

MATANUSKA-SUSITNA BOROUGH Fish & Wildlife Commission

350 E Dahlia Ave., Palmer, Alaska 99645

CHAIRPERSON

Andy Couch

VICE CHAIR

Peter Probasco

MSB STAFF

Maija DiSalvo



BOARD MEMBERS

Howard Delo

Larry Engel

Tim Hale

Gabe Kitter

Bill Gamble

Kendra Zamzow

Ex officio: Jim Sykes

Regular Meeting

October 24, 2024

Meeting Packet - Table of Contents

Pg. = Item:

- 1 = Agenda
- 4 = Draft ADF&G Meeting Questions
- 6 = Draft Water Reservations Letter
- 7 = Takes Fish Booklet
- 9 = Pike Suppression Projects

Physical Location of Meeting: Conference Room 203, DSJ Bldg, 350 E. Dahlia Ave., Palmer

Remote Participation: See attached agenda on p. 1

Planning and Land Use Department - Planning Division

<http://www.matsugov.us> • planning@matsugov.us

**MATANUSKA-SUSITNA BOROUGH
MSB Fish and Wildlife Commission
AGENDA**

Edna Devries, Mayor

Andy Couch – Chair
Peter Probasco – Vice Chair
Gabriel Kitter
Howard Delo
Larry Engel
Tim Hale
Bill Gamble
Kendra Zamzow
Jim Sykes – Ex officio member

Maija DiSalvo – Staff



Michael Brown, Borough Manager

PLANNING & LAND USE DEPARTMENT
Alex Strawn, Planning & Land Use Director
Maija DiSalvo, Planning Services Manager
Jason Ortiz, Development Services Manager
Fred Wagner, Platting Officer

*Conference Room 203
Dorothy Swanda Jones Building
350 E. Dahlia Avenue, Palmer*

**OCTOBER 24, 2024
REGULAR MEETING
4:00 p.m.**

Ways to participate in MSB Fish and Wildlife Commission meetings:

IN-PERSON: Conference Room 203, DSJ Building

REMOTE PARTICIPATION VIA MICROSOFT TEAMS:

Join on your computer:

[Click here to join the meeting](#)

Meeting ID: 245 910 175 149

Passcode: 4vQhrN

Or call in (audio only):

1-907-290-7880

Phone conference ID: 999 949 510#

I. CALL TO ORDER

II. ROLL CALL – DETERMINATION OF QUORUM

III. LAND ACKNOWLEDGEMENT

"We acknowledge that we are meeting on traditional lands of the Dena'ina and Ahtna Dene people, and we are grateful for their continued stewardship of the land, fish, and wildlife throughout time immemorial."

IV. PLEDGE OF ALLEGIANCE

V. APPROVAL OF AGENDA

VI. AUDIENCE PARTICIPATION (*three minutes per person*)

VII. STAFF/AGENCY REPORTS & PRESENTATIONS

- A. Staff Report
- B. West Susitna Access Road – Alaska Department of Transportation
- C. Chair’s Report
- D. Waterbody Setback Advisory Board Update

VIII. UNFINISHED BUSINESS

- A. ADF&G Fishing Season Summary Meeting
 - a. December 5, 2024 – 5:00 pm – Location TBD
 - b. Review of Draft Questions
 - c. Public Etiquette Expectations
- B. Revision to Water Management Regulations
 - a. Review Draft Letter – Comment Deadline – October 29, 2024
- C. Board of Game Proposals
 - a. Comment Deadline – December 27, 2024
 - b. Work Group Development
- D. Board of Fisheries Planning
 - a. Prince William Sound/Upper Copper Proposals & Meeting Dec. 10-16, 2024
 - b. Agenda Change Request Work Session – Anchorage – October 29-30, 2024
 - c. Board Appointments/Reappointments

IX. NEW BUSINESS

- A. MSB State Legislative Fishery Priorities
 - a. Legislative Meeting – December 19, 2024
 - b. CAPSIS Work Group – Project & Budget Development
- B. MSB Fish & Wildlife Commission Appointments/Reappointments
- C. NOAA Meeting Report/Update – Jim Sykes, FWC

X. MEMBER COMMENTS

XI. NEXT MEETING DATE: Thursday, November 14, 2024 – 4:00 pm - Assembly Chambers

XII. ADJOURNMENT

Disabled persons needing reasonable accommodation in order to participate at a MSB Fish and Wildlife Commission Meeting should contact the borough ADA Coordinator at 861-8432 at least one week in advance of the meeting.

ADF&G 2024 Fishing Season Summary Questions - DRAFT

1. To date the department has done an exemplary job of identifying the degree of infestation of Northern Pike in Upper Cook Inlet waters. However, the efforts to date in removing this very destructive invasive species does not seem to be getting the attention and effort needed to provide the positive results necessary to eradicate this predator. Recognizing the fact that Northern Pike have a very detrimental impact on salmonid species, especially coho and chinook what are the Departments plans to address this very challenging issue?
2. Has the Department researched the effects of river otters on Northern Pike in lakes and tributaries? If so, could the department elaborate on the pros and cons of utilizing a more robust population of river otters to suppress pike in lakes or tributaries with little to no salmon left?
3. Aside from reducing sport or commercial fishing pressure, what is the department's number one priority in rebuilding southcentral Alaska's king salmon?
4. Does the department plan to gather more data on the Lake Louise and Susitna Lake systems to ensure its trophy-class fishing opportunities are not overfished? The lake trout and Burbot that make the area so popular for Ice fishing are becoming increasingly fished and harvested, which has caused concern for the long-term sustainability of the fishery.
5. Recognizing the dramatic reduction of coho and chinook salmon returns to Upper Cook Inlet waters what are the conservative management practices the Department will implement in 2025 and beyond to enhance and provide protection for these stocks?
6. Would you please provide sockeye salmon genetic survey data from Upper Cook Inlet fish harvested in the commercial fisheries by period / week for your most thorough analysis considering 2023 and 2024 harvests?
7. Do you anticipate any changes in how the department might manage fisheries harvesting Mat-Su / Northern Cook Inlet coho salmon stocks in 2025? If so, what are you considering?
8. The Fish Map App allows people to collect and send data to nominate fish species and life stages to the Anadromous Waters Catalogue. Are there other citizen data collection efforts that ADFG finds useful, or areas where ADFG can envision the public providing useful information?
9. What are the most critical unfunded research needs for ADFG in the Mat-Su Borough?
10. The legislature recently funded an Upper Cook Inlet coho salmon genetic study. Please provide a brief description of this project. For example, what are the studies goals or expectations? When will the study start and what is the projects duration? Identify sampling locations and frequencies of collections. When will program results be available to the public?

11. In 2024, for the first time in decades, the Upper Cook Inlet offshore test fishery was not operational. Will this project be functional next year or is it no longer an important management tool?

DRAFT



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

Planning Division

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7833

www.matsugov.us

October 24, 2024

Alaska Department of Natural Resources
Division of Mining, Land & Water
Program Support Section
550 W. 7th Avenue, Suite 1070
Anchorage, AK 99501-3579
dnr.water.regulation@alaska.gov

Re: Revisions to Water Management Regulations

The Matanuska Susitna Borough (MSB) Fish and Wildlife Commission (FWC) appreciates the opportunity to provide public input on potential revisions to Alaska's current Water Management Regulations ([11 AAC 93 of the Alaska Water Use Act \(AS 46.145\)](#)). The FWC represents the interests of the MSB in the conservation and allocation of fish, wildlife and habitat and advises borough officials, state or federal agencies and other organizations with interests that may impact conservation of fish, wildlife, and habitat. The members of the FWC combined bring well over 100 years of experience researching and managing fish and wildlife resources within Alaska.

The MSB lies at the head of Upper Cook Inlet and contains the Susitna River, the Matanuska River, and more than 50,000 miles of mapped streams. This vast region provides robust wildlife habitat and supports all five species of Pacific salmon. As the core area continues to grow and develop, we recognize that there are known as well as unintended consequences to rivers, streams, and the wetlands, riparian areas, and intermittent and ephemeral streams that contribute to water flow, aquatic life, and water quality. In growing areas, the MSB has invested millions in fish passage improvements, reopening more than 1000 stream miles and 6000 acres of lake habitat for salmon rearing and spawning.

Within the 25,000 square miles of the MSB landscape changes such as glacial melt and intense or long periods of rain may affect all areas, including pristine areas, with resulting impacts on water bodies. Researchers have documented water temperatures warm enough to affect fish migration and spawning in lakes (MSB Volunteer Lake Monitoring data, available upon request) and non-glacial streams throughout the MSB ([Mauger et al, 2016](#)), while glacial and non-glacial streams have experienced flood events that have washed out salmon redds, potentially changing salmon reproductive success.

Throughout Upper Cook Inlet, residents fish commercially, personal use dip net, sport fish, and four indigenous communities are important subsistence users - Tyonek, Knik, Eklutna and

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Chickaloon. The FWC recognizes the value of preserving this productive salmon habitat and the importance of tools that support responsible development and habitat preservation in the Mat-Su. Maintaining instream flows is essential to Alaska, its people, and our local and state economy. In-stream flow reservations are an important tool in achieving this.

Over the past several years, king and coho salmon returns have reached historic lows. In August 2024, the FWC formally requested the Alaska Board of Fisheries (BOF) designate Susitna drainage king salmon as a Stock of Yield Concern. Additionally, the Mat-Su Delegation submitted a mirroring request to designate Little Susitna coho salmon as a Stock of Yield concern. Both requests were supported by the MSB Assembly. If either request is approved by the BOF, a management plan would be put in place to help restore the stock. Salmon populations are likely being affected by changes in both the marine and freshwater environments. In the wake of already struggling king and coho returns and the anticipation of continued growth and development in the MSB core area and landscape changes throughout the state, understanding and maintaining natural stream flow and water quality has become increasingly important.

It is critical that the Alaska Department of Natural Resources (DNR) manages public waters in a way that ensures the continued health and productivity of important fish and wildlife habitat. Decisions about how public waters are allocated, reserved, or otherwise appropriated are of utmost importance. **The FWC supports the existing laws regulating the reservations of water and would not support changes to the program that would negatively impact the ability to maintain flows in rivers, streams, and lakes.** The FWC would support a plan for public outreach and education to improve public understanding of the rules and regulations governing water uses and reservations.

Additionally, the FWC believes any changes to Alaska's water management regulations should:

- 11 AAC 93.510:
 - Require broad public notice and allow adequate time for the public comment, including applications for temporary water use, which may be granted for five-year periods and renewed multiple times. An application period of 60 days would allow a more sufficient timeframe for review, especially for boards, agencies, or organizations who may only meet on a monthly, bi-monthly, or quarterly basis. Feedback from these groups is essential in gathering robust feedback from valuable subject matter experts.
- 11 AAC 93.040:
 - Include consultation with the Alaska Department of Fish & Game (ADF&G) on all applications to ensure sufficient water quality and quantity remains to support fish and wildlife spawning, rearing and migration.
- 11 AAC 93.142 Content of application:
 - Consider the reasonable risks associated with future development, specifically with already identified projects that have the potential to influence stream flow directly or indirectly (through impacts to surrounding landscape).

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- Consider anticipated trends in water temperatures (ie. streams prone to warming, identify contributing factors that influence water temperature, and consider if more water will be needed in the future to keep temperatures cool enough for fish). Consider whether changes in stream flow may affect the depth or frequency of pools used by cold water fish for refuge from warm temperatures.
- 11 AAC 93.146 Issuance of a certificate of reservation of water:
 - Certificates of reservation of water should be held by DNR, Alaska Department of Fish & Game (ADF&G), or other entities with the funding, experience, and capacity to continue to hold them. As mentioned above, ADF&G should be consulted by any agency or group applying for a water reservation. However, any groups with the capacity and expertise to gather data and monitor streams (e.g. Tribes, long-standing non-profits) should be allowed to receive certificates for the reservation of water. Given the vast area within the MSB and across the state, and the fluctuations in funding ADFG research, allowing other groups to gather data and monitor streams provides the public benefit of learning more about the systems.
- 11 AAC 93.147 Review of reservation of water:
 - Fully fund and staff the water reservation program to mitigate a backlog of applications and to enhance DNR's ability to review reservations as necessary. Applications should be processed in the order in which they are received.
 - (a)(2) a significant change affecting the water resource; including shifts in water temperatures.

Healthy fish and wildlife populations support the livelihood, recreational, and cultural and subsistence values of a multitude of communities, businesses, and individuals. Maintaining adequate flows in rivers, streams and lakes to support healthy habitat for fish and wildlife populations is essential throughout our region and all of Alaska.

The Matanuska Susitna Borough (MSB) Fish and Wildlife Commission (FWC) appreciates the opportunity to provide public input on potential revisions to Alaska's current Water Management Regulations. Please contact us with additional questions.

Sincerely,

Andy Couch
Chair, Matanuska-Susitna Borough Fish & Wildlife Commission

Providing Outstanding Borough Services to the Matanuska-Susitna Community.

Alexander Creek Suppression

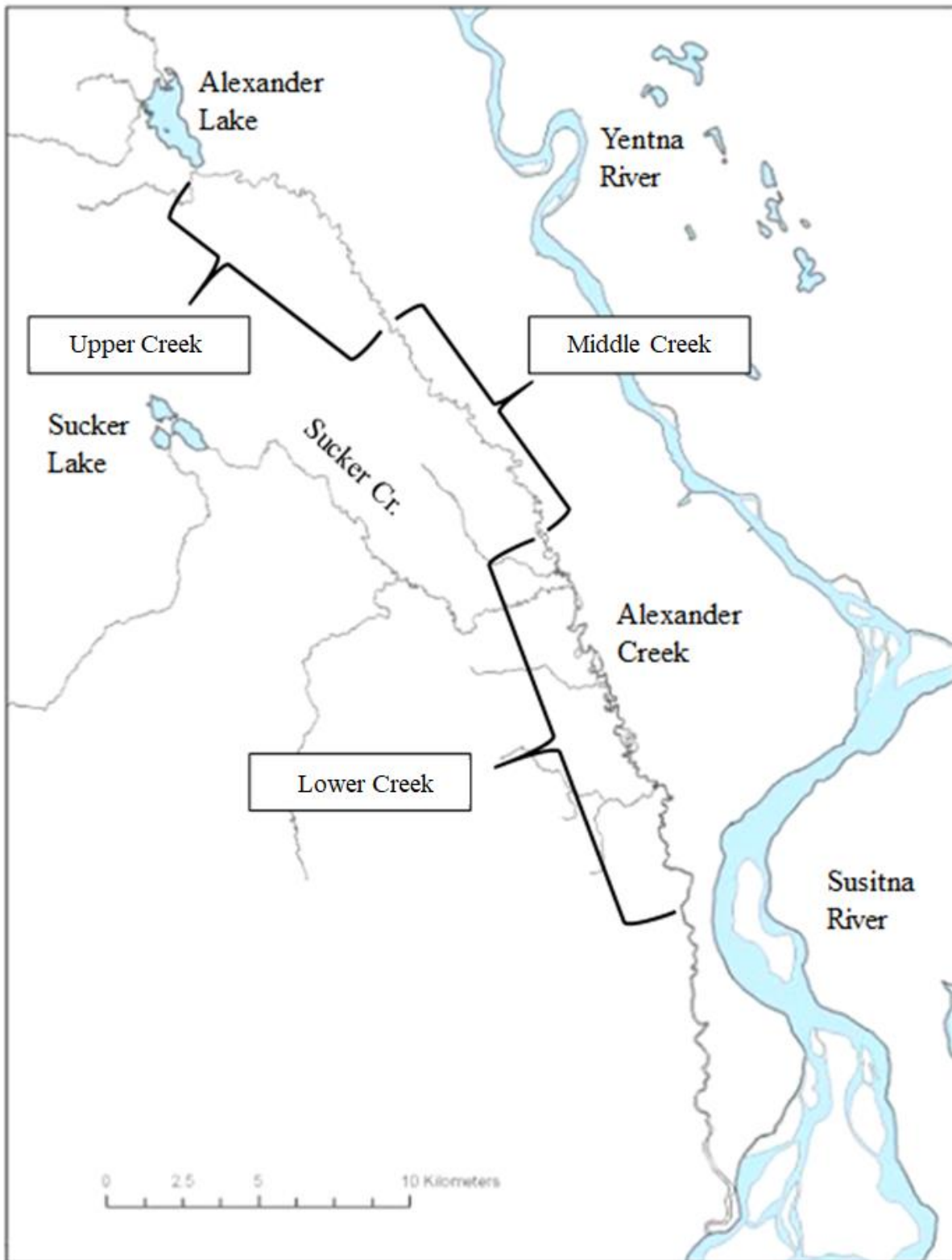
What are we doing?

- Currently boating 2 crews of 2 FWT II's to Alexander Creek as soon as possible in the spring. One crew nets the lower section, one crew nets the upper section. Cody (currently vacant PCN) and I operate middle camp for 3 days with very intensive netting. Typically, we have a hard leave date a day or two before the last day of May (usually May 29th). This is because one FWT is budgeted for only May and has other obligations under another PCN. Additionally, we begin work in other locations in June (Threemile/Dehska River). Therefore, the date we can start based on spring break-up dictates our netting duration in Alexander Creek.

How well is it working?

- The amount of habitat we find juvenile salmon in is essentially limited to the “lower” section, which begins just below Sucker Creek. Historically salmon occupied the entire drainage, including all the tribs that flow into Alexander/Sucker. Now hardly any juvenile salmon occupy middle, and basically no salmon occupy the upper section, or Alexander/Sucker Lakes. The lower section also contains some of the best pike habitat, so they catch the most pike, and those pike are the salmon predators. Upper camp generally catches less than half the pike that lower camp does. Adult Chinook returns are still very low and with pike catch rates remaining consistent each year, and decreasing numbers of juvenile salmon showing up in pike stomachs, current efforts are not achieving Chinook recovery goals. Minimum escapement (2,100 Chinook) has not been met since 2005. Aerial counts were not conducted in 2022 or 2023 either due to high water or budget shortages, but the latest count in 2024 was 51 fish. We estimate that pike predation is reducing Chinook production in Alexander an additional 75-80% on top of overall production issues Chinook are facing statewide.
- Currently DNR is treating elodea in Alexander Lake. There is elodea also scattered down the creek in various sloughs that we net. The upper camp, because it's based at the lake, is a vector for moving elodea back upstream to the lake, where DNR is investing hundreds of thousands of dollars for elodea treatment. The gillnets can be literally full of elodea, and by pulling the nets, the front of their boat can be covered with elodea. Until elodea is eradicated from the creek (or DNR discontinues treating Alexander Lake), this upper camp might need to be eliminated. This is occurring in 2024 as a test run, and the upper camp's workload will be based out of Middle Camp.
- The ultimate reason we're not making progress in Alexander is that the mortality rate we're inflicting on the pike population is not exceeding the recruitment rate. By the time we're able to physically boat there in the spring, pike spawning is 99% complete. Therefore, there's always a fresh cohort waiting for us each spring.

Map of the Alexander Creek Drainage



Options for increasing pike mortality in the Alexander Drainage

(Any or all options could be implemented)

Option 1 - Fly crew to Alexander Creek early May

Typically, the ice goes out in Alexander in early May. We are not able to boat there until mid-May due to ice coming down the Susitna/Yentna. This delay causes us to miss the pike spawning event. Therefore, the idea is to fly a crew to Alexander Creek right after the ice goes out in the spring to begin netting in the lower sloughs. The primary purpose of this is to catch pre-spawned females, which will have a greater impact on the population. This would involve flying a crew into the lower section of the creek to a cabin where we have an inflatable boat/outboard stored. They would boat up to Rip/Ann's property where all necessary gear is available. The raft is very space limited, so it is unknown how many nets the crew can run. Other crew would boat from Doshka Landing when able and bring them a regular boat to continue netting efforts in the lower section.

Timeframe: early May

Budget: \$15,500

Pros:

- Will likely result in capture of pre-spawn females

Cons:

- Logistically challenging
- Very narrow window to capture pre-spawn females (5 days?)
- Unknown how effective this crew will be.
- Will require hiring staff at the end of April (paying for full month of benefits)

Option 2 - Utilize rotenone in select sloughs in the spring

These sloughs will have two things in common: a lack of rearing salmon and minimal connection to Alexander creek (meaning little rotenone outflow). About 16 sloughs have been identified meeting these criteria, which would require about 20 gallons of rotenone. This would not only kill at least as many pike as the gillnets, but it would kill age 0 and age 1 pike in the sloughs that are too small for our nets. For context, netting efforts removed 438 pike from these 16 sloughs in 2023. Additionally, these can be treated in one day, vs 3-5 days of netting. The netting crews can then focus on netting other sloughs. The primary purpose of this is to kill as many pike as possible in as short amount of time as possible before they leave the sloughs with dropping water levels.

Timeframe: May

Budget: \$2,000 for rotenone costs

Pros:

- This will maximize efficiency
- This will kill all age classes of pike, including YOY and age-1 pike which are typically not currently captured in our netting efforts.

Cons:

- This will kill all fish in the sloughs with grayling being the most common non-target species. Besides the pike caught in those sloughs in 2023, 89 grayling, 11 suckers, 3 rainbows and 1 burbot were captured. Since 2011, a very subtle increase in grayling catch rates have occurred in the upper sloughs, but there have been no noticeable changes in catch rates of other native species. We will need to decide if a similar mortality ratio (For 438 pike to 89 grayling plus the few other species) is acceptable collateral damage to benefit Chinook salmon.

Option 3 - Gillnet Sucker Lake

Currently Sucker Creek is the stronghold for Chinook salmon in the system and supports most of the spawning. Sucker Creek is not good pike habitat, and it's not possible to boat up/down very far (maybe doable about the first 0.4 miles below the lake). However, having a stronghold of pike at the headwaters is likely a significant contributing factor to juvenile salmon mortality for fish that move into Sucker Lake for rearing. To perform this, it would require flying in all gear/personnel, including an inflatable raft/motor. It would also require setting up a small camp for at least 10 days. Ideally the elodea is all eradicated before this is conducted so we aren't spreading it around the lake.

Timeframe: May, June, July or August

Budget: First year \$15,200 (net purchase), about \$5,000 each year after

Pros:

- This will result in heavy pike mortality in a lake that likely has rearing Chinook/coho moving in to rear

Cons:

- This will upset the 1-2 people with property on the lake
- Logistically challenging as there is no infrastructure there for us, so we would have to fly everything in

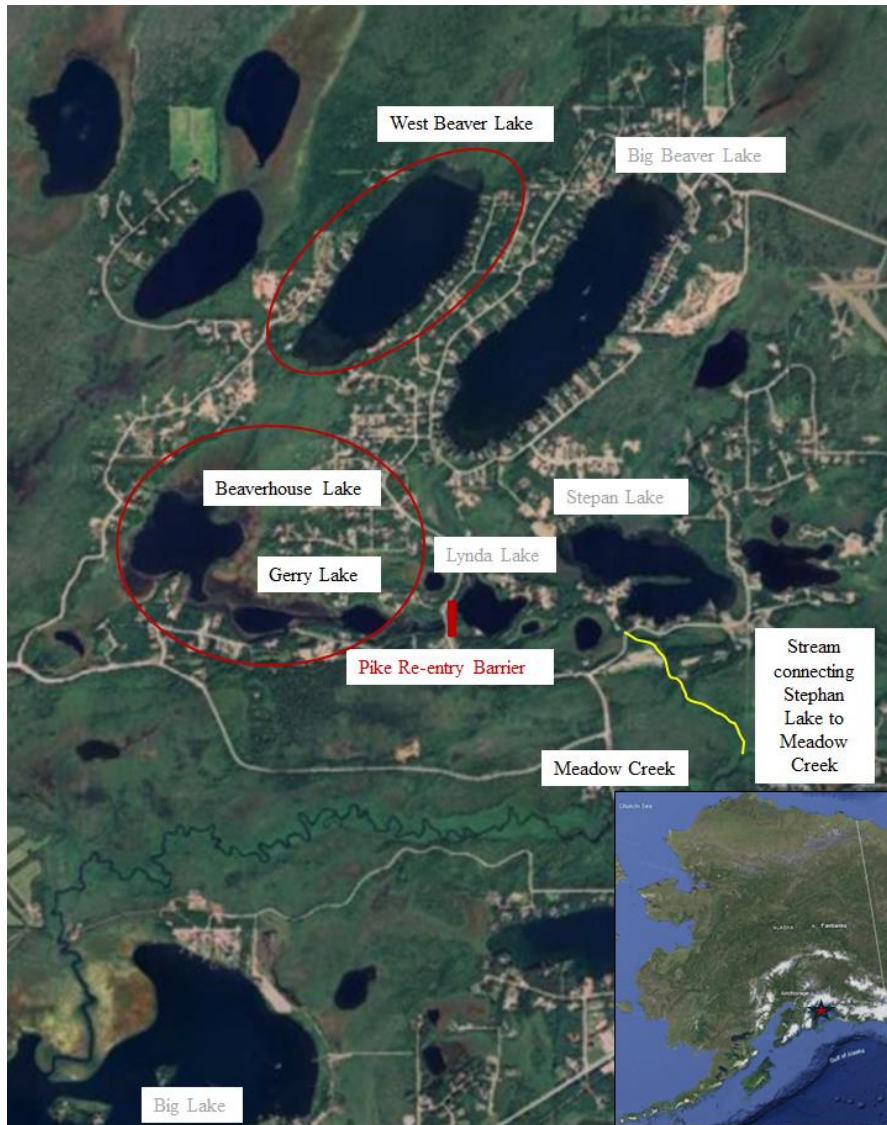
Gerry Lake Complex Pike Eradication and Native Fish Restoration

Eradication efforts in the Mat-Su Valley have been limited up to this point, primarily because many of the systems are interconnected to larger source populations, and without prevention methods to keep pike from returning, the eradication project would ultimately fail. This project aims to start chipping away at some of these interconnected systems invaded by pike by utilizing a pike re-entry barrier to maintain the waters upstream as pike-free following eradication. The concept of the barrier is to utilize a known weakness of northern pike, and that's their leaping ability. This project would utilize an existing culvert below Gerry Lake, and integrate a vertical drop that prevents pike from ascending.

Overall, we estimate at least 3,291 hectares of lakes (26% of all anadromous lake habitat) in the Mat-Su Valley no longer function as anadromous habitats due to invasive Northern Pike invasions. This is a significant ecological problem in a state where already low productivity of salmon, such as Chinook and Coho, is devastating local economies, and this project is the steppingstone to gaining some of that lost anadromous habitat back. Of the 14 anadromous lakes in the Fish Creek/Meadow Creek Drainage, pike are known to occur in at least 10 of them, which all serve as important rearing habitat, primarily for coho salmon. This year is on track to have the lowest coho salmon return on record. While other factors are at play impacting coho salmon populations, northern pike are likely a significant factor in the Meadow Creek/Fish Creek drainage.

Utilizing pike barriers is a novel concept, and if successful, opens the door to much more restoration potential in the Mat-Su Valley. This project would focus on the Gerry Lake Complex within the Meadow Creek Drainage in the Mat-Su Valley. Northern pike were first detected via monitoring surveys with gillnets in the Gerry Lake complex in September of 2020 following reports from a landowner on the lake. Within 3 years, the fish community became a complete monoculture of invasive pike, and these lakes no longer support juvenile salmon or rainbow trout. This project would essentially build a barrier just downstream of Gerry Lake, then remove all of the pike from West Beaver Lake, Beaverhouse Lake, and Gerry Lake. Native rainbows, stickleback, and suckers would be captured from elsewhere in the Meadow Creek drainage and returned to Beaverhouse and Gerry Lake. Additionally, minnow trapping would occur below Gerry Lake so juvenile salmon could be moved upstream of the barrier, giving them access to pike free rearing habitat. West Beaver is currently stocked with Rainbow Trout, and it would likely return to a stocked fishery.

Should this project occur and appear successful, a second phase of this project in future years could be repeated in Lynda, Stepan, and Big Beaver lakes with the installation of a Northern Pike re-entry barrier below Stepan Lake. But that would be contingent on the success of this current project in the Gerry Lake complex, future funding, and permissions for that effort.



Because this project involves hiring a contractor for designing a barrier, installing that barrier, then performing a rotenone treatment of 3 lakes, project costs are high. However, these costs are comparable with other fish passage/restoration projects. Estimated budget for this project is \$200,000. A more detailed budget can be provided upon request.