

#### **Meeting Agenda - Final**

#### Planning and Zoning Commission

Wednesday, July 28, 2021	7:00 PM	Civic Center Conference Room

**Regular Meeting** 

#### **REGULAR AGENDA - 7:00 PM**

- I. CALL TO ORDER
- II. ROLL CALL
- III. PUBLIC BUSINESS FROM THE FLOOR
- IV. PUBLIC APPEARANCES
  - 1. Presentation: Robe Lake Salmon Habitat Restoration Project
- V. REPORTS
  - 1. Planning Director's Report
- VI. COMMISSION BUSINESS FROM THE FLOOR
- VII. ADJOURNMENT



Legislation Text

File #: 21-0387, Version: 1

**ITEM TITLE:** Presentation: Robe Lake Salmon Habitat Restoration Project **SUBMITTED BY:** Kate Huber, Planning Director

#### FISCAL NOTES:

Expenditure Required: N/A Unencumbered Balance: N/A Funding Source: N/A

#### **RECOMMENDATION:**

N/A - receive and file

#### SUMMARY STATEMENT:

Mike Wells from the Valdez Fisheries Development Association (VFDA) will present to the commission regarding a proposed project, in collaboration with the US Army Corps of Engineers (USACE) to study options for increasing water flow in Corbin Creek and controlling vegetation within Robe Lake, all with the intent of improving salmon habitat.

In August, the VFDA will be looking to the Valdez City Council to provide a letter of support, and willingness to join the project as a co-sponsor.

Following tonight's presentation, Mr. Wells would like to hear initial feedback from the commissioners regarding the proposed project. Staff will pass along comments received during the meeting to the Clerk's office for inclusion in the Council agenda packet for consideration of co-sponsorship.

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# Robe Lake Salmon Habitat Restoration Project



## **Robe Lake**

## Largest fresh water lake in Port Valdez

## Approx., 682 acres. Mean depth of 3.12 meters, 5 meters max depth

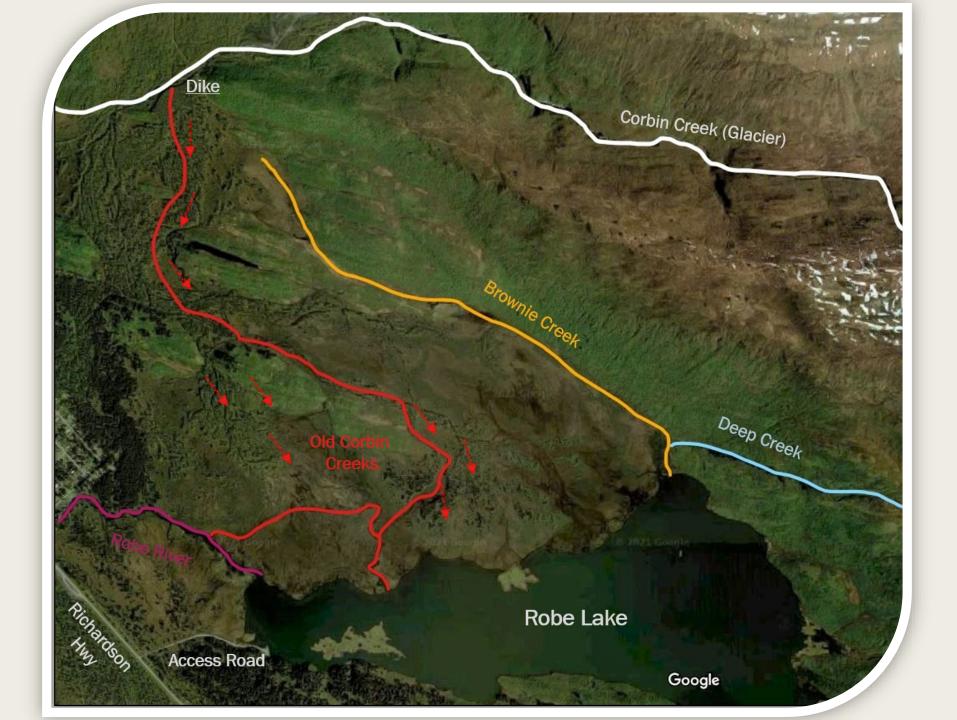
Three tributaries:Old Corbin CreekSingle outlet:Robe RiverBrownie CreekDeep Creek

✓ Corbin Creek Coho salmon is the donor stock for VFDA's sport fishery enhancement program

✓ Sockeye & Coho salmon stocks are important to sport fishery and other customary users

✓ Popular community recreational area for kayak, SUP, boating, and waterfowl hunting

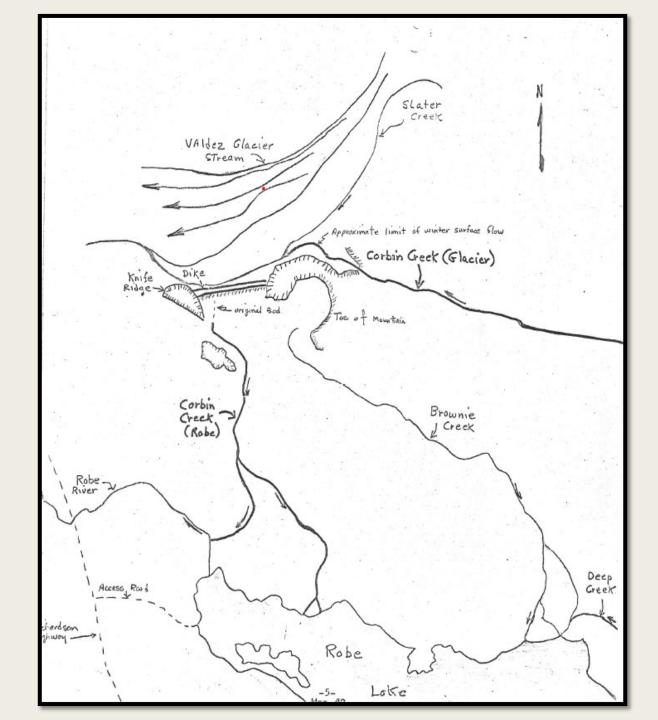
 $\checkmark\,$  Float plane landing and mooring



# Chronology of Lake Change

Prior to 1956	1956	1966	1970	1981 to date
Valdez Glacier Stream overflow deposited into the lake via Corbin creek Cold glacial water deposited silt preventing light from penetrating shallow depths Aquatic vegetation kept in check	City of Valdez diked main Corbin Creek flow to protect Richardson Hwy	Changing lake dynamics allowed water to warm, increasing growth of aquatic vegetation	City of Valdez received EPA Clean Lakes Program grant to establish baseline data and identify methods to restore the lake	<ul> <li>VFDA, ADF&amp;G, COV conducted studies to assess lake change, map stream flows, determine methods to control vegetation, and maintain salmon habitat</li> <li>Purchased a mechanical weed harvester</li> <li>Manual stream restoration in 1988 to improve spawning habitat</li> <li>Annual weed removal funded by COV grant</li> </ul>

Results are diminishing



# **Robe Lake Habitat Project Goals**

- Increase water flow to Old Corbin Creek to reduce aquatic growth and keep spawning beds open naturally
- Mechanically improve existing stream channel entrances in Old Corbin and Brownie Creek to provide better access for existing spawning stock through aquatic plant removal
- Increase lake size where feasible through mechanical vegetation removal.

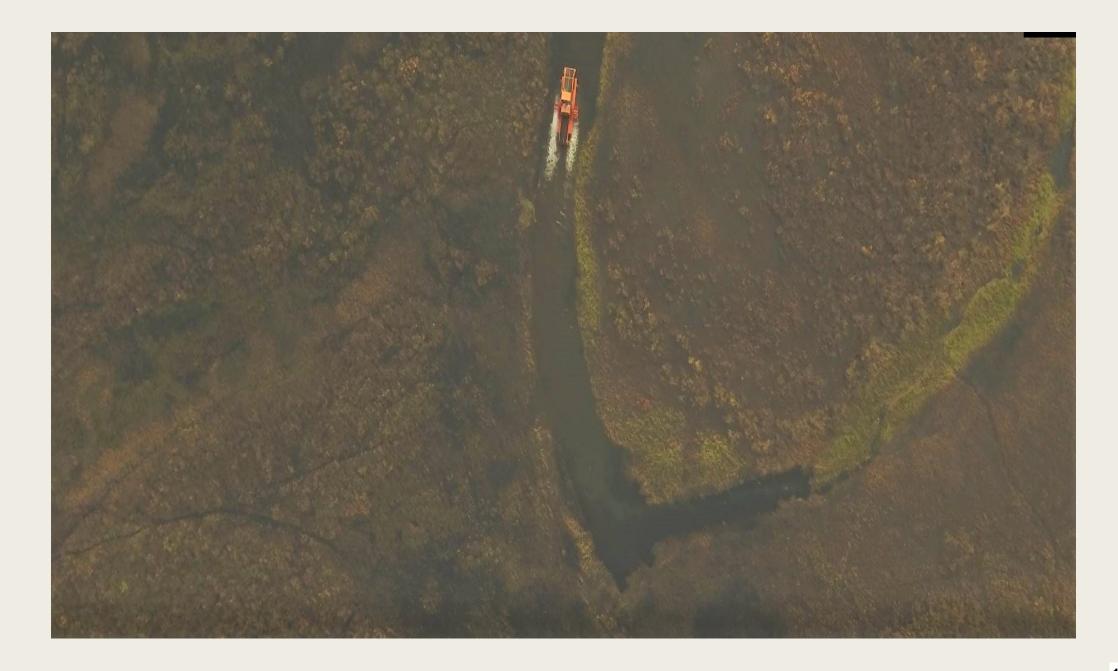
## **Current Robe Lake Efforts**

## Mechanical Aquatic Vegetation Removal

- Cooperative annual effort funded by the City of Valdez and the Valdez Fisheries Development Association
- Removing approximately 400-500 cubic yards annually
- In the process of sourcing a new aquatic harvester

## Habitat Analysis of Robe Lake

- Environmental study funded by a City of Valdez grant
- Evaluate and provide a current status update
  - Survey contemporary lake area
  - > Map existing stream channels for Brownie and Corbin creeks
  - Determine annual tributary and outlet flows
  - Identify opportunities for improvement; including non- mechanical, cost, permitting, and funding sources



## A Long Term Solution? Develop a non-mechanical solution to control vegetative growth through improved lake flushing.

U.S. Army Corp of Engineers (ACOE) Section 206 Aquatic Ecosystem Restoration Program.

- VFDA has petitioned the ACOE to evaluate Robe Lake and propose a long term solution
- The ACOE has agreed to conduct a Federal Interest Determination for a project.  $\sqrt{We}$  are Here!
  - First step in assessing viability of a project and identifying sponsors.
  - > ACOE will spend up to \$100,000 with no non-federal match required.
  - > If viable, will conduct a Cost Shared Feasibility Study Requires a 50% non-federal match
    - Non-federal match may be reduced by up to \$511,000 if sponsor works with a federally recognized native tribe.
  - If feasible, project moves to Project Partnership Agreement Requires a 35% non-federal match
- VFDA has agreed to sponsor the project, contingent upon identifying interested parties to cosponsor the non-federal portion of the project.

## Benefits of Co-Sponsorship

- Project is within the community of Valdez. Project improvements may be proposed for lands owned by a co sponsor
- Robe Lake is a popular community recreational site and provides an important salmon resource for subsistence, sport, and commercial harvests
- Co-sponsors would have a seat at the decision table to evaluate the project and address interests, public concern and impacts of the proposed solution to land use and surrounding developments
- Improved lake ecosystem for salmon production brings economic value to Prince William Sound and benefit through increased resource harvest opportunity
- Long term solution may help to reduce costs of future mechanical mitigation
- Opportunity to improve upon a man-made negative environmental condition

# Example Cost of Co-Sponsorship

• Cost Shared Feasibility Study – 50% Federal/ 50% Non-Federal

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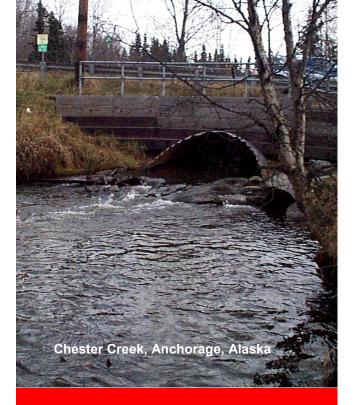
Estimated cost of the Cost Shared Feasibility Study	\$ 1,200,000
Federal share is 50%	- \$ 600,000
Non Federal Share is 50%	\$ 600,000
If a co sponsor is a federally recognized native tribe, first \$511,00 is waived	<u>-\$ 511,000</u>
Non Federal Share	\$ 89,000
Project Design and Construction – 65% Federal/ 35% Non-Federal	
Estimated cost of a hypothetical project design and construction	\$ 3,000,000
Federal Share is 65%	<u>-\$ 1,950,000</u>
Non-Federal Share is 35%	\$ 1,050,000
If a co sponsor is a federally recognized native tribe, first \$511,00 is waived	<u>-\$ 511,000</u>
Non Federal Share	\$ 539,000

- Lands, Easements, Right of Ways, Relocations, and Disposal Credit to project of up to 35% of non-federal contribution
- Operations and Maintenance costs are 100% non federal

## Next Steps

- Approve Letter of Interest to become a co-sponsor of this ACOE Section 206 Aquatic Ecosystem Restoration Program Project for Robe Lake
   Letters of Interest are due no later than August 10<sup>th</sup>
- Letter of Interest can be conditioned upon future governing bodies approval of spending
- Work with the ACOE and other co-sponsors to develop a project that improves Robe Lake, the community of Valdez, and the lives of Prince William Sound residents

## **Questions?**



#### How does the process start?

The Corps may begin a Section 206 or 1135 study after it receives a formal letter of request from the prospective sponsoring community. A sample letter of request is included on the back of this brochure.

The letter of request and any other inquiries about the Section 206 Aquatic Ecosystem Restoration Program or Section 1135, Modifications of Corps Projects to Improve the Quality of Fish and Wildlife Habitat, should be sent to the address below.

U.S. Army Corps of Engineers, Alaska District ATTN: CEPOA-PM-C-PL P.O. Box 6898 Joint Base Elmendorf-Richardson, Anchorage, AK 99506-0898 Email: POA.AKCAP@usace.army.mil

## Sample letter to request a study

District Commander Alaska District, U.S. Army Corps of Engineers ATTN: CEPOA-PM-C-PL P.O. Box 6898 Joint Base Elmendorf-Richardson, AK 99506-0898

Dear Sir:

This letter is to request the assistance of the U.S. Army Corps of Engineers under Section 206 of the Water Resources Development Act of 1996, Aquatic Ecosystem Restoration, or Section 1135 of WRDA 1886, Modifications of Corps Projects to Improve the Quality of Fish and Wildlife Habitat, in planning and designing a project for ecosystem restoration at (location) in (city or town, etc.).

Briefly described the potential project, why it is being requested, its approximate size, and any specific problems or needs.

We understand we would be required to pay the non-Federal cost share for both planning studies and project implementation.

Thank you for considering this request. Please contact (name, address, phone, email) for more information.

Sincerely,

Name Title





Alaska District U.S. Army Corps of Engineers

## Section 206 and Section 1135 **Ecosystem Restoration Programs**

Under the U.S. Army Corps of Engineers Continuing Authorities Program (CAP), Section 206 of the Water Resources Development Act (WRDA) of 1996, Aquatic Ecosystem Restoration, provides authority for projects that restore degraded ecosystem function and values (including hydrology and plant and animal communities, or portions of them) to a less degraded ecological condition.

Section 1135 of WRDA 1886, Modifications of Corps Projects to Improve the Quality of Fish and Wildlife Habitat provides the authority to modify the structure or operation of an existing Corps project.



# What the Corps of Engineers can do

Projects under Section 206 should restore degraded ecosystem functions and values, including hydrology and plant and animal communities or portions of them, to a less degraded ecological condition. Examples of aquatic ecosystem restoration projects might include enabling salmon to reach blocked spawning grounds, enhancing nesting territory for waterfowl, or restoring flow to a degraded stream. The maximum Federal limit is \$10 million per project, including study costs. The Corps pays for the initial \$100,000 of the study cost, with the remaining cost shared 50/50 with the non-Federal sponsor. Implementation costs are shared 65 percent Federal, 35 percent non-Federal with the non-Federal sponsor.

Projects under Section 1135 should concentrate on engineering and other technical solutions because these projects must modify the structure or operation of an existing Corps project. The maximum Federal limit is \$10 million per project, including study costs. The Corps pays for the initial \$100,000 of the study cost, with the remaining cost shared 50/50 with the non-Federal sponsor. Implementation costs are shared 75 percent Federal, 25 percent non-Federal with the non-Federal sponsor.



# Chester Creek, Anchorage, Alaska

### Fast Facts About Sections 206 and 1135

	Section 206	Section 1135
Project Purpose	Restore aquatic habitat for fish and wildlife	Restore fish or wildlife habitat impacted by an existing Corps project
Who May Sponsor	Public agency (e.g. city, state) , some private interests or large non-profit organization	Same as Section 206
Maximum Federal Cost	\$10 million, including planning studies	Same as Section 206
Sponsors Responsibilities	Acquire needed land, easements, rights-of-way etc; operate and maintain project; and be willing and able to provide non-Federal cost share.	Same as Section 206
Cost Sharing	50% planning after first \$100,000 Federal; 65% Federal, 35% non- Federal implementation costs	50% planning after first \$100,000 Federal; 75% Federal, 25% non-Federal implementation costs 16

#### VALDEZ FISHERIES DEVELOPMENT ASSOCIATION, INC. SOLOMON GULCH HATCHERY



P.O. Box 125 Valdez, AK. 99686 1815 Mineral Creek Loop Road Valdez, AK 99686 (907) 835-4874 Fax (907) 835-4831 Mike.Wells@valdezfisheries.com

July 5, 2021

COL Damon Delarosa U.S. Army Corps of Engineers – Alaska District 2204 3rd St. JBER, AK 99506-1518

RE: VFDA Letter of Interest for Robe Lake Habitat Restoration

Dear Colonel Delarosa,

This Letter of Interest is to request the assistance of the U.S. Army Corps of Engineers (ACOE), under Section 206 of the Water Resources Development Act of 1996, *Aquatic Ecosystem Restoration,* for planning and designing of a project for the long-term improvement of salmon habitat in Robe Lake located in Valdez, Alaska.

The Valdez Fisheries Development Association, Inc. (VFDA), established in 1980, is a 501(c)3 not for profit organization formed to develop renewable fisheries resources for the benefit of sport, commercial, subsistence, and personal use fisheries in Alaska. VFDA operates the Solomon Gulch hatchery and has a long history of maintaining salmon spawning habitat in the Robe Lake watershed to protect and enhance indigenous Coho and Sockeye salmon stocks, which are harvested by local residents and are a donor stock for VFDA's hatchery programs.

Robe Lake is the largest fresh water lake in the Port Valdez area with an historic size of approximately 682 acres. It is a very shallow lake with a mean depth of just 3.12 meters and only 5 meters at its deepest point. Three tributaries feed the lake: Brownie creek, Old Corbin creek, and Deep creek. Prior to 1956, the main channel of Corbin creek, and on occasion the Valdez Glacier Stream, flowed into the lake. This cold and turbid glacial water kept the lake bottom covered in silt and prevented light from penetrating its shallow depth, keeping aquatic vegetation in check. This inflow of water was estimated to provide a complete flushing of the lake about once a month. In 1956, the main stem of Corbin creek was redirected out of the lake by the City of Valdez to protect the Richardson Highway from wash-outs; unfortunately, this action changed the lake ecology and within ten short years, the negative environmental effects of this action became apparent. By 1982, the estimated flushing rate slowed to once every five months. VFDA has observed that the aquatic plant growth is rapidly increasing. If left unchecked, this growth may greatly reduce or completely shut down the lake's ability to support the successful spawning of its indigenous species.

VFDA seeks assistance from the ACOE to find a long-term solution to reduce the growth of aquatic vegetation and return the lake to its previous condition. This could be accomplished through rechanneling some of the original inflow of Corbin Creek into the lake. Other

considerations to improve existing salmon habitat may be to improve existing stream systems through mechanical excavation and rechanneling.

Robe Lake lies within the municipality of Valdez, Alaska. As such, the lake is heavily used by the community for recreation, waterfowl hunting, fishing, and for float plane operations. In addition, the municipality has two residential housing developments in proximity to the Robe Lake flood plain that may be impacted by future changes in the lake's hydrology. Acceptability of recommended solutions will need to be carefully considered to accommodate concerns by the City of Valdez and its residents.

Finally, VFDA is aware of the requirements for nonfederal contributions of 50% to determine feasibility, and up to 35% for design and construction of any proposed solution. As a small not for profit entity, VFDA has limited funds to participate as the sponsor and because the cost of the projects next steps are not yet defined, participation beyond the Federal Interest Determination will be contingent on VFDA's ability to identify and recruit other non-federal partners to share in the Cost Shared Feasibility Study, project design and construction, costs for "Lands, Easements, Right-Of-Way, Relocations and Disposal Areas" (LERRD), costs to demonstrate ownership of such, and cost of any operation and maintenance of the project.

Your consideration of this request is greatly appreciated. We are very excited that the ACOE has taken an interest in bringing a long-term solution to help slow the decline of Robe Lake salmon habitat. Please contact me if you have further questions.

Sincerely,

Mike H. Wells, Executive Director



Legislation Text

File #: 21-0388, Version: 1

ITEM TITLE: Planning Director's Report SUBMITTED BY: Kate Huber, Planning Director

#### FISCAL NOTES:

Expenditure Required: N/A Unencumbered Balance: N/A Funding Source: N/A

#### **RECOMMENDATION:**

N/A - report only

#### **SUMMARY STATEMENT:**

The Planning Director will give a verbal report during the meeting.