on the attached top-view site plan drawing.

11) What is the surface area (in acres) that would be filled, excavated, or dredged of any waters, including areas below the HTL or MHW of tidal waters, below the OHW of non-tidal waters and/or wetlands adjacent to tidal or non-tidal waters? \_\_\_\_\_

12a) List all motorized equipment to be used in this project, including access route to site and any stream or waterbody crossings:

\_\_\_\_\_  
\_\_\_\_\_

12b) How long will motorized equipment be used **below** OHW, MHW, or the HTL? \_\_\_\_\_

13) Are there any threatened or endangered species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work? ☐ Yes ☐ No If yes, list all species:

\_\_\_\_\_

## Multi-Agency Permit Application – Page 4

14) Are there any historic properties that may be affected by the proposed work? ☐ Yes ☐ No If yes, state which property or properties may be affected and/or attach a vicinity map including the location of the historic property or properties.

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15) Is any portion of the work already complete? ☐ Yes ☐ No If yes, describe the completed work:

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16) Will utility systems, including water, electric, gas, etc. be developed? ☐ Yes ☐ No If yes, describe:

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### Application Checklist

- ☐ Are pages 1 through 4 completely filled out? If a question does not pertain to your activity, write 'N/A'
- ☐ Did you include a detailed project description?
- ☐ Did you complete the Top View & Elevation/Side View drawings? Be sure to review the instructions for site plans and make sure all relevant information is included.
- ☐ Did you include your permit fee (if applicable)? If your project is within State Park Boundaries or cantilevers over a State Park (which includes the Kenai River) a \$100 fee is required at the time of application. Make checks payable to 'State of Alaska.' If you are not certain if a fee is required, contact State Parks at the River Center at (907) 714-2470.
- ☐ Did you sign your application? If you have designated an agent to work the agencies on your behalf, they must also sign the application.

Is this project under consideration for a USFWS Cost Share Project? yes or no

Application is hereby made for a permit or permits to authorize the work described in this application form. I certify the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

X 

July 2, 2018

Date

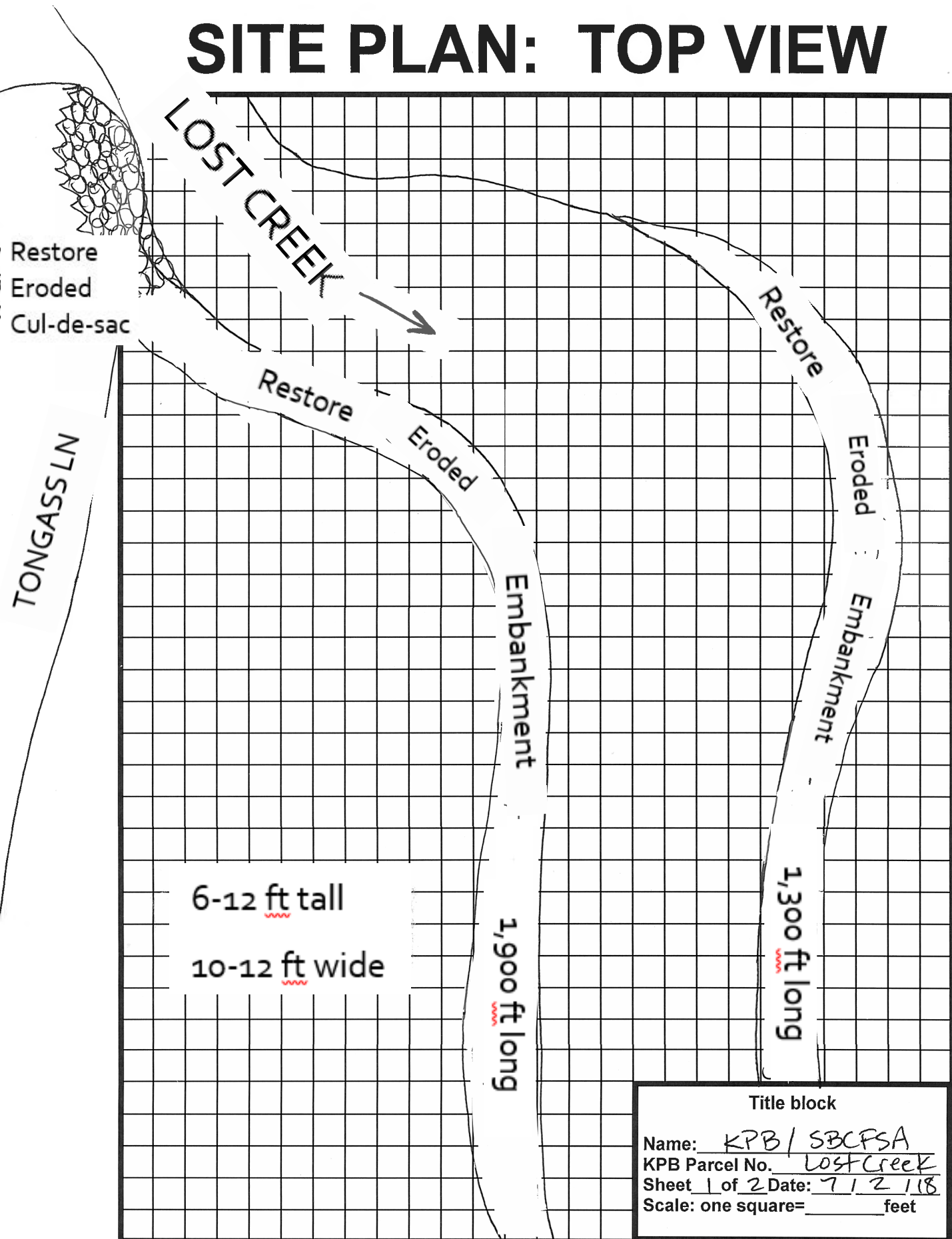
If you designated an agent, both the applicant and agent must sign this application.

X \_\_\_\_\_  
Signature of Agent

\_\_\_\_\_  
Date

Page 5

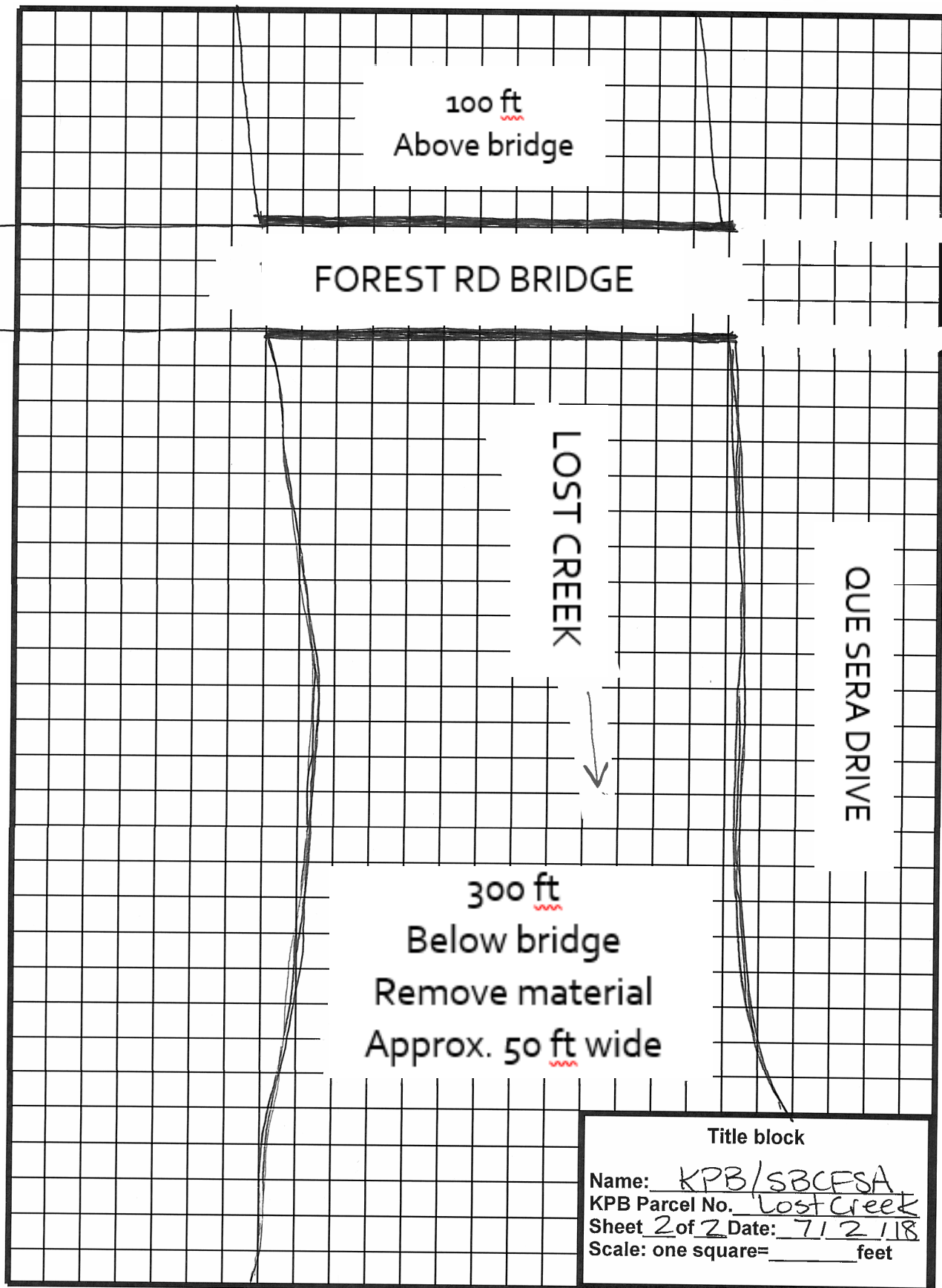
# SITE PLAN: TOP VIEW



Sheet 2



# SITE PLAN: TOP VIEW





# SITE PLAN: ELEVATION OR SIDE VIEW

10-12 ft wide  
6-12 ft tall

10-12 ft wide  
6-12 ft tall

Remove material  
Approx. 6-8 ft deep

Restore Eroded  
Embankment

Restore Eroded  
Embankment

Title block

Name: KPB/SBCESA  
KPB Parcel No. Lost Creek  
Sheet 1 of 2 Date: 7/2/18  
Scale: one square = \_\_\_\_\_ feet

Additional Comments or Descriptions:

CHANNEL & EMBANKMENT RESTORATION  
TYPICAL CROSS SECTION

# SITE PLAN: ELEVATION OR SIDE VIEW

Remove material  
Approx. 6-8 ft deep  
50-70 ft wide

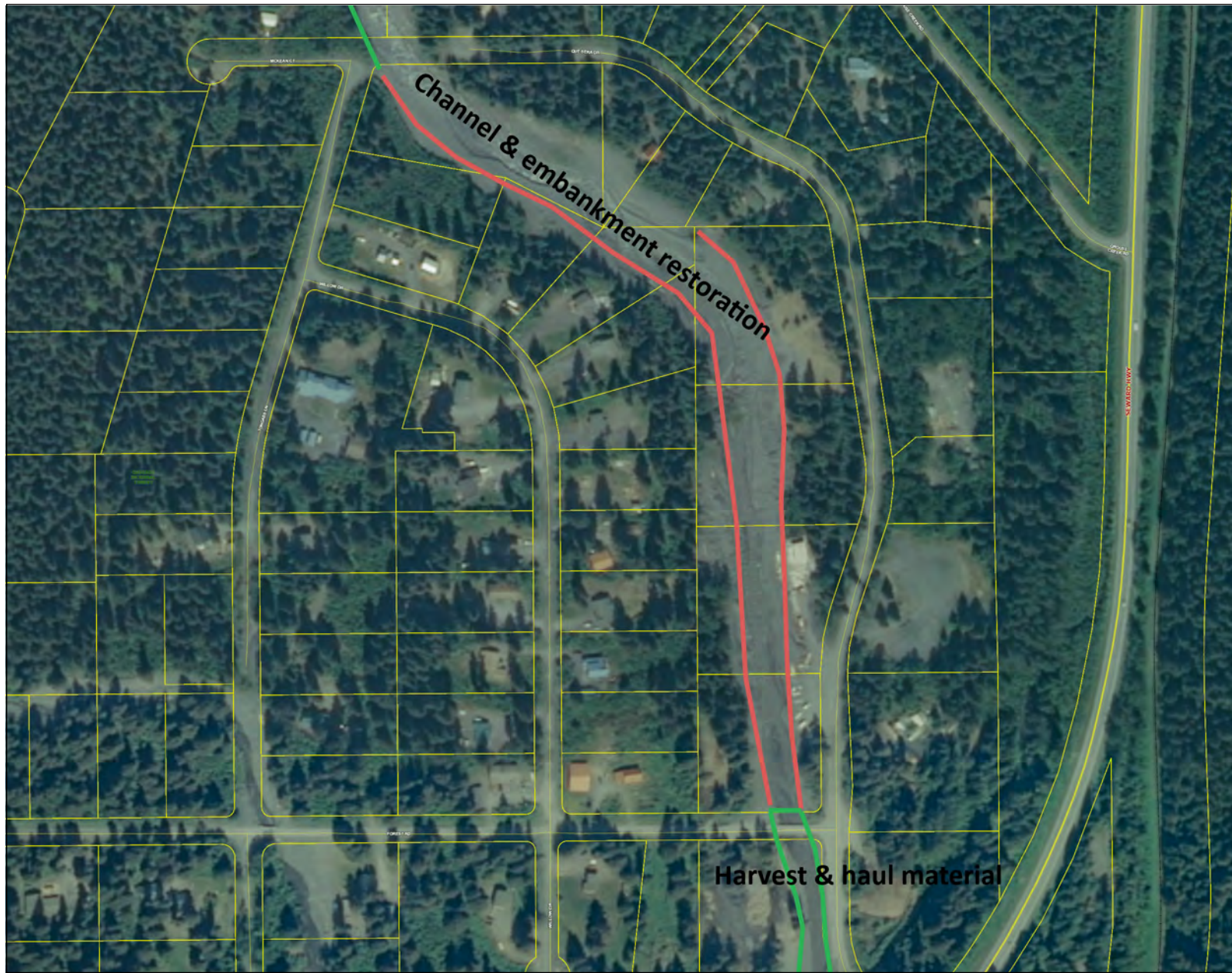
Title block

Name: KPB / SBCFSA  
KPB Parcel No. Lost Creek  
Sheet 2 of 2 Date: 7/2/18  
Scale: one square = \_\_\_\_\_ feet

Additional Comments or Descriptions:

STREAMBED MATERIAL REMOVAL





0.1 0 0.06 0.1 Miles

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

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THIS MAP IS NOT TO BE USED FOR NAVIGATION



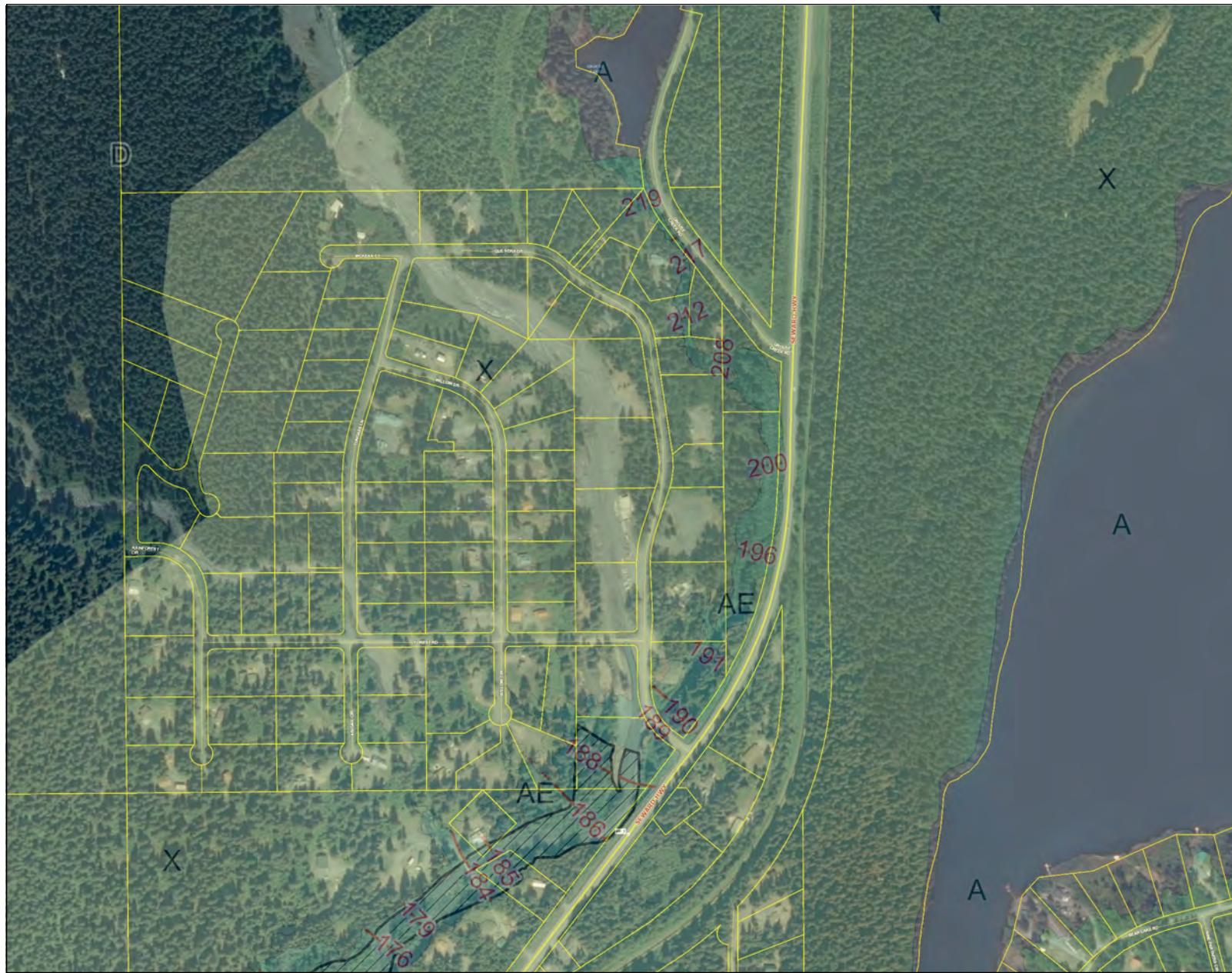
## Legend

- Tax Parcels
- Tax Parcels

## Notes

- Red - SBCFSA
- Green - KPB Roads





0.2 0 0.12 0.2 Miles

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

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### Legend

- BASE FLOOD ELEVATION
- FLOODWAY
- SPECIAL FLOOD HAZARD AREA
- A
- AE
- AH
- AO
- VE
- X
- Tax Parcels
- Tax Parcels

### Notes





#### Legend

- 1986 SEWARD FLOODING
- 2006 SEWARD FLOOD
- 1995 SEWARD FLOODING
- Tax Parcels
- Tax Parcels



#### Notes

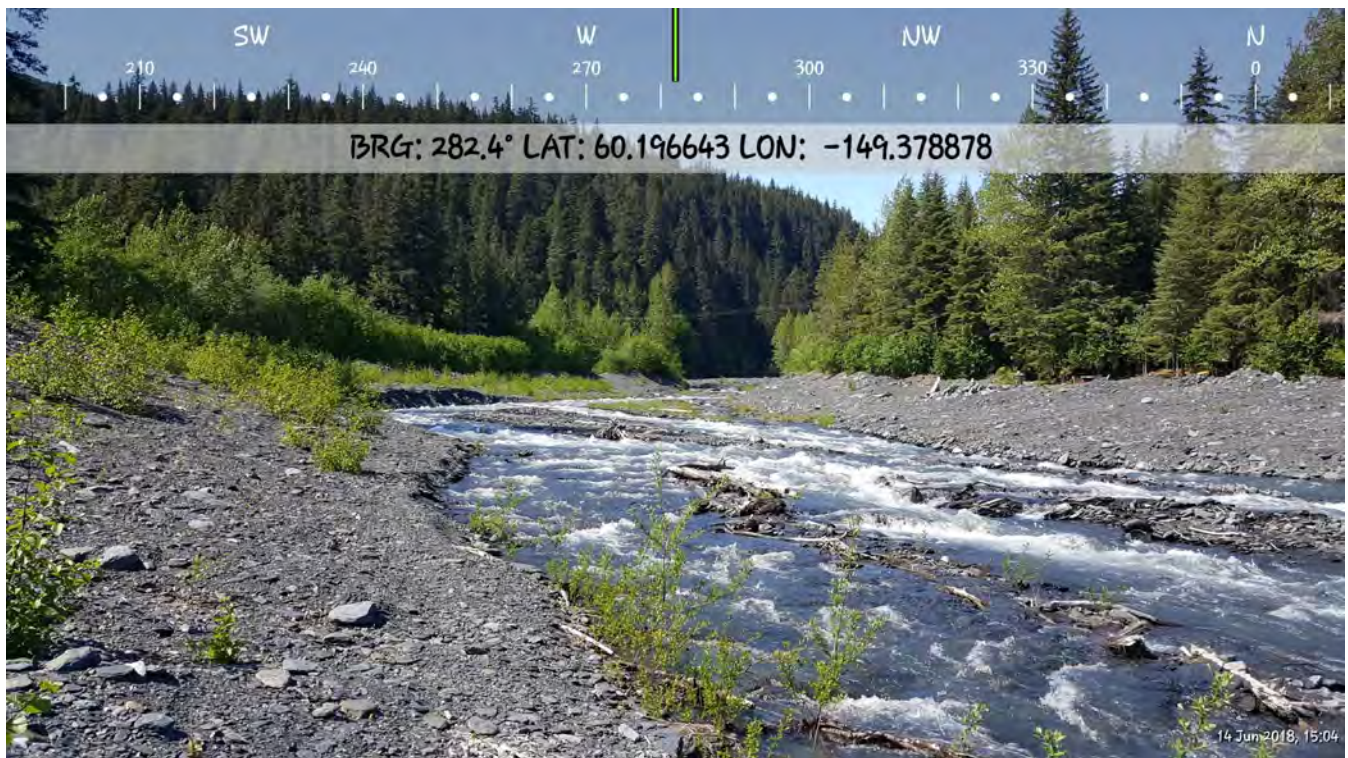
0.2 0 0.12 0.2 Miles

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

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Lost Creek prior to event, looking upstream from river right to Tongass Ln. cul-de-sac.



Lost Creek during event, looking upstream from river left.





Looking downstream to the Forest Rd bridge from river right, prior to the high water event.



Looking downstream to the Forest Rd bridge from river left, during the event.





Looking downstream from Forest Rd bridge to Que Sera Dr.



Looking across Lost Creek to the eroded Tongass Ln cul-de-sac.



## Seward/Bear Creek Flood Service Area

302 Railway Avenue, Suite 123  
Seward, Alaska 99664  
907-224-3340 • 224-5197 Fax

TO: All Prospective Participants  
FROM: Stephanie Presley, Seward/ Bear Creek Flood Service Area Program Lead  
DATE: July 17, 2018  
SUBJECT: SCOPE OF WORK – Kwechak Creek Channel & Embankment Restoration

LOCATION: LOCATION: Salmon Creek (locally known as Kwechak, Glacier or Stoney Creek) located within T 1N R 1W SEC 14 SEWARD MERIDIAN SW 2004013 QUESTA WOODS ESTATES #8 TRACT A1B (Lat. 60.17777, Long. 149.38595 – Lat. 60.17485, Long. 149.39260). Project area to begin near the Flood Hazard Area sign on the left bank of Kwechak Creek on parcel number 12502240 and continue approximately 1,600 feet downstream to a smooth transition with the current channel on parcel number 12502238.

PROJECT JUSTIFICATION: Gravel embankments maintain the channel of Kwechak Creek downstream of the Bruno Road Bridge. An existing 2,600 foot long, 4-12 foot tall gravel berm exists to channelize the creek to protect Bruno Road and the Questawoods neighborhood. The high water event of June 18-20, following the remnants of typhoon Maliksi, eroded 80% of the total mass of the embankments in several locations, including several near breaches on both banks. Emerging situation patches were completed June 18-19, during the high water event. KPB Roads Service Area plans to complete work to the upstream 1,000 feet of the embankment along Bruno Road. Increased bed elevation and eroded banks, in future high water events, may lead to substantial flooding on adjacent properties, including private home sites, public property and road infrastructure.

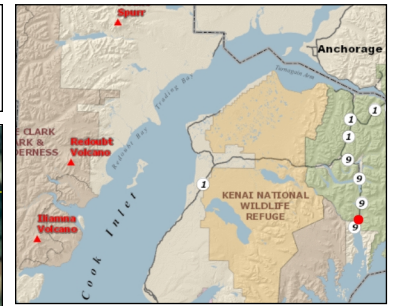
PROJECT OBJECTIVE: Heavy equipment will be used to push gravel from the thalweg of the creek to the east, to restore the eroded water diversion structures. The project will begin at the southern extent of the KPB Roads Service Area section (near the Flood Hazard Area sign) and continue approximately 1,600 feet downstream. The area is approximately 130 feet wide at the upstream end, and 225 feet wide at the downstream end. Material will be dredged eight to ten feet down to a smooth transition with the creek channel. The restored embankment will match the height of the current berm, 6-12 feet tall, and 10-12 feet wide. Tracked equipment will pass over the embankment at least one time to compact the materials. All gravel dredged, approximately 64,000 cubic yards, will be used for embankment restoration. No gravel will be removed from the creek drainage area. Access to the site will be from the corner of Oakwood Street and Myrtlewood Circle.

PROJECT TIMELINE: This work will be completed between Aug. 1 and Aug. 17, 2018.

PROJECT MANAGEMENT: Will be provided by the Seward/ Bear Creek Flood Service Area. All permits have been or will be obtained by the Seward/ Bear Creek Flood Service Area Board. Project management will be notified 72 hours prior to any work.

PERMITS OBTAINED: State Fish Habitat Permit FH-17-V-0244, KPB Floodplain Permit 11698, US Department of the Army POA-2017-460\_NPR





## Legend

- Tax Parcels
- Tax Parcels



0.1 0 0.06 0.1 Miles

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

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THIS MAP IS NOT TO BE USED FOR NAVIGATION

## Notes

- Orange - SBCFSA
- Green - KPBRoads





*Kwechak Creek looking downstream from river right, near Myrtlewood Circle corner, during event.*



*Kwechak Creek looking downstream from river left, during event.*





*Kwechak Creek looking downstream from river right, near Myrtlewood Circle, at completed patch work.*



*Kwechak Creek looking upstream from river right, near Myrtlewood Circle, at completed patch work.*



## Seward/Bear Creek Flood Service Area

302 Railway Avenue, Suite 123  
Seward, Alaska 99664  
907-224-3340 • 224-5197 Fax

TO: All Prospective Participants  
FROM: Stephanie Presley, Seward/ Bear Creek Flood Service Area Program Lead  
DATE: July 17, 2018  
SUBJECT: SCOPE OF WORK – Lost Creek Channel & Embankment Restoration

LOCATION: Lost Creek located within T 1N R 1W SEC 12 SEWARD MERIDIAN SW 0000093 OLD MILL SUB (Lat. 60.19768, Long. 149.38122 – Lat. 60.19317, Long. 149.37662). Project area to begin approximately 1,900 feet upstream of the Forest Road bridge, and continue downstream to 100 feet upstream of the bridge.

PROJECT JUSTIFICATION: Existing gravel berms maintain the channel of Lost Creek through the Forest Road bridge, protecting infrastructure and residents along Tongass Lane, Willow Drive and Que Sera Drive. The high water event of June 18-20, following the remnants of typhoon Maliksi, eroded 80% of the total mass of the embankments in several locations, including 100% of some sections of the berm along river right. Heavy equipment was mobilized during the event to patch the berms near breaching. Breached berms and increased bed elevation can cause substantial flooding on adjacent properties, and may do so in future flood events, damaging businesses, private home sites, public property and road infrastructure.

PROJECT OBJECTIVE: Heavy equipment will be used to push river run material from center creek to the right and left banks to restore the existing water diversion structures. The project will begin just downstream of the eroded Tongass Lane cul-de-sac and continue approximately 1,900 feet downstream on river right, to the Forest Road bridge right-of-way, with a smooth transition to the up and downstream channel. The river left embankment will be restored along approximately 1,300 feet, upstream of the bridge right-of-way. Embankments will be restored to 6-12 feet tall, and 10-12 feet wide. Efforts will be made to move the active channel to one side so work can be completed on the other bank, in mostly dry conditions, to lessen the effects of sediment transportation downstream. All gravel dredged, approximately 32,000 cubic yards, will be used for embankment restoration. No gravel will be hauled out of the creek drainage area. Tracked equipment will pass over the embankments at least one time to compact the materials. Access to the site will be from Que Sera Drive. This work will be completed between Aug. 1 and Aug. 17, 2018.

PROJECT MANAGEMENT: Will be provided by the Seward/ Bear Creek Flood Service Area. All permits will have been obtained by the Seward/ Bear Creek Flood Service Area. Project management will be notified 72 hours prior to any work.

PERMITS OBTAINED: State Fish Habitat Permit FH-18-V-0191, KPB Floodplain Permit #####, US Department of the Army POA-2018-###\_NPR





## Seward/Bear Creek Flood Service Area

302 Railway Avenue, Suite 123  
Seward, Alaska 99664  
907-224-3340 • 224-5197 Fax

TO: All Prospective Participants

FROM: Stephanie Presley, Seward/ Bear Creek Flood Service Area Program Lead

DATE: July 17, 2018

SUBJECT: SCOPE OF WORK – Sawmill Creek (Upstream) Channel & Embankment Restoration

LOCATION: Sawmill Creek located within T 1N R 1W SEC 36 SEWARD MERIDIAN SW SW1/4 SE1/4 (Lat. 60.13011, Long. 149.36998 – Lat. 60.12740, Long. 149.37363) Project area to begin approximately 1,200 feet upstream of the Alaska State Department of Transportation right-of-way, on CIRI parcel number 14523165, and continue downstream to 100 feet upstream of the bridge.

PROJECT JUSTIFICATION: Existing gravel berms maintain the channel of Sawmill Creek through the Nash Road Bridge and downstream to the bay. The high water event of June 18-20, following the remnants of typhoon Maliksi, eroded 80% of the total mass of the embankments in several locations, including a breach on river right, upstream from the Nash Road bridge, a breach on river left approximately 1,200 feet upstream, and deposited gravel in the active stream channel. Breached berms and increased bed elevation can cause substantial flooding on adjacent properties, and may do so in future flood events, damaging businesses, private home sites, public property and road infrastructure.

PROJECT OBJECTIVE: Heavy equipment will be used to push river run material from the thalweg of the creek to the right and left banks to restore the existing water diversion structures. The project will begin upstream of the breached areas and continue approximately 1,200 feet downstream to the Nash Road Bridge right-of-way with a smooth transition to the up and downstream channel. Embankments will be restored to 6-12 feet tall, and 10-12 feet wide. All gravel dredged, approximately 24,000 cubic yards, will be used for embankment restoration. No gravel will be hauled out of the creek drainage area. Tracked equipment will pass over the embankments at least one time to compact the materials. Access to the site will be from the end of Godwin Circle. This work will be completed between Aug. 1 and Aug. 17, 2018.

PROJECT MANAGEMENT: Will be provided by the Seward/ Bear Creek Flood Service Area. All permits, except one for work on CIRI property, have been obtained by the Seward/ Bear Creek Flood Service Area. Project management will be notified 72 hours prior to any work.

PERMITS OBTAINED: Alaska State Department of Natural Resources Land Use Permit LAS 31656, Alaska State Fish Habitat Permit FH-16-V-0311, KPB Floodplain Permit 11763, US Department of the Army POA-2017-114-NPR

PERMIT REQUIRED: The awarded contractor will be required to obtain a land use permit from CIRI Land Development Company for work on KPB parcel number 14523165. The contractor will

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be the permit applicant and permit holder and the one who provides certificate of insurance to CIRI under the permit. Permit fees will be waived for the permits due to the conservation purpose of the permitted activity. The following is the permitting procedure that will be used:

Contractor will apply for land use permit at: <https://www.cirilandpermit.com/Permit>. On the permit application the "Purpose of Access" will be a copy and paste of this scope of work for the Sawmill Creek project. CIRI will prepare a permit for execution by the contractor/applicant. The contractor/applicant will return the signed permit to CIRI along with a certificate of insurance naming CIRI as additional insured.

DRAFT





0.1 0 0.06 0.1 Miles

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

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THIS MAP IS NOT TO BE USED FOR NAVIGATION



## Legend

☐ Tax Parcels



## Notes

River run materials will be pushed from the thalweg to restore the channel and rebuild the right and left banks. Access from Godwin Circle.





Sawmill Creek looking downstream to the Nash Rd bridge at the river right breach during the event.



Looking upstream at an eroded section of river right on CIRI parcel 14523165.





Looking downstream from river right to eroded left bank.



Sawmill Creek channel and embankment maintenance project completed August 2017.

## Inside this Issue

- 1 Hazard Mitigation Planning Can Be Fun!
- 2 NORFMA Conference
- 2 FloodSmart Returns
- 2 Training Workshops
- 2 New HMGP Fact Sheet
- 2 Volcanic Hazards Video
- 2 Job Opening
- 3 Online Training Calendar

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

# News from Region 10

## Hazard Mitigation Planning Can Be Fun!

The City of Eugene shows us how

Eugene-Springfield Natural Hazards Mitigation Planning (NHMP) staff, with guidance from OEM and FEMA mitigation experts, decided to switch tactics for their 2020 NHMP update to generate more public involvement. The new outreach efforts started May 17<sup>th</sup> at Eugene's annual Public Works Day. Staff wanted to determine if there were any gaps between children and adults in their understanding of hazards. Recognizing today's children will manage and influence the plan in 5, 10, or 15 years, staff developed an activity both children and adults could participate in and understand, while helping guide planning efforts.

It was a fast-paced, hands-on event with thousands of people attending. Children and adults talked with staff to learn some of what goes on behind the scenes with the NHMP. While at the booth, participants ranked the natural hazards they thought were the most important to "be stronger against." People were eager to engage with staff. Many were surprised and interested to learn there are people employed in mitigating natural hazards for their community. People asked a host of questions concerning the NHMP and natural hazards the City of Eugene faces.

Responses from the event produced some surprising results. One thing the City recognized was how comparable the public's view of risk was to the NHMP Project Team's risk assessment for the City. Many of the children seemed to have a realistic grasp on many of the



hazards in question. Very few children placed their vote on winter storms while several adults did. We believe this is due to adults remembering the devastating Ice Storm of 2016 and "snow days" are hoped for by children across the nation. Making NHMP outreach more engaging and hands-on proved successful and far surpassed the expectations of NHMP staff.

The next large event will be a "Disaster Movie in the Park" on August 31st. Eugene Water and Electric Board (WEB) and the City of Eugene, along with support from the City of Springfield, Rainbow Water District, and Springfield Utility Board (SUB), will be partnering to host this event. The format will be similar to the Public Works Day NHMP outreach. Attendees will be asked to vote on specific mitigation action items they would like to see completed followed by an interactive disaster movie.

– Jessica Gourley is an Emergency Management Analyst with the City of Eugene, Oregon. For more information about the event, email [Jessica.K.Gourley@ci.eugene.or.us](mailto:Jessica.K.Gourley@ci.eugene.or.us).



## NORFMA News

### Annual Conference

September 26-28  
Silver Reef Hotel & Casino  
Bellingham, WA

Registration is now open for the NORFMA Annual Conference. This year's theme is *Floods, Fish, Farms: Balancing Multiple Needs in Northwest Floodplains*.

### Call for Abstracts

Come share your work with fellow floodplain managers! NORFMA is seeking submittals for workshops or presentations on floodplain projects, regulatory environment, and other emerging issues.

### Conference Scholarships

A limited number of scholarships are available to assist communities and students attending the conference in Bellingham. New this year, Alaska scholarship recipients will also be eligible for a hotel stipend to help defray travel costs.

Abstracts and scholarship applications are due by July 15<sup>th</sup>. For more information, visit <http://norfma.org/>.

## FloodSmart Returns

If you recently updated your web links and outreach materials when the FloodSmart.gov site was taken down, it's time to put it back. The official website for the NFIP has a brand-new design and a fresh approach to information about flood risk and insurance. Update your links now: <https://www.floodsmart.gov/>.

## Ask the Help Desk

The Region 10 Service Center is here to help local community officials and stakeholders with technical, training, mitigation, and mapping questions. Email us at [RegionXHelpDesk@starr-team.com](mailto:RegionXHelpDesk@starr-team.com).

## Newsletter Ideas?

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

Articles can be up to 500 words and may include pictures. Email [RXNewsletter@starr-team.com](mailto:RXNewsletter@starr-team.com).

## Featured Training

### Coastal Construction Workshops

Registration is now open for five one-day training classes on coastal construction this summer in Oregon and Washington. The course will be a condensed version of the four-day E0386 [Residential Coastal Construction course](#) that is offered by the Emergency Management Institute.

Dunes City, OR – July 17  
Astoria, OR – July 18  
Lincoln City, OR – July 19  
Montesano, WA – September 12  
Tacoma, WA – October 24

### ESA Puget Sound Workshops

FEMA Region 10, National Marine Fisheries Service (NMFS), and Washington Department of Ecology are teaming up again to offer workshops to discuss the 2008 NMFS Biological Opinion (BiOp) on the Implementation of the NFIP in Puget Sound and the three "doors" to compliance. The target audience are local floodplain administrators from communities in the Puget Sound impacted by the BiOp. These workshops will cover a general overview of the NFIP, requirements resulting from the BiOp, and what a habitat assessment needs to contain to show compliance.

Bremerton, WA – July 26  
Everett, WA – August 9  
Tacoma, WA – September 11

For details and to register for these featured training workshops, visit <http://starr-rsc10.eventbrite.com>.

## Planning-Related Activities Fact Sheet

The FEMA Mitigation Planning program in coordination with FEMA Hazard Mitigation Assistance (HMA) announces the release of a new fact sheet, [Planning-Related Activities Using Hazard Mitigation Grant Program 7 Percent Funding](#) (May 2018). The fact sheet encourages use of planning-related activities funding available from the Hazard Mitigation Grant Program (HMGP). It is intended for use by state, tribal, and/or local governments to improve mitigation plans and leverage related activities to advance mitigation efforts and outcomes.

## Suggested Viewing

### Volcanic Hazards

Check out this brief and informative video from the Washington Emergency Management Division on volcanic hazards (two thumbs up): <https://youtu.be/7tKZEM4Hdg>

## Job Opening

**Earthquake Program Manager –  
Physical Scientist  
FEMA Region 10  
Lynnwood, WA**

<http://www.usajobs.gov/GetJob/ViewDetails/501019700>

## Online Training

(All times Pacific)

### How to Review a “No-Rise” Certification

June 7, 10 am  
Online – 1 CEC

### Elevation Certificates

June 14, 10 am  
Online – 2 CEC

### Determining Base Flood Elevation

June 28, 10 am  
Online – 1 CEC

### CRS: Preparing an Annual Recertification

July 17, 10 am  
September 18, 10 am  
Online – 1 CEC

### CRS: Repetitive Loss Properties

July 18, 10 am  
Online – 1 CEC

### Letters of Map Amendment

July 19, 10 am  
Online – 1 CEC

### NFIP Basics

August 2, 10 am  
Online – 1 CEC

### Introduction to CRS

August 21, 10 am  
Online – 1 CEC

### CRS: Flood Insurance Promotion (Activity 370)

August 22, 10 am  
Online – 1 CEC

### Floodplain Development Permit Review

September 13, 9 am  
Online – 1 CEC

### Inspecting Floodplain Development

September 13, 10:30 am  
Online – 1 CEC

### CRS Activity 410 (Floodplain Mapping)

September 19, 10 am  
Online – 1 CEC

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To register for online courses, visit STARR’s training site online at [j.mp/starronlinetraining](http://j.mp/starronlinetraining), or email [RXTraining@starr-team.com](mailto:RXTraining@starr-team.com).





## KPB Hazard Mitigation Plan – July Update

From Brenda Ahlberg

We're on target with the DRAFT mitigation plan. It is available for public comment on the KPB OEM page ([CLICK HERE](#)). In August-ish, we'll be scheduling public meetings throughout the borough as well as regrouping with municipalities on next steps (schedule below).

Borough's plan - timeline (updated):

- May = internal review of all section updates; 2<sup>nd</sup> workshop with Seward/Bear Creek Flood Service Area to incorporate East peninsula into the Flood Section
- July = draft provided for public review onto KPB OEM page
- Summer 2018 = public input gathered
- August = submit to state for initial review
- Fall 2018 = internal edits/final review
- Winter 18/19 = KPB committees, i.e. LEPC, Planning Commission, Service Area boards, etc.
- Winter 18/19 = submit to FEMA for review
- Spring 2019 = final edits/FEMA approval
- May 2019 = plan adoption (incorporate Cities' updated LHMPs as annexes)
- July 2019 = FEMA deadline completed – WHEW!