MATANUSKA-SUSITNA BOROUGH

350 E Dahlia Ave., Palmer, Alaska 99645

CHAIRPERSON
Mike Wood

VICE CHAIR
Andy Couch

MSB STAFF
Ted Eischeid

BOARD MEMBERS
Howard Delo
Larry Engel
Tim Hale
Peter Probasco
Jesse Sumner
Kendra Zamzow
Ex officio: Jim Sykes

FISH AND WILDLIFE COMMISSION

MEETING PACKET – TABLE OF CONTENTS

Regular Meeting

01/19/2023

Pg.---Item:

Physical Location of Meeting: LLCR, DSJ Bldg, 350 E. Dahlia Ave., Palmer.
Remote Participation: See attached agenda.

Planning and Land Use Department - Planning Division

Cell Phone (907) 795-6281

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

MATANUSKA-SUSITNA BOROUGH
MSB Fish and Wildlife Commission
AGENDA

Edna Devries, Mayor

Mike Wood – Chair
Andy Couch – Vice Chair
Howard Delo
Larry Engel
Tim Hale
Peter Probasco
Rob Yundt
Kendra Zamzow
Jim Sykes – Ex officio member

Ted Eischeid - Staff

Michael Brown, Borough Manager

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

Lower Level Conference Room
Dorothy Swanda Jones Building
350 E. Dahlia Avenue, Palmer

January 19, 2023
REGULAR MEETING
4:00 p.m.

Ways to participate in MSB Fish and Wildlife Commission meetings:

IN PERSON: Lower Level Conference Room, DSJ Bldg, 350 E. Dahlia Ave, Palmer.

REMOTE:

Microsoft Teams meeting

Join on your computer, mobile app or room device
Click here to join the meeting
Meeting ID: 274 857 148 438
Passcode: zcjjv8
Download Teams | Join on the web
Or call in (audio only)
+1 907-290-7880,,564446137# United States, Anchorage
Phone Conference **ID: 564 446 137#**
Find a local number | Reset PIN
Learn More | Meeting options

I. CALL TO ORDER

II. ROLL CALL – DETERMINATION OF QUORUM/LAND ACKNOWLEDGEMENT

III. APPROVAL OF AGENDA

IV. PLEDGE OF ALLEGIANCE

V. APPROVAL OF MINUTES
1. December 15, 2022, Regular Meeting Minutes

VI. AUDIENCE PARTICIPATION (*three minutes per person, for items not scheduled for public hearing*)

VII. STAFF/AGENCY REPORTS & PRESENTATIONS
1. Ted Eischeid, Planning Staff to FWC
2. Michael Mazzacavallo, ADF&G
3. Alex Strawn, MSB Planning Dept. Director

VIII. UNFINISHED BUSINESS
1. MSB Waterbody Setback draft OR 23-002
    a. Public Hearing
    b. RS FWC 23-01
2. Board Of Fisheries 2024 Meeting Goals & Proposals
3. ADF&G Game Season Summary Meeting Planning
4. North Pacific Fisheries Management Council

IX. NEW BUSINESS
1. Chair & Vice-chair Officer elections for 2023

X. MEMBER COMMENTS

XI. NEXT MEETING DATE:
1. February 16, 4 PM, Lower Level Conference Room, DSJ Building, Palmer.

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.

MSB FISH AND WILDLIFE COMMISSION

Regular Meeting: Dec. 15, 2022

MINUTES

DSJ Building, Lower Level Conference Room //TEAMS Remote Participation

Prepared by Ted Eischeid, Planner

I. CALL TO ORDER
Meeting called to order at 4:07 PM by chair Mike Wood

II. ROLL CALL – DETERMINATION OF QUORUM/LAND ACKNOWLEDGEMENT
Present:
Andy Couch (AC)
Howard Delo (HD)
Larry Engel (LE)
Pete Probasco (PP)
Mike Wood (MW)
Kendra Zamzow (KZ) joined remotely @ 4:45 PM.
QUORUM ESTABLISHED.

Not Present:
Tim Hale
Jesse Sumner

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

III. APPROVAL OF AGENDA
PP Moved; LE seconded;
Motion passes unanimously.

IV. PLEDGE OF ALLEGIANCE

V. APPROVAL OF MINUTES
1. November 17, 2022 - Regular Meeting Minutes
LE moved; PP seconded.
AC noted a change to Stephen Braun's title.
Motion passes unanimously as corrected.

VI. AUDIENCE PARTICIPATION (*three minutes per person, for items not scheduled for public hearing*):
1. Mike Stoltze, Commercial Fisher. Has interest in BOF meetings.
2. Bill Stoltze, MSB Staff. State budget may see a slight increase in ADFG budget. Sen. Sullivan's office offered opportunity to dialogue.
3. Melissa Heuer, SRC.
4. Becky Long, Talkeetna, interested in agenda items, esp. on the water setback issue.
5. Eric Booton, TU

6. Shannon Marin, KRSA.
7. Marc Lamoreaux, Eklutna Tribe.

VII. STAFF/AGENCY REPORTS & PRESENTATIONS

1. Staff Report – presented by Ted Eischeid

VIII. UNFINISHED BUSINESS

1. ADF&G Fisheries/Game 2022 Season Summary Meeting held 12/7/2022

Discussion ensued:
AC: Heard some people had appreciated the multiple forms of remote participation.
MW: NPFMC info was good; liked that ADFG was up at the dais with us; liked having only 7 questions; would suggest eliminating general introductions while inviting partipation.

2. MSB State & Federal Legislative Priorities

MW/AC will try to attend; can TED attend?
BRING BOF BOOKLETS;
LE: Should have a clean summary of weir needs and costs. CAN A.C. FACILITATE THIS?
AC raised concerns about Sam Ivey's season lengths for various weirs; surprised at the low cost of Colton's estimates. Might be good to prioritize these; Eklutna tribe said they'd support Jim Creek weir work (there might be money from tribes) – Marc said they'd support both.

MW: can we prioritize weirs now? Yes.

AC: Weir priorities:
1. Deshka
2. Jim Creek and/or Fish Creek
3. Chelatna

PP: We have to look at the big picture; sockeye is important to be documented in Chelatna, Judd, and Larson (AC also mentioned Fish Creek)

LE: we have to be careful about prioritizing at this stage as we might lose commercial fishing support, as well as we don't know ADFG's priorities; a good discussion, but we have to be careful identifying priorities; we should simply support all of these weirs being reinstated and the other weirs being open for the full season. All of these weirs are important; let's get ADFG behind this idea first.

PP: I would echo LE's comments.

AC: I heard the message loud and clear.

HD: I concur with LE; we've been losing weirs over time due to funding shortfalls; we need full funding for our current weirs and recently funded weirs.

MW: I agree. I want the Governor/Commissioner to get the message loud and clear we need more funding.

PP: if I was asked this question… If you look at the size of UCI fishery users compared to the amount management dollars addressing the resource there, there is a shortfall; good management requires all of these weirs to properly manage these resources for these UCI users;

PP: we need a FAQ with current funding, what is needed, and what the shortfall.

AC: do we need a cost estimate for genetic sampling as well? Who could we ask?

PP: central region comm fish research arm;

LE: we had a program for this three years ago who did this; see Andy Barkley. [AC will get this]

3. Board Of Fisheries 2024 Planning-Goals

Bill Stoltze: in 2023 four BOF positions will be up for appointment/reappointment. FWC will have an opportunity to make comment.

LE: we should coordinate on this with our partners.

MW: looking at the goals; submit goal ideas to Ted by January 5th for action on January 19; BOF nominees, one thing that worked really well was giving a fieldtrip to new BOF nominees in May/June (add this to budget).

AC: talked about ADFG coho harvest info from 2000-2017; we have seen a reduction of coho inriver over that time; we need to prioritize.

IX. NEW BUSINESS

1. MSB Waterbody Setback Ordinance

LE: this is an important issue for the FWC to consider; it has a potential negative impact; ADFG meeting, that our growing population could have negative impacts on fisheries; this should be a prioritiy item for the FWC; noted the history of setbacks.

AC: most development is occurring in the Jim Creek system, Fish Creek/Big Lake is an important system; a lot of development in the core area, especially in the Little Su River area; Jim and Fish Creeks have issues with warm water; we recently have been buying properties from flood prone areas, so in this context this is a bad idea.

LE: everyone should look closely at the justification for the proposed ordinance changes; maybe we should enforce the existing law; need to emphasize the importance of fisheries;

PP: I agree; someone needs to be at Tuesday's Assembly meeting to testify on this issue before the Assembly, perhaps you Mr. Chair;

MW: I think this is a poor ordinance revision; perhaps we should have Ted write a resolution?

Moved by PP, that the FWC send a designee to Dec. 20 meeting to speak on the setback ordinance and their desire to provide comments on this ordinance to the Assembly; second by LE.

We want to provide input on this issue.

KZ: we should have something in writing to give to Assembly members; we should also emphasize the economics end of this issue;

AC: LE's comment on the history on how this setback was changed and then reinstalled by referendum.

KZ: we might have a tribal position on this.

AC: are you, MW, going to represent the FWC?

MW: I need to check my calendar;

PP: I think MW should be the person, but I can fill in for your if your schedule conflicts;

Melissa Heuer: economics of sportfisheries info.

AC: Legislative priorities for the MSB is getting a set amount of money to buy out flood properties.

Motion passes unanimously.

2. North Pacific Fishery Management Council issues

PP: key is to find out NPFMC action on the advisory council recommendation; we need to figure out what happened on that recommendation.

PP: the court has provided a specific date for a new FMP; I think it will be some sort of joint management like what happens in the Bering Sea;

MW: the Bycatch Task Force Final Report – discussion; there has to be a way to work Kodiak, CI genetics from the big ocean to the river systems; maybe we could get some federal funding from Murkowski's office?

AC: Jamie O'Conner from Murkowski's office seemed to be optimistic that MSA and/or earmarks could generate money for genetics; maybe some money for habitat.

MW: there are two federal priorities that our interests apply to.

X. MEMBER COMMENTS

HD: This was a good meeting, with a lot of good discussion;

LE: Happy Holidays.

PP: Happy Holidays.

KZ: I echo everything others are saying; noted a Boom and Bust in the Bering Sea meeting;

AC: Couldn't get the TEAMS app to work though I tried several times; get to Ted some questions about a ADFG Game meeting; what are the ADFG's latest moose survey.

MW: Happy Holidays to everyone.

XI. NEXT MEETING DATES:

1. January 19, 2023 - LLCR

XII. ADJOURNMENT

Moved by HD, second by LE.
Motion passes unanimously.

Meeting stands adjourned at 5:56 PM.

_____ _____

Mike Wood, Chair **Dated**

ATTEST:

_____ _____

Ted Eischeid, Planner II Staff **Dated**

MATANUSKA-SUSITNA BOROUGH
Planning and Land Use Department
Planning Division
350 East Dahlia Avenue • Palmer, AK 99645
Phone (907) 861-7833
http://www.matsugov.us • planning@matsugov.us

Date: 19 January 2023

Re: FWC Staff Report – Ted Eischeid

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1. Board of Fisheries 2024

a. MSB Project Budget

b. SOA BOF Call For Proposals – Due April 10

2. 1/5/23 Special Meeting MSB Assembly with Mat-Su State Legislative Delegation

a. AC Write Up

3. Draft OR 23-002, MSB Waterbody Setbacks

a. ADF&G 2001 Landowners Guide to Fish Habitat (edited)

b. Public Comment packet received from E.P.

4. North Pacific Fisheries Management Council

5. FWC business

a. Process- Election of FWC Officers, Chair and Vice-Chair, for 2023

b. FWC Orientation Memo (your guide to FWC success)

c. Looking ahead: expiring FWC terms and BOF 2024

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3 January 2023

To: Kim Sollien, Planning Division Manager

From: Ted Eischeid, Planner II staff to MSB Fish & Wildlife Commission

RE: Budget for upcoming Board Of Fisheries 2024 meeting cycle

The Issue

We are entering another Board Of Fisheries (BOF) meeting cycle this next year, comprised of two weeks of meetings in Anchorage, Feb. 23-March 7 (13 days), at the Egan Center. During the 2014 BOF cycle the Mat-Su Fish and Wildlife Commission (FWC) was successful in getting the BOF to approve a "conservation corridor" proposal that returned more salmon to Mat-Su basin streams for residents and guests to harvest. However, the 2017 BOF cycle saw some erosion in our 2014 gains. The FWC was successful in 2020 in strengthening the conservation corridor concept along with helping create a personal use fishery on the Susitna River. They hope to build upon past gains in returning salmon to Mat-Su waters.

During both the 2014 and 2017 BOF cycle we had a budget of about $50,000 that was dedicated to a comprehensive BOF strategy. For 2020 that budget was initially reduced, but additional monies were found to once again add to this work. This memo presents a plan with a budget with the intent of maximizing our impact at the BOF meetings.

The Plan

Our plan, in order of priority:

1. Hire a consultant to coordinate and lead our BOF effort. This was done during the 2010, 2014, 2017, and 2020 BOF cycles. Rationale: Due to staff turnover there is little BOF experience to draw upon for staff helping the FWC be successful in advancing their proposals. The consultant typically works with the FWC on the lead up to the BOF meeting, and then is present full time for the two

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week meeting cycle. Former employees have said that the consultant was a key element in past successes and was the glue that held everything together. Estimated costs + expenses: $35,000.

2. Update and print BOF background booklets. We would update the last professionally produced booklet. Rationale: This booklet uses graphics and data to create the rationale for the FWC proposals for the BOF. This tool educates BOF commissioners and our supporters about our main issues and makes the pitch understandable. Estimated costs + expenses: $10,000
3. "War Room" rental at the Egan Center. In the past the MSB has partnered with the Kenai River Sportfishing Association to share a room onsite where staff and the consultant could work with FWC members and other allies, print out testimony as needed, and coordinate efforts with privacy. Rationale: Having a private place to coordinate, strategize, and print updates gives us an advantage over other groups who have no such private conference areas. Cost estimate for MSB's share: $5,500.
4. Lodging/mileage for FWC members. This facilitates having FWC members in Anchorage at the BOF meetings. Rationale: We have many talented FWC members to advocate for our proposals. This not only includes having members present to provide testimony, but also to individually lobby BOF members – an identified "best practice" – as well as work with allies on joint interests. It is also a safety issue as the meeting cycle occurs in late February and the many of the FWC members would have a long drive home in the dark on icy roads. Estimate: $9,500.
5. MSB salmon habitat tours: if excess funds allow, offering an area salmon habitat site tour to new Alaska BOF members, similar to what happened in 2019 in preparation for the 2020 meeting.

Preliminary total estimated costs for this BOF strategy: $60,000

This estimate uses accounts for inflation increases from 2020, a time of unprecedented inflationary increases.

Recommendation

We presently have just under $50,000 in the BOF project account. We respectfully request $10,000-$20,000 additional monies to implement our BOF plan.

- $10,000 additional request is a "bare bones" budget to fund this project fully;
- $20,000 additional request is to account for additional inflation, offering MSB salmon habitat site tours to new BOF members, and other unanticipated costs.

Boards Support Section
Board of Fisheries
Art Nelson, Executive Director
333 Raspberry Road
Anchorage, AK 99518
(907) 267-2292

Alaska Department of Fish and Game
Doug Vincent-Lang, Commissioner
PO Box 115526
Juneau, AK 99811-5526

www.adfg.alaska.gov

PRESS RELEASE **CONTACT: Art Nelson, 907-267-2292**
***For Immediate Release December 22*, 2022**

CALL FOR PROPOSALS
Alaska Board of Fisheries

THE ALASKA BOARD OF FISHERIES CALLS FOR PROPOSED CHANGES IN THE SUBSISTENCE, PERSONAL USE, SPORT, GUIDED SPORT, AND COMMERCIAL FISHING REGULATIONS FOR THE LOWER AND UPPER COOK INLET FINFISH, and KODIAK FINFISH FISHERIES.

PROPOSAL DEADLINE – MONDAY, APRIL 10, 2023

The Alaska Board of Fisheries (board) is accepting proposed changes to the subsistence, personal use, sport, guided sport, and commercial fishing regulations for the Lower and Upper Cook Inlet finfish, and Kodiak finfish management areas. Finfish includes salmon, herring, trout, other freshwater finfishes, and groundfish, including Pacific cod, for consideration by the board in its 2023–2024 meeting cycle. The board may also consider subsistence proposals for other topics (including other areas) under the subsistence proposal policy, 5 AAC 96.615, if proposals are submitted within this deadline and the board determines they meet the criteria in either 5 AAC 96.615(a)(1) or (a)(2).

To ensure the proposal book is finished in advance of the board meetings, the board sets Monday, April 10, 2023, as the proposal deadline.

Proposals may be submitted online, by mail, or fax at:

Online: http://www.adfg.alaska.gov/index.cfm?adfg=fisheriesboard.forms

Mail: ADF&G, Boards Support Section
P.O. Box 115526
Juneau, AK 99811-5526

Fax: (907) 465-6094

Proposals must be received by Monday, April 10, 2023 at the Boards Support Section office in Juneau. A postmark is NOT sufficient for timely receipt.

Interested parties are encouraged to submit proposals at the earliest possible date. The Board of Fisheries proposal form, including the on-line proposal form, is available at the Boards Support website, http://www.adfg.alaska.gov/index.cfm?adfg=fisheriesboard.forms. Proposal forms are also available at any Boards Support office. Proposals must be submitted on the current approved

form. Any additional information provided with the form, such as tables, Internet web links, or charts, will not be included in the proposal book.

The completed proposal form must contain a contact telephone number and address. Email addresses are appreciated. Please print or type the individual's or organization's name as appropriate.

All proposals are reviewed prior to publication. Language that is emotionally charged detracts from the substance of the proposal and may draw opposition not germane to the element(s) of the proposal. Such language may be edited or deleted prior to publication. **Proposals that do not meet the call will not be accepted**. Proposals must pertain to the region, species, and uses in this call. If duplicative proposals are received by the same individual or group only one will be included in the proposal book.

Proposals published in the proposal book will be referenced with the appropriate Alaska Administrative Code citation and include a brief description of the action requested.

Proposal books are sent to advisory committees and the public for review and comment. Proposals are posted online at http://www.adfg.alaska.gov/index.cfm?adfg=fisheriesboard.proposalbook. Those submitting proposals are encouraged to review the proposal book at their earliest convenience to ensure proposals are included and accurate. Noted errors and omissions should be reported to Boards Support immediately. The public is encouraged to visit the Board of Fisheries website frequently for news and information regarding the upcoming cycle.

Responsive proposals received by the proposal deadline will be considered by the Board of Fisheries during the October 2023 through March 2024 meeting schedule.

For more information, please contact the Alaska Board of Fisheries Executive Director, Art Nelson at (907) 267-2292 or art.nelson@alaska.gov.

From: Andy Couch
To: Theodore Eischeid; Miaji.DiSalvo@matsugov.us
Subject: Fish & Wildlife Commission Meeting Information & 2 Frontiersman Articles from Andy Couch. -- please share all
Date: Wednesday, January 11, 2023 2:08:07 PM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Ted and Commission Members,

Below is the actual dollars needed to fund established Mat-Su Salmon weir projects -- along with the narrative copy I provided Mat-Su legislators. In addition there is also the reply I received from ADF&G's Andy Barclay concerning a Coho Salmon Genetic Sampling / Testing program for Upper Cook Inlet during the 2023 summer. -- Andy Couch

Northern Cook Inlet Salmon Weir and Coho Salmon Genetic Testing Budget Requirements

In alphabetical order — costs supplied by Alaska Department of Fish and Game:

Chelatna Lake — At the head of Lake Creek would count a sockeye salmon population with the largest spawning escapement goal in the Susitna River drainage. This project has been unfunded for the past 3 years. Cost to fund throughout the sockeye salmon return — **$60,000.**

Deshka River — Currently counts a Chinook salmon population with the largest escapement goal within the Susitna River drainage — and also counts the early portion of a Coho salmon population with the ONLY coho salmon spawning escapement goal in the entire Susitna River drainage. Cost to extend project from August 15 — September 15 which would count the full coho run, and allow inseason management throughout that entire timeframe— **$40,000.**

Fish Creek —Currently funded to primarily count sockeye salmon escapement during the month of July. Cost to extend the Fish Creek project from July 31 — September 30 inorder to count the complete sockeye salmon and coho salmon returns (both of which have established ADF&G spawning escapement goals) thereby allowing better inseason management for both species throughout the season —$25,000.

Jim Creek — This project has currently been unfunded for the past 3 years. Cost to re-install the project from July 15 — September 30, which would count the entire coho salmon return which has an ADF&G established spawning escapement goal (McRoberts Creek), and therefore allows inseason management throughout this timeframe —**$55,000.**

Supplemental Weir Funding Needs —Total $180,000

Coho Salmon Genetic Testing of Upper Cook Inlet Commercial Harvest — This project was first established using money the legislature provided the Matanuska - Susitna Borough for salmon project funding in Upper Cook Inlet. This project has already established Upper Cook Inlet coho salmon genetic baselines, and provided four years of commercial harvest sampling results, but has been unfunded since 2016. Similar to sockeye salmon genetic testing, currently in place, coho salmon genetic testing allows the department to determine total run size, harvests rates, and productivity of specific coho salmon stocks within Upper Cook Inlet, thereby providing for better scientific management of these economically

important salmon stocks. **Cost Requested** — and expected to be received shortly.

Reply From ADF&G concerning Upper Cook Inlet Coho Salmon Genetic Study 2023:
I just talked to our regional coordinator. He said that even if we get plenty of funding to collect coho samples this summer, commercial fishery staff will be unable to collect them. The commercial fishery division just does not have the staff to collect additional samples this summer. The Soldotna office has had a really hard time finding people just to work on the sockeye sampling crew each summer, so hiring enough people by this summer to sample two species would be impossible. Also, many permanent Soldotna staff have either retired or moved on to another job in the last year, and some of those positions have not been filled yet. The ADF&G genetics lab has the capacity to analyze coho fishery samples this year, but we won't be able to do it if we can't get the samples.

Sorry to be the bearer of bad news! -- Andy Barclay

Mat-Su Anglers' Column for Friday January 6, 2022 Frontiersman

Maximum Benefit, Common Use, and Sustained Yield of Northern Cook Inlet Salmon Resources By Andy Couch

Article VIII of the Alaska Constitution speaks to Natural Resource Management including fish and water. I have specific thoughts about three specific sections: 2, 3, and 4.

Section 2. General Authority

The legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the State, including land and waters, for the maximum benefit of its people.

Section 3. Common Use

Wherever occurring in their natural state, fish, wildlife, and waters are reserved to the people for common use.

Section 4. Sustained Yield

Fish, forests, wildlife, grasslands, and all other replenishable resources belonging to the State shall be utilized, developed, and maintained on the sustained yield principle, subject to preferences among beneficial uses.

Starting with Common Use as discussed in section 3, if fish are reserved for the people of the State of Alaska for common use, there should be reasonable opportunities for all Alaska residents to harvest a portion of Northern Cook Inlet salmon. Reasonable must consider how many salmon surplus to spawning needs are available for harvest and how many people would like to harvest a share of that bounty or lack of bounty. When personal use fishers are allowed to keep zero king salmon on an annual basis, sport anglers are allowed to keep up to 5 king salmon per year (but only from Ship Creek or Eklutna Tailrace / Knik River hatchery enhanced fisheries as during the 2022 season), and even priority subsistence users in two small limited areas are limited to specific annual harvest limits, I question why Northern Cook Inlet commercial set netters are allowed to harvest as many king salmon as they can catch several days during the same season. I realize current regulations adopted by the Alaska Board of Fisheries allow this scenario, but I have serious doubts about how these regulations meet the common use clause of the State of Alaska Constitution.

Concerning utilizing, developing, and conserving Northern Cook Inlet's salmon resources in such a manner to provide maximum benefit for the state's people (Section 2): During the past 3 seasons, with much lower sport king and coho salmon harvest opportunities and sport king and coho harvest levels greatly reduced compare to the decade of 2000 - 2009, angler participation levels and economic output from the Northern Cook Inlet sport fishery has been dramatically reduced as well. With less nonresident and resident sport license monies, the salmon escapement weir projects funded by these and federal matching moneys have been cut creating additional management uncertainty. In addition the 4 primary developed boat launches to access Mat-Su Valley salmon fisheries (Little Susitna River Public Use Facility, Deshka Landing, Susitna Landing, and Talkeetna Boat Launch) have all seen dramatically reduced participation and user fees from which the boat launches are maintained and operated. It appears to me, current regulations are failing from the economic standpoint of providing maximum benefit for the people.

Sustained Yield and Benefit from Northern Cook Inlet Salmon Resources (Section 4): I believe all salmon user groups would benefit from conservative management that attempts to provide a more consistent and reasonable harvest opportunity amongst all user groups throughout the May — September time frame. Commercial, sport, personal use, and subsistence regulations should all be designed to provide a full season of reasonable harvest opportunity (reduced opportunity in times of shortage) for each user group, while still meeting salmon spawning escapement needs.

April 10, 2023 is the deadline for submitting Northern and Upper Cook Inlet fishery proposals for the 2023 / 2024 Upper Cook Inlet Board of Fisheries meeting where current regulations will be left in place or new regulations may be adopted. The Alaska Department of Fish and Game staff in Palmer (907) 746-6300 can be very helpful in developing and writing a person's proposal ideas in a manner that can increase the likelihood of adoption by the Board.

Good Luck and Fish On!

Andy Couch has written and helped other people write proposal(s) that have been adopted into regulation by both the Alaska Board of Fisheries and Alaska Board of Game.

Mat-Su Anglers Column for Friday Jan. 13, 2022 Frontiersman

Exploring Funding for Mat-Su Salmon Projects with Legislators By Andy Couch

On Friday January 6 the Mat-Su Borough along with the Palmer, Wasilla, and Houston Mayors met with Mat-Su Valley legislators to talk about legislative priorities. Mike Wood, chairman of the Matanuska-Susitna Borough Fish and Wildlife Commission and I also attended and signed up to briefly talk about funding needs to operate 4 Mat-Su Valley salmon weirs and a coho salmon genetic testing program that provides additional knowledge from Upper Cook Inlet commercial coho salmon harvests.

As mentioned in an earlier Mat-Su Anglers Column, the Jim Creek and Chelatna Lake weir projects have not been operated at all in the past 3 years. While Deshka River weir project has been operated throughout the king salmon season, but only funded for the early portion of the coho season, and Fish Creek weir is currently funded only for the month of July and does not record most of the coho salmon return. All 4 locations are important Mat-Su Valley salmon producers with Alaska Department of Fish and Game established salmon spawning goal(s). Currently Little Susitna River is funded for the entire Chinook and coho salmon returns (which each have a goal) and also counts chum, sockeye, and pink salmon returns without spawning escapement goals.

Jim Creek has a coho salmon goal on the McRoberts Creek tributary and another location where ADF&G counts a similar number of coho salmon on most years upstream of Leaf Lake. In addition to coho salmon, Jim Creek may also be the largest producer of sockeye salmon in the Knik River system. Cost for a weir project from mid-July to September 30 is **$55,000.**

Chelatna Lake — At the head of Lake Creek would count a sockeye salmon population with the largest spawning escapement goal in the Susitna River drainage. This project has been unfunded for the past 3 years. Cost to fund throughout the sockeye salmon return — **$60,000**.

Deshka River — Currently counts a Chinook salmon population with the largest escapement goal within the Susitna River drainage — and also counts the early portion of a Coho salmon population with the ONLY coho salmon spawning escapement goal in the entire Susitna River drainage. Cost to extend project from August 15 — September 15 which would count the full coho run, and allow inseason management throughout that entire timeframe— **$40,000**.

Fish Creek —Currently funded to primarily count sockeye salmon escapement during the month of July. Cost to extend the Fish Creek project from July 31 — September 30 inorder to count the complete sockeye salmon and coho salmon returns (both of which have established ADF&G spawning escapement goals) thereby allowing better inseason management for both species throughout the season —**$25,000**.

The first question a legislator asked was, **How would the Commission prioritize the weir projects?** All of these salmon projects have goals attached and each weir project has been used in the past to make inseason salmon management decisions. People from different portions of the Mat-Su Valley harvest significant numbers of salmon from each of these salmon populations. Is it even desirable to only allow inseason and postseason salmon management for salmon stocks from only a portion of the Mat-Su Valley? The Chelatna Lake sockeye salmon project and the Deshka River coho salmon project represent the two largest salmon spawning escapement goals and the Deshka River coho goal has been used to manage coho salmon throughout the entire Susitna River drainage — and especially when Deshka River weir was in for the entire season. When any weir project is Not run through a salmon season we've lost considerably inseason management ability and often don't know — even postseason — if Mat-Su salmon spawning escapement goals were attained.

Multiple Mat-Su legislators commented that the amount of money needed to fully operate these weirs was a relatively small amount of money — especially considering how many people purchase fishing licenses and utilize the salmon resource. Compared to the other priorities discussed at the meeting, the funding needed to operate these already established weir projects is minimal.

Why were the weir projects cut in the first place? In the recent past with reductions in oil revenue state funding was cut throughout many departments and programs. When each department is asked to cut a specific amount without thoroughly considering the consequences essential programs may be lost or diminished. Travel restrictions and a loss of nonresident license and king salmon stamp sales, resulting from the Covid pandemic, compounded the lack of money to fund sport fish division projects. Like the legislature annually appropriates money for Commercial Fisheries management projects would not now be an appropriate time to use some General Fund monies to fund important and already established sport fishery management projects?

Fish On!

Andy Couch is a Mat-Su Valley salmon fishing guide and member of the Matanuska Susitna Borough Fish and Wildlife Commission. Thoughts expressed in this article are his own.

Landowners Guide

to

Fish Habitat

Conservation and Restoration Practices

compiled by

William J. Hauser and Edward W. Weiss

Technical Report No. 01-3 March 2001

ALASKA DEPARTMENT OF FISH AND GAME ***HABITAT AND RESTORATION DIVISION***

Additional copies may be obtained from the Alaska Department of Fish and Game, Habitat and Restoration Division, 333 Raspberry Road, Anchorage, AK 99518 or from the ADF&G – H&R web site: http://www.state.ak.us/local/akpages/FISH.GAME/habitat/hab_home.htm

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Frank Rue, Commissioner

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Habitat and Restoration Division
Alaska Department of Fish and Game
P.O. Box 25526
Juneau, Alaska 99802-5526

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Landowners Guide to Fish Habitat Conservation and Restoration Practices

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Landowners Guide

to

Fish Habitat

Conservation and Restoration Practices

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PURPOSE OF THIS DOCUMENT

The purpose of this document is to help you – a riparian landowner - to develop good planning and implementation decisions for projects around water bodies, to find and understand good, fish-friendly methods, and to find assistance if you need it. This is NOT a "cookbook" or a construction manual, but it will guide you through the water and land permitting process. The goal is to help you to design improvements to your property that will be not only fish-friendly, but also improve the aesthetics and value of your property.

The INTRODUCTION of this document provides background information and rationale about why the edge or, riparian area, is so important for fish. WHAT DOES THIS MEAN TO YOU? is an introduction and discussion about the permit requirements and YOUR PROJECT links your planning process with those requirements. There are two ways to view the PERMITTING PROCESS: a step-by-step outline and a diagrammatic flow chart. The table of TYPES OF DEVELOPMENTAL ACTIVITIES is a list of actions that you may want to use to improve your property and the table of METHODS is an overview of ways to accomplish some of your goals. The sections, PERMIT APPLICATION FORMS, CONTACTS, and USEFUL WEB SITES, direct you to sources for documents and information. The GLOSSARY helps you to understand some acronyms and terms and the BIBLIOGRAPHY AND SOURCES OF INFORMATION lists documents where information for this document was obtained and similar information sources. INFORMATION SHEETS for more detailed information about METHODS are at the end of the document. Finally, ACKNOWLEDGEMENTS (which are actually located before the Table of Contents) are important because that is where we say thanks to the folks who helped compile this document.

INTRODUCTION

Life on the edge

Life always seems to be on the edge. People always want to push out and away from crowded places and we are always in the search for something different. Fish and wildlife are no different. People want nice quiet places to live and a variety of things to do and eat. Fish and wildlife are no different. As people push to their edge in a search for nice places to live and work and have fun, they often encounter the edge of where fish live and are pushing out to their edge. So as we develop more areas to live and grow, we begin to affect the "edge areas" that are so very important to fish and other wildlife as well. Fish, wildlife and people begin to compete for life on the edge.

Our attitude is simple. People need a place to live. People like to live on the edge. We like to live on an edge that we share with wildlife and fish… but, this creates a dilemma because people affect the places where they live. People have the capability to change their environment. When we modify the edges of our environment to fit our needs, we may also be changing the fish's environment as well. The intent of this document is to help us find ways that allow us to use the edges of our environment without serious damage to the fish's environment.

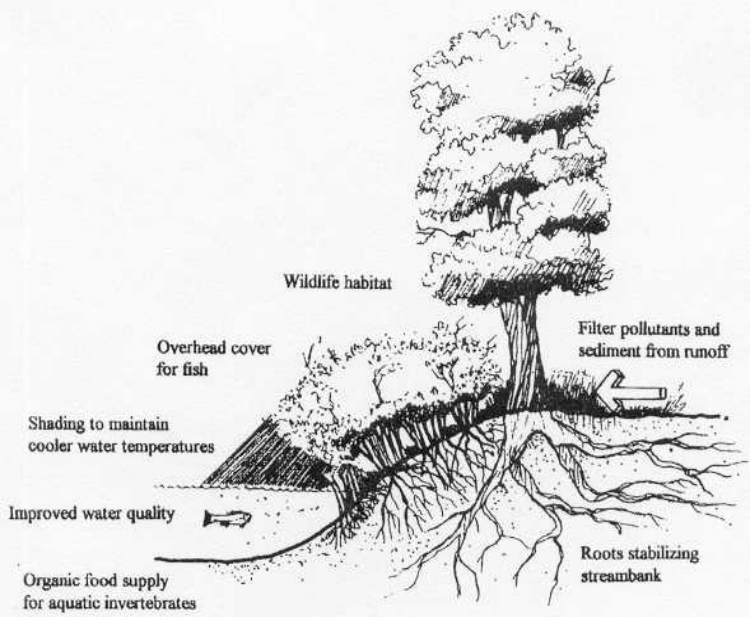
Why is the edge important to fish?

Different parts of a lake or a stream are not equal. Certainly, we cannot have a lake or stream without water and we cannot have fish without water, but the most important parts of a water body are on the edge. The water surface is important because this is one of the pathways for oxygen to get into the water and it provides a pathway for input of organic matter such as detritus and insects. Sunlight also comes through the surface. It is one of the important ingredients in the photosynthesis of plants, which are at the bottom of the food chain. The other edges of a water body are the bottom and the banks. The bottom is a food factory for fish. Most of food for a fish originates on the bottom whether they live in a lake or a stream. Most fish spawn on the bottom. Trout and salmon need a clean, gravelly stream bottom to dig a redd (i.e., a nest where they spawn) and bury their eggs to incubate and hatch.

The banks or edges of streams and lakes are very important edges because they provide a source of fish food. Many nutrients that fall into the water help to drive the food chain. The streambanks and the lakeshores define the shape of the water body and create an interface where plants, bushes and trees can grow. Vegetation along this edge creates a root system that improves the stability of the shore.

This is where life is truly on an edge. This is the edge where people like to live and the edge that provides important habitat for fish, too. This is the edge that people have the power to change and changes to this edge can have a profound affect our fish and wildlife populations.

How important is this edge to the fish? Young chinook salmon cannot tolerate water velocity faster than about six inches per second; so, in a large river like the Kenai River, it has been estimated that over 80% of the young chinook salmon were within 6 feet of the bank. In smaller streams, they are also associated with the banks and woody materials. Young coho salmon prefer slower moving ponds and slough-like areas and they depend on the woody materials, too. Where do they go in winter? Young fish seek out deep holes or ponds. Rocky rubble and woody materials provide places for the small fish to burrow for shelter. Young sockeye salmon usually prefer to rear in lakes but they may also be in slow areas or ponds associated with rivers.



High quality riparian habitat is good for fish and people (illustration from: Bentrup and Hoag)

What does the edge provide for fish?

The streambanks and lakeshores create the edge or "riparian zone" of water bodies and the riparian areas are crucial to the life of the water body and the lives of the organisms that live in the water. First, it provides structure. Roots of trees and other vegetation knit together to hold the soil and rocks to minimize erosion and to contain the water. A stable, non-eroding streambank means that there is less fine material washed into the water. Some erosion is natural and some is needed to replenish the streambed materials and spawning gravel, but excessive siltation in the water is detrimental. Silty water reduces light penetration and lowers photosynthesis. When water loses velocity, it cannot transport the material and the silt begins to coat the bottom. This plugs spawning gravel and smothers fish food organisms and fish eggs. Silty water can also irritate fish gills and cause infection and death.

Eventually, some riparian zone plant roots become exposed and tree branches fall into the water. These are good for fish too. They dissipate hydraulic energy of moving water and slow down erosion. They provide a place for fish food organisms to grow and they provide places for fish to hide from predators. Woody debris in streams also act as strainers to catch and hold drifting organic matter, including carcasses of spawned salmon. The organic matter fertilizes the food chain and creates more fish food in our Alaskan waters which would otherwise be quite sterile and unproductive.

Branches that hang over the water break up the direct sunlight into a pattern of light and shade that compliments the camouflage pattern and colors of the fish. More fish food items drop from tree branches into the water.

Other wildlife use the riparian zone, too. Some, such as moose, are attracted by the lush vegetation. Others, such as bears, may be attracted by the fish where the edges of the water and the land come together. Waterfowl, muskrats and beavers use the water and the vegetation as a home and a food source. A continuous, undisturbed riparian zone is an excellent travel corridor for wildlife.

People on the edge

Natural riparian areas often comprise less than 1 percent of the available landscape; however, they typically support a much higher percentage of fish and wildlife species and perform more ecological functions than upland habitats. Life can be good on the edge, but often, well-intentioned people can overuse the riparian zone and change it to "improve" it for their needs. When this happens, the riparian zone cannot support the fish and wildlife populations or the ecological functions that they normally do.

Many lakes in the Matanuska-Susitna valley are ringed with homes on small lots with lawns, driveways, garages and recreational structures. Residents with permanent and seasonal homes in the riparian zone of lakes and streams throughout the Matanuska-Susitna area have caused many changes that have affected fish and wildlife habitat, water quality and the natural functions of these riparian areas. Cumulative impacts from individual projects along the shoreline of lakes and streams are having an alarming affect on the diverse resources and functions of these riparian areas and the lakes and streams that they border. A small dock here, a lawn there, a shed over there and soon the natural riparian habitats around a lake or river have disappeared.

Data from the Matanuska-Susitna Borough assessors office shows that 60% of the nearly 600 properties with water frontage on Cottonwood Creek, Anderson Lake, Nicklason Lake, Cornelius Lake, Cottonwood Lake, Finger Lake, Mud Lake and Wasilla Lake have been developed.

A 1997 ADF&G study of the Cottonwood Creek drainage documented over 1200 structures (e.g., docks, bank stabilization, houses, roads and lawns) within 75 feet of the normal edge of the water. Structures associated with recreation (docks, boat ramps and beaches), structure development (houses, sheds and pads) and lawns or vegetation thinning each comprised about 25% of all structures inventoried.

A total of 82% of the impacts inventoried during the Cottonwood Creek study were within 25 feet of the water and 52% were within 5 feet or less. Cumulatively, these impacts have caused a great deal of removal or replacement of the riparian vegetation. Lawns and vegetation thinning made up over half of the total length of inventoried impacts along the waterline and comprised nearly 70% of the disturbed areas. Of the 72 miles of shoreline surveyed, 11% or 8.3 miles, had been altered by lawns, vegetation removal or filling.

Most of the impacts in the Cottonwood system also occurred around the lakes. Approximately 70% of the inventoried impacts in the Cottonwood Creek drainage were along the lakeshores of the six main lakes in the system.

Lawns and vegetation thinning or removal accounted for 70% of the disturbed area along the lake shorelines in the Cottonwood study. Approximately 13% of the total riparian area in a 75-foot zone around 6 of the main lakes in the Cottonwood Creek Drainage had been placed in lawns or had vegetation removal or thinning done to it.

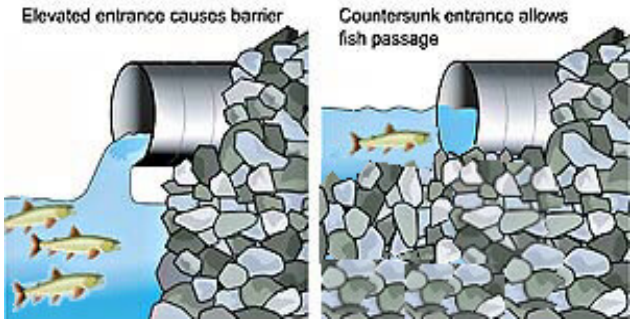
Large open lawns and parks may be nice for viewing and recreation, but they alter the diversity and function of the riparian zone. Lawns usually have few trees, if any, that may fall into the water to provide food sources and cover for fish. Shoreline vegetation, which provides fish cover and food, is usually removed. Fertilizers and pesticides are added to lawns, which run into the water. Sometimes, vegetation is absent or insufficient, and sediment washes into the water, covering fish spawning areas or impacting recreational areas. The percentage of the shoreline area placed in lawns or having vegetation removal adjacent to observed sockeye spawning areas on Wasilla Lake, east Nicklason Lake, Mud Lake and Cottonwood Lake was 41%, 68%, 29% and 22%, respectively. Most wildlife species prefer the natural riparian vegetation to lawns. The removal of riparian vegetation has been linked to the reduced abundance and variety of bird life around lakes. And without continuous stretches of riparian vegetation larger wildlife are less likely to frequent the area or utilize them for travel corridors.

Replacement of the natural riparian vegetation by lawns or other structures can result in many problems for fish, wildlife and the

landowner. Loss of ground water recharge, water quality problems, increased sedimentation, loss of wildlife habitat and travel corridors, loss of food and cover for fish, and increased shoreline erosion have all been linked to development within riparian zones and the removal of natural riparian vegetation. There are also aesthetic effects to be considered, such as increased noise levels and a view of your neighbor's homes or a commercial area versus being able to look out on a relatively undisturbed lake.

When we replace natural vegetation and wetlands with structures such as houses, cabins and sheds and parking lots and roads, we also accelerate runoff by converting porous vegetated soil and wetlands to a hard, impervious surface. Rainfall and snowmelt that normally soaks into the soil, runs off instead, and we help speed it along and prevent it from recharging groundwater. Fertilizers, pesticides, petroleum products, animal wastes (e.g., dogs and waterfowl) are washed by rain from these areas and into the water. When the water is enriched too much, the nutrient cycle is tilted off balance and unwanted algae develop. Exposed soil is also vulnerable to erosion, both during construction and on areas cleared for a view. Erosion is a problem not only for water quality and fish habitat but also for the landowner.

Other activities also have potentially large impacts on fish habitat. Fish passage may be disrupted if road-crossing structures such as bridges and culverts are not located, designed or installed carefully. Adult fish can be blocked from spawning areas and young fish may be prevented from migrating to or from feeding habitat or over-wintering habitat.



The "perched culvert" on the left prevents upstream passage of fish
Adapted from: Canada: Factsheet for culvert web page

In the Cottonwood Creek system, culverts have replaced more than a third of a mile of stream habitat and over 30 illegal ATV ford or crossing sites were identified. These tend to be in reaches with shallow riffles where fish spawn. Culverts and ATV crossing sites directly impacted an estimated 3% of the observed coho salmon spawning habitat in the Cottonwood Creek system. Indirect effects may be even greater. In some individual short spawning reaches as much as 56% of the spawning area was impacted.

Uncontrolled boat launches and excessive foot traffic on shorelines can lead to trampling of protective vegetation and soil compaction. These create instability in riparian areas and lead to erosion and silt in the water. Over 40

unimproved boat launches were found during the 1997 Cottonwood Creek inventory resulting in a total of almost 47,000 square feet of impact. These unimproved sites are often simply places where landowners have cleared a launch down to the water without any regard to bank stabilization, erosion control or revegetation. Likewise the areas denuded of vegetation were inventoried. There were 108 areas of denuded bank related to trails or other uses. These added up to over 87,000 square feet of unvegetated trampled area on over 5,400 linear feet of bank.

What can be done?

While economic growth is important for the Matanuska Valley it is vital that development occurs in a way that safeguards the ecological health of the lakes and streams that draw people to the Matanuska Valley in the first place. We must respect and protect riparian areas. We must acknowledge this importance and we must understand that streams and lakes are dynamic. Streams and lake riparian zones will change. Streams will flood and alter their banks. Lake levels will rise and fall. This is precisely the reason cities are designed with greenbelts around streams and lakes. And this is the reason that any development needs to protect and preserve riparian habitat. It is good for the fish and it is good for people, too. What can we do to share the edge with fish and wildlife?

Our first challenge is to preserve and care for what we have. We must become good stewards of resources that are associated with our waterways. We must learn to recognize and understand the importance of the riparian

Good stewardship practices avoid activities that are not fish-friendly. (illustration from: Henderson, Dindorf and Rozumalski.)

areas to fish, to wildlife and to us. We must learn to use these areas carefully and protect them.

Preserving riparian vegetation to maintain strong banks, good water quality and fish and wildlife habitat is the first part of this challenge. Maintain a vegetative buffer and locate structures away from the lake or stream. Avoid clearing the natural riparian vegetation next to the stream or lake. Leave logs and woody debris in the water. Preserve wetlands that sustain subsurface water flow. Consolidate the development of trails, access points, roads and parking areas to help eliminate unnecessary destruction of riparian vegetation. Incorporate water quality and runoff issues into development and construction plans. Evaluate placement of stream crossings to eliminate destruction of spawning areas or causing a barrier to upstream or downstream fish movements. Tell others about the importance of good riparian area stewardship.

Frequently, we cannot avoid development in the riparian zone and the needs of fish and the desires of the people may conflict. In the absence of being able to preserve, we need to protect. As we acknowledge the importance and role of the riparian areas for fish and wildlife habitat, we need to use methods to develop our property that protect these resources; or, at least, minimize the damage.

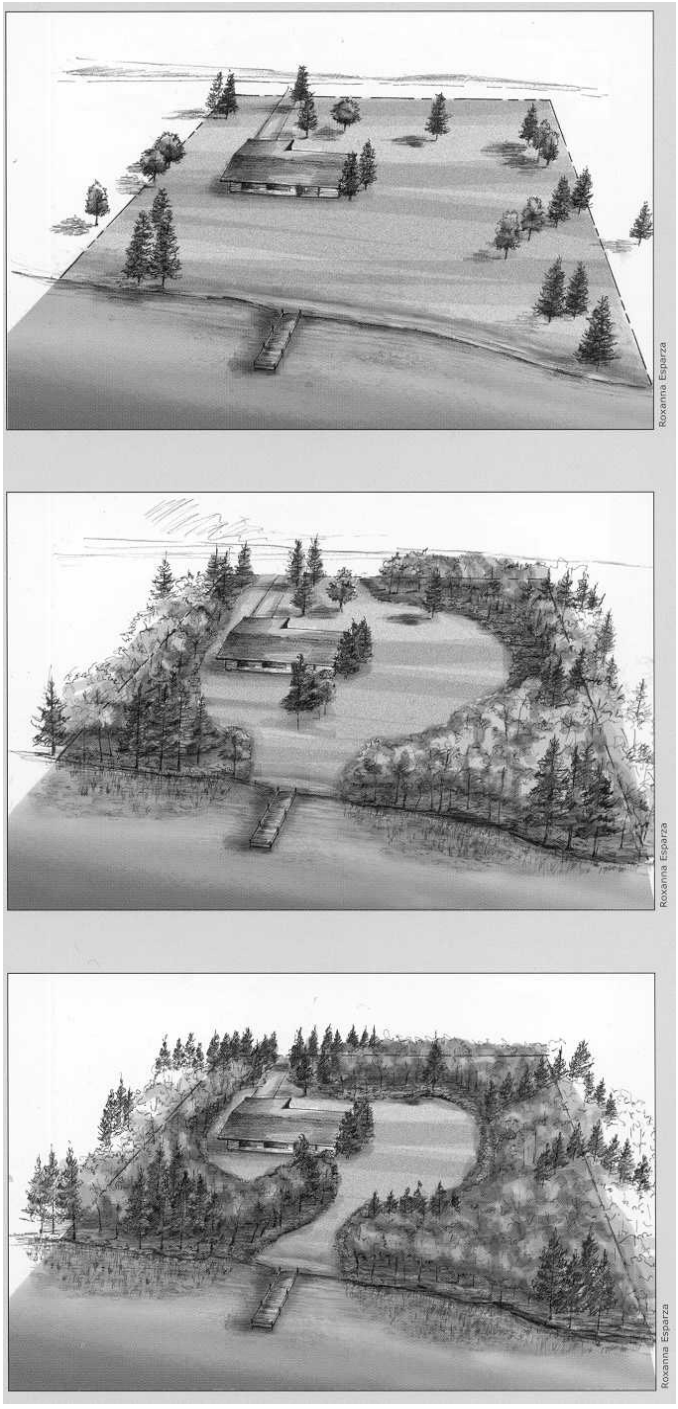
What can be done? Be a good steward. Avoid large, open lawns. Maintain good riparian vegetation with a narrow corridor for you to get to the water. If you already have a large, open lawn, allow natural riparian vegetation to encroach, especially along the shoreline. Consider transplanting to add native woody vegetation to your shoreline. Plan all of your projects so fish habitat will not be lost. Become a better steward of fish habitat as well as your property.

And lastly where perturbations have already occurred we need to look at restoration or rehabilitation. Places outside of Alaska have experienced varying amounts of degradation of riparian areas and private and governmental organizations have been faced with the challenge to control and repair damage that has been done. We are fortunate in Alaska. Few lake and stream systems are severely damaged and few need to be rehabilitated. Fortunately the cumulative effect of replacing or restoring small patches of natural vegetation can ultimately lead to the restoration of larger patches or entire riparian zones, just as the incremental impacts have destroyed them.

People can choose to remove or not to remove riparian vegetation and they can choose to replace it, too. For example, as property owners on the Kenai River began to understand the importance of riparian areas to fish, they became better stewards of their river front property. Beginning in 1995,

many landowners on the Kenai River have participated in a program to protect and rehabilitate streambank fish habitat on the Kenai River. Between 1995 and 1999 cumulative efforts from state/federal cost share projects with private landowners has resulted in the protection of almost 15,000 linear feet of shoreline and the rehabilitation of over 8,900 feet (Hughes 2000).

Since 1998 efforts have also been under way within the Matanuska-Susitna Borough Area to increase public awareness through education and public outreach programs and to carry out restoration of riparian areas and fish habitat. In the last two years 44 shoreline or stream restoration projects have been initiated within the Matanuska-Susitna Borough. Ten of these have already been completed resulting in 589 feet of rehabilitated shoreline or stream bank.



Good stewardship practices avoid intense landscaping (top panel). Preserve or restore riparian vegetation (mid and bottom panel) to maintain good fish and wildlife habitat, improve aesthetics and increase property values. (illustration from: Henderson, Dindorf and Rozumalski.)

WHAT DOES THIS MEAN TO YOU?

The need to implement a permitting process in Alaska is embodied in two documents: The Constitution of the State of Alaska and the Alaska Coastal Management Program (ACMP).

The Alaska Department of Fish and Game (ADF&G) is mandated by the Constitution of the State of Alaska. (Alaska Statute Title 16) which directs the Commissioner of the ADF&G to "manage, protect, maintain, improve, and extend the fish, game and aquatic plant resources of the state in the interest of the economy and general well-being of the state..." (AS 16.05.020). The Habitat and Restoration Division (H&R) has the responsibility under this legal mandate to coordinate the department's involvement and policy on a wide range of activities including: land use and natural resource planning, large and small development projects, water reservations and appropriations, and public access. The division also provides fish and wildlife resource information and technical assistance to public and private land managers and regulatory governmental agencies.

The H&R Division also has specific statutory responsibilities for protecting freshwater anadromous fish habitat under the Anadromous Fish Act (AS 16. 05. 870) and providing free passage of anadromous and resident fish in fresh water bodies (AS 16. 05. 840). Consequently, the ADF&G – H&R maintains the *Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes* to identify and document anadromous waters for the protection of fish habitat.

This mandate can be accomplished only if we protect and maintain spawning, feeding, overwintering and migratory habitats for fish. Many species of fish depend on a contribution from some part of the riparian areas for some kind of habitat during some part of their life cycle; therefore, it is imperative that to protect fish, we must protect riparian areas and use developmental practices that do not harm this important area.

The ACMP implements legislation passed by the State of Alaska in 1977 - the Alaska Coastal Management Act. The Alaska Coastal Management Program improves stewardship of Alaska's coastal land and natural resources by creating a network of local, state, federal, and applicant interests in the project approval process to ensure that all aspects of a project are considered

during a single review and approval process. The ACMP requires that projects in Alaska's coastal zone be reviewed by coastal resource management professionals and found consistent with the statewide standards of the ACMP and local or Borough Coastal Management Programs. It is called the "consistency review process" and a "finding of consistency" with the ACMP must be obtained before permits can be issued for the project.

The Division of Governmental Coordination (DGC), located in the Office of the Governor under the Office of Management and Budget, is the lead agency for coordinating the ACMP. The DGC is intended to be a central contact liaison for the various agencies that have been charged with the protection of the riparian areas and our aquatic resources.

In addition to the statewide standards adopted through the ACMP, local districts such as the Matanuska-Susitna Borough (MSB) adopt standards that are specific to their district. The statewide and district specific standards adopt policies against which projects are reviewed to protect or guide development of coastal resources such as air, land and water quality, fish and wildlife habitat, subsistence, mining, transportation, timber, energy and utilities. The MSB district coastal habitat policies adopt the statewide standards and also adopt more specific coastal habitat policies. Under the specific MSB policies, proposed uses and activities within 75 feet of the ordinary high water line of rivers, streams and lakes that require local, state or federal authorization must be reviewed and approved to protect water quality and fish and wildlife habitat. Some water dependent structures are allowed, provided that impacts to water quality and fish and wildlife habitat are minimized or mitigated. Other uses can also be allowed if they have no significant adverse impact.

Agencies that have responsibilities for planning and permitting in the coastal zone include:

Agency	Responsibility
Alaska Department of Environmental Conservation (DEC)	Water Quality – industrial, commercial and private discharge into water bodies
Alaska Department of Fish and Game (DFG)	Removal of water or materials from a water body or placement of structures or discharge into an anadromous water body

Agency	Responsibility
Alaska Department of Natural Resources (DNR)	Project on State-owned land or water or crossing State-owned property for access; use of State-owned resources
Alaska Division of Governmental Coordination (DGC)	Facilitate communications and permitting among Municipal, Borough, State and Federal agencies
Matanuska-Susitna Borough	Development in or near water – code compliance
Municipal or Borough Planning departments	Flood hazard determination for any materials placed into a stream
Municipal or Borough Planning departments	Structure setback, vegetative buffer or zoning agreements
U. S. Bureau of Land Management (BLM)	Manage BLM properties
U. S. Coast Guard (USCG)	Bridge, or causeway over tidal waters, navigable rivers, streams or lakes
U. S. Environmental Protection Agency (EPA)	Discharge of materials into wetlands or water bodies or exposure of soils
U. S. Federal Aviation Administration (FAA)	Materials discharge within 5,000 feet of an airport
U. S. Federal Energy Regulatory Commission (FERC)	Installation or operation of a hydroelectric project, natural gas pipeline or an electric transmission
U. S. Forest Service (USFS)	Manage USFS properties
U.S. Army Corps of Engineers (COE)	Dredging, structures or fill in tidal waters, streams, lakes and wetlands

YOUR PROJECT

You need two very important things before you can implement your project: a good plan; and, permit or code compliance.

1. As you begin…

- What do fish need? Remember that the riparian areas are important to fish and wildlife. That means that they are important to you, too. Healthy riparian areas mean healthy fish populations. Riparian areas contribute directly or indirectly to stability of the banks, structure in the water, camouflage, and food.

- What do you need? You want to use your property and you want to be able to access a stream or lake. But you also want to preserve riparian areas so fish and wildlife habitat is not lost and your property is protected and preserved.

2. Background work

- Establish project goals that are both good for fish and meet your needs. Keep it small and simple. Avoid work in wetlands. Avoid or minimize changes to the riparian areas.
- Scheduling. Be sure to allow ample time to do your planning, obtain all permits and hire workers so your project can be started at the most appropriate time. Work in or near the water can be performed only during times that are safe for fish – usually in the spring and early summer or as stipulated by ADF&G.
- Existing Regulations. Understand zoning, structure setback and vegetative buffer constraints established by local governments and restrictions by state and federal agencies.
- Determine the best practices for your development and needs which are also compatible for fish habitat.

3. Site selection and planning

- Create a base map or use an as-built survey to determine existing boundaries (both legal and natural), structures, distances, slopes, drainage and existing vegetation.
- Analyze the base map to evaluate existing use patterns, including types and location of activities, movement patterns, views, etc.
- Design and sketch improvements and proposed changes on a copy of the base map. Consider incorporating or expanding riparian area buffers.

- Timing is important. Certain activities may be permitted only during certain seasons or conditions. It is important to understand legal and environmental limitations that may affect your scheduling. Allow ample time.
- Pre-application assistance. DGC can schedule a pre-application meeting with the permitting agencies to identify any issues and work to resolve them early in the process.
- Use methods that avoid and minimize impacts to streams and lakes. Filling wetlands and placing material below a waterline in salmon waters may not be permitted. Avoid oversized structures, roads, parking areas and access routes. Keep slopes and banks vegetated and consider drainage patterns. Remember that exposure is important. North- or south-facing slopes have different environmental conditions and different planning requirements.

4. Final Consistency Finding and required permits (see: PERMITTING PROCESS)

- Complete the Coastal Project Questionnaire and permit applications
- Receive a Finding of Consistency
- Receive required local, state and federal permits

5. Implementation

- Work within the timeframe designated by ADF&G.
- Implement erosion and sediment control practices during construction.
- Report departures from the permit specifications before you do the work.

6. Maintenance

- Monitor vegetation, project installation and new use of project.
- Perform necessary maintenance as needed.

TYPES OF DEVELOPMENTAL ACTIVITIES

Property improvement activities that may affect the riparian areas. Many of these activities require a permit from one or more local, state and federal agency.

Activity	**Associated with**	**Potential Habitat Concerns**	**Fish-friendly Considerations**
Roadway	Property development	Increase runoff rate, siltation, erosion, petroleum spills	Minimize surface area Control erosion and runoff Proper location
Structures	Property development; Recreation	Increase runoff rate	Minimize number and size Add vegetation buffer
Parking areas	Property development	Increase runoff rate, erosion & petroleum spills	Minimize surface area Control erosion and petroleum Proper maintenance
Pathways	Property development; Recreation	Increase runoff & erosion	Minimize surface area Proper maintenance Elevated walkways
Landscaping	Property development	Removes woody debris and vegetation from edges	Minimize – especially near the edge Keep or add natural vegetated buffer
Lawns	Property development	Increase fertilizer & runoff	Minimize area; Keep or add natural vegetated buffer
Vegetation clearing	Property development	Removes woody debris from edges Erosion	Minimize Keep or add vegetated buffer
Unimproved ford	Stream crossing	Disrupts fish spawning, rearing, migration Affects riparian habitat, erosion	Illegal Don't do it
Established ford	Stream crossing	Minimizes and localizes impacts in stream	Get a permit Use only as needed
Culvert	Stream crossing	May affect fish passage	Needs proper design, size and installation Consider bridge

Activity	**Associated with**	**Potential Habitat Concerns**	**Fish-friendly Considerations**
Temporary bridge	Stream crossing	Susceptible to wash-out and downstream effect	Needs proper design, size and installation Remove after use
Permanent bridge	Stream crossing	Often narrows channel and increases flow	Needs proper design, size and installation
Beach development	Lakeshore Recreation	Removes bottom structures & bank function	Keep it small Consider floating dock
Boathouse	Lake or stream Recreation	Loss of riparian habitat &vegetation Petroleum spills	Keep it small Control petroleum Prepare for cleanup
Permanent boat launch	Lake or stream Recreation	Increased runoff Uncontrolled expansion Petroleum spills	Needs proper siting & maintenance Control petroleum Prepare for cleanup
Undeveloped boat launch	Lake or stream Recreation	Erosion/ siltation Petroleum spills	Don't do it Use permanent launch
Pier or dock	Lakeshore Recreation	Loss of riparian habitat	Keep it small Allow light-penetration
Bank stabilization/ wave control	Lake or stream	Loss of riparian habitat	Avoid hard surfaces/bulkhead Use bio-degradable materials
Fishing access	Lake & stream Recreation	Loss of riparian habitat & vegetation Erosion	Install open, raised platform or walkway Stand in the water Use a boat
Bank restoration	Lake & stream	Difficult Needs professional Often expensive May need heavy equipment	Use bio-degradable materials Use live vegetation Plan carefully Follow-up

METHODS

Fish-friendly methods and considerations that protect or improve riparian zones (For more information, see: INFORMATION SHEETS):

Technique	**Purpose**	**Role**	**Fish-friendly Considerations**
Planning	Identify needs of fish and landowner Select best techniques	Better to be fish-friendly	Allow lots of time Speed kills
Protect undisturbed riparian areas	Avoid damage to riparian areas	Maintain natural vegetated banks	Better to protect and maintain habitat than to repair it
Timing	Identify best time do the development	Avoid times that are sensitive to fish (e.g., spawning, migration)	Avoid migration times Avoid spawning times
Structure setback	Prevent structures too close to water edge	Allow buffer Protect vegetation	Make it as large as possible Follow local codes
Designated stream crossings (fords, culverts, bridges)	Create safe crossings Avoid sensitive areas and critical times for fish	Reduce impact on fish One good site is better than several bad sites	Design and install carefully
Silt fence	Limit location or timing of silt dispersion	Control or minimize damage from silt dispersion during construction phase Better water quality	Avoid smothering food items Avoid smothering fish eggs Deploy properly
Vegetative buffer	Filter runoff & treat polluted water Catch blowing debris Stabilizes bank	Source of woody debris in water Provides wildlife habitat	Future supply of fish habitat structures Better water quality Bigger is better

Technique	**Purpose**	**Role**	**Fish-friendly Considerations**
Elevated, light-penetrating walkways & piers	Provide access & protects vegetation Allows vegetation to grow	Avoid trampling vegetation Allow access and vegetation	Roots stabilize the soil and prevent erosion Stabilize bank
Revegetation	Re-establish vegetative cover	Control runoff and erosion	More is better Stabilize bank (Avoid over-use of fertilizer)
Transplanting	Re-establish vegetative cover from one site to another	Control runoff and erosion	More is better Stabilizes bank (Avoid over- use of fertilizer)
Grass rolls	Reintroduce herbaceous vegetation in difficult sites	Revegetate grassy shores where simple reseeding won't work and short-term stability	Roots stabilize the soil and prevent erosion (Avoid over- use of fertilizer)
Live-staking of Dormant cuttings	Stimulate revegetation of woody materials	Long-term strategy Hold the soil Stabilize shore	More is better Easy, inexpensive Control erosion
Wood-fiber blankets	Immediate Temporary Combine with other techniques	Provides instant cover Trap sediments Helps revegetation	Use in combination with other techniques Control erosion
Bundles of dormant cuttings (Fascines)	Stimulate revegetation of woody materials	Long-term strategy Hold the soil Stabilize shoreline	Use in combination with other techniques Control erosion
Brush mattress	Immediate Temporary Combine with other techniques	Provides instant cover Trap sediments Stimulate revegetation by woody materials	Use in combination with other techniques Control erosion

Technique	Purpose	Role	Fish-friendly Considerations
Brush layering	Combine layers of dormant cuttings with layers of soil	Stabilize shore Provides instant cover Trap sediments Stimulate revegetation by woody materials	Use in combination with other techniques Control erosion (Expensive)
Hedge brush layering	Combine layers of dormant cuttings and rooted plants with layers of soil	Stabilize shore Provides instant cover Trap sediments Stimulate revegetation by woody materials	Use in combination with other techniques Control erosion (Expensive)
Live siltation	Create fish habitat Trap sediments Allow revegetation by other materials	Provides instant cover Trap sediments Stimulate revegetation by woody materials	Use in combination with other techniques Control erosion
Vegetated cribbing	Brush layering with addition of lumber cribbing	Stabilize shore Extreme technique for extreme erosion	Use in combination with other techniques Control erosion (Expensive)
Spruce tree revetment	Control erosion Reduce scour, waves and water velocity	Trap sediments Reduce erosion Stabilize bank or project toe	Inexpensive Simple Provide instant fish habitat
Root wad revetment	Streambank protection	Usually combine with other techniques Stabilize bank Adds woody materials	Provides fish habitat Uses heavy equipment Control erosion (Expensive)
Coir logs	Provide temporary stability until vegetation is established	Short-term Combine with other techniques	Control erosion Bank stability (Expensive)
Coir logs with rootwads	Increased streambank protection – short and long term	Adds woody materials Stabilize bank	Provides fish habitat Uses heavy equipment Control erosion (Expensive)

The following methods have been used in riparian areas in the past and, although they can be effective, they are not fish-friendly and they are rarely permitted by ADF&G. These methods may be useful, at times, above the waterline and combined with other methods that are fish-friendly.

Technique	**Purpose**	**Role**	**Fish-friendly Considerations**
Rock riprap	Build a solid wall	Harden a bank (may be useful above waterline)	NOT fish-friendly Avoid this Rarely permitted
Rock-filled gabions	Build a solid wall	Harden a bank (may be useful above waterline)	NOT fish-friendly Avoid this Rarely permitted
Cinder-block walls	Build a solid wall	Harden a bank	NOT fish-friendly Don't do it Won't be permitted
Sheet pile/ bulkhead	Build a solid wall	Harden a bank	NOT fish-friendly Don't do it Won't be permitted

Landscaping – Information Sheet

Useful for:	Creating a pleasant environment for people that does not harm fish habitat
Benefits to fish:	Minimizes damage to riparian vegetation
Benefits to you:	Use and enjoy your property and minimize maintenance activities and costs

Part of your property development plan will include landscaping. One way to cut costs of development and maintenance that is also beneficial to the fish is to leave most of the native plants along the shore. You may want to do some thinning or pruning and allow some access, but the fish and other wildlife depend on that vegetation. You will have less grass to mow, less fertilizer to buy and more time to enjoy the view or go fishing.

The best approach is to build your landscape plan before you develop the property, but if you already have a big open lawn, consider transplanting native trees, bushes and herbs -– especially along the shore. You may lose some of your view, but your property value will probably increase and your view will improve because you will have more variety and more colors that change with the seasons along with more wildlife.

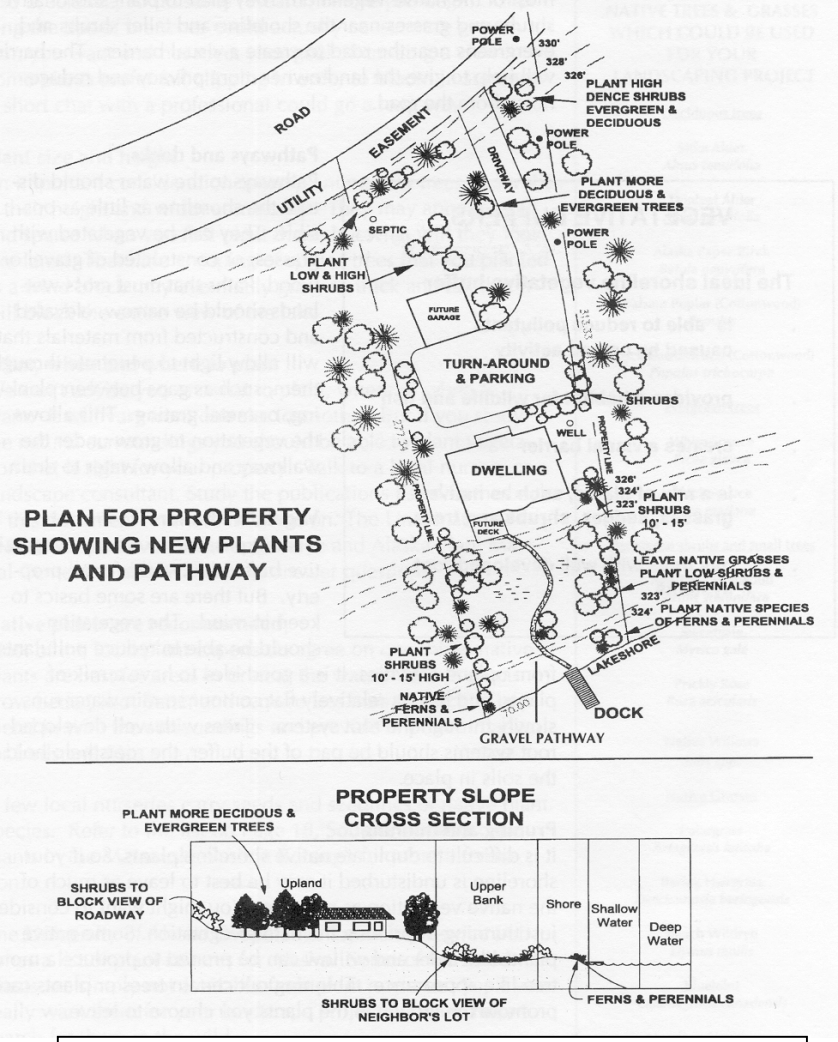
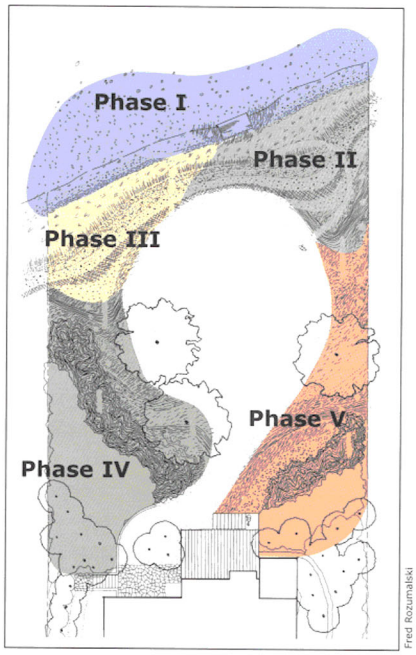


Illustration is from: Owens, Duffy, Finney and Grantland, A Property Owners Guide to Shoreline Landscaping in the Matanuska-Susitna Borough

For more information:
- Henderson, Dindorf, and Rozumalski, Landscaping for wildlife and water quality
- Soil Conservation Service, Kenai River landowner's guide
- ADF&G - H&R

Planning – Information Sheet

Useful for:	Understand what you want to accomplish, how to do it, how much time it will require and the costs before you begin.
Benefits to fish:	You can plan and design your project in a fish-friendly manner.
Benefits to you:	Save time, money and frustration.



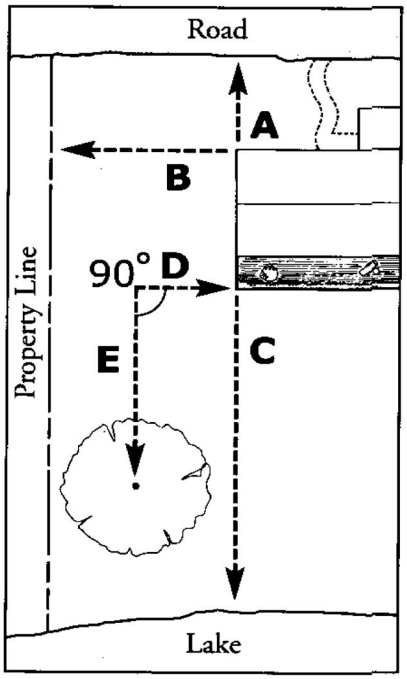
Thoughtful planning is a huge asset to both you and the fish as you carry out your project. Plan ahead; allow ample time.

Think about what you want and think about how that can be done in a fish-friendly manner. Make a simple sketch. Review fish-friendly techniques and considerations. Contact ADF&G – H&R for ideas and comments. Complete the Coastal Project Questionnaire to determine which state, federal and local agencies require a permit. Determine if you must comply with a structure setback. Allow for a vegetative buffer.

Develop your final plan and submit the Coastal Project Questionnaire and Permit Applications for Consistency Review.

Plan ahead to know what season any in-water work will be permitted and any stipulations that may be required.

Careful and thoughtful planning and allowing ample time will pay off in better design, less cost and less frustration.



When measuring a landscape, measure distances at right angles from a fixed point on the house.

Illustration is from: Henderson, Dindorf and Rozumalski, Lakescaping for wildlife and water quality

For more information:
- Bentrup and Hoag. The practical streambank bioengineering guide
- FISRWG, Stream corridor restoration
- Flosi, et al., California salmonid stream habitat restoration manual
- Henderson, Dindorf, and Rozumalski, Landscaping for wildlife and water quality
- Owens, et al., A property owners guide to shoreline landscaping in the Matanuska-Susitna Borough
- Soil Conservation Service, Kenai River landowner's guide
- ADF&G – H&R

Structure Setback – Information Sheet

Useful for:	Allows space for vegetation along the shore of a waterbody and allows an uninterrupted corridor for movement of wildlife.
Benefits to fish:	Reduces hazard of contaminants and erosion and siltation from construction activities.
Benefits to you:	Reduces hazard of property loss when a flood happens.

Structure setbacks are useful to allow space for natural habitat along waterbodies that is so important for both fish and wildlife. Riparian vegetation stabilizes the banks, controls erosion, filters runoff to stabilize water quality and is a source of nutrients and cover for fish. Wildlife need continuous vegetative cover where they can migrate. Structural setbacks help to keep fuel, paint and other contaminants - which are often used around structures – farther from the water.

Structure setbacks are not required by regulation for all waterbodies in all parts of Alaska, but setback requirements have been established in many for many streams and areas. Usually, different kinds of structures have different requirements. Although specific requirements vary, ADF&G recommends a *minimum* of 100ft on both sides of the waterbody.

It is imperative that you check with your local government and ADF&G to determine the requirements for a structure setback on your property. Even if it is not required, the space created by a structure setback makes sense for the fish and for you.

For more information:

-FISRWG, Stream corridor restoration
-Henderson, Dindorf, and Rozumalski, Landscaping for wildlife and water quality
-Owens, et al., A property owners guide to shoreline landscaping in the Matanuska-Susitna Borough
-Soil Conservation Service, Kenai River landowner's guide

Timing (a) – Information Sheet

Useful for: Schedule your project implementation to avoid sensitive fish life history stages
Benefits to fish: Improves chances for survival
Benefits to you: Improve your project planning and scheduling

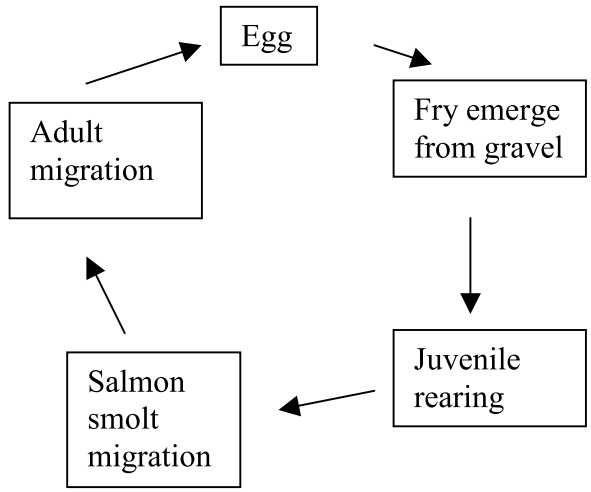
The timing and scheduling for your project is important to you because it is important for the fish. Your ADF&G permit for in-water work may stipulate the time periods when the work will be allowed. Usually, this will be between May 15 and July 15. There are two important reasons for this. First, in-water work will be allowed when it will be least hazardous to the fish that may be present. (see: *Note*, below) This will depend on the particular waterbody, species and type of proposed activity. Second, this is usually the time of high water conditions for streams in southcentral Alaska. Consequently, silt that may result from your activities will be washed out of the system.

Fall, winter and early spring are poor times to schedule most in-water work activities because flows are low and silt is liable to be deposited in spawning areas and smother fish eggs. Summer is a poor time to schedule in-water work because silt is liable to smother food organisms that are important to growing fish.

Work in wetlands, lakes and streams which are used year-round by juvenile salmon will require special measures to control sediment and avoid habitat loss.

(*Note*: Considering the general schedule of life history events of salmon and trout, the safest time for in-water work is usually mid-May to mid-July. ADF&G-H&R may prescribe another time depending on local conditions.)

Salmonid Life Cycle



Generalized critical life history stages for salmonids in southcentral Alaska.

Species	Critical Stage	Time
Salmon	Fry migration	May
Salmon	Smolt migration	May-June
Salmon	Spawning	July - October
Rainbow	Fry migration	June-July
Rainbow	Spawning	May - June
Dolly Varden	Fry migration	June-July
Dolly Varden	Smolt migration	May-June
Dolly Varden	Spawning	October
Dolly Varden	Adult migration	June and August

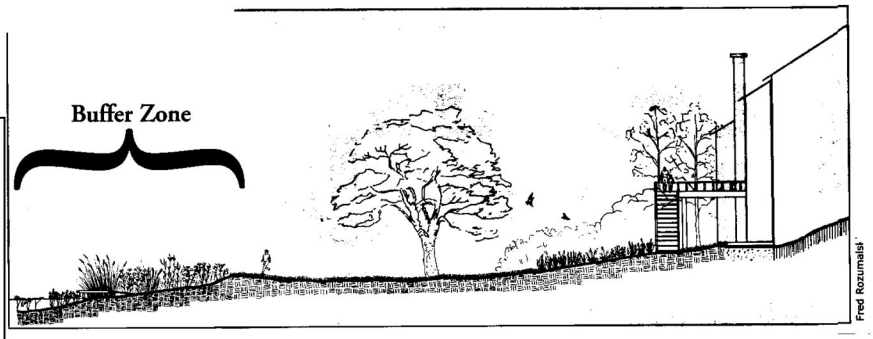
For more information:
- ADF&G – H&R
- ADF&G Wildlife Notebook Series:
http://www.state.ak.us/local/akpages/FISH.GAME/notebook/notehome.htm

Vegetative Buffer – Information Sheet

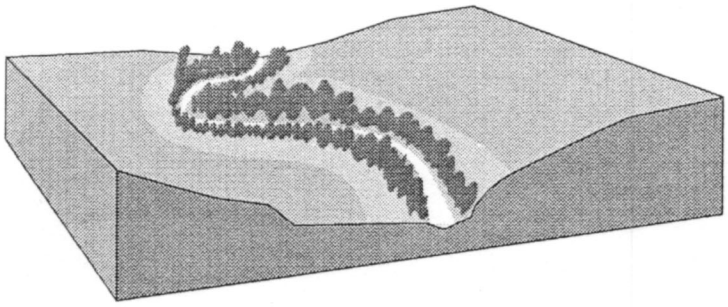
Useful for:	Provides a corridor of vegetation along the shore of a waterbody to attract and allow movement of wildlife and filters runoff and blowing debris from the water.
Benefits to fish:	Provides shade and a source of woody debris. Stabilize streambank.
Benefits to you:	Less lawn to mow; see more wildlife. Stabilize streambank.

Vegetative buffer zones are needed to retain natural habitat along waterbodies that is so important for both fish and wildlife. Riparian vegetation stabilizes the banks, controls erosion, filters runoff to stabilize water quality and is a source of nutrients and cover for fish. Woody vegetation from the riparian areas fall into the water to create hiding places for fish and surfaces for fish food to grow. Wildlife rely on riparian vegetation and need continuous vegetative cover where they can migrate.

Buffer zones are not required by regulation for all waterbodies in all parts of Alaska, but streamside riparian buffer requirements have been established in many for many streams and areas and for the timber industry. Although specific requirements vary, ADF&G recommends a *minimum* of 100ft on both sides of the waterbody. Some highly-responsible logging operations have established self-imposed buffers that are even wider; up to 200 feet adjacent to salmon streams and lakes and wetlands.



RIPARIAN FOREST BUFFERS



Streamside vegetation to lower water temperatures, provide a source of detritus and large woody debris, improve habitat, and to reduce sediment, organic material, nutrients, pesticides and other pollutants migrating to the stream.

For more information:
- FISRWG, Stream corridor restoration
- Henderson, Dindorf, and Rozumalski, Landscaping for wildlife and water quality
- Owens, et al., A property owners guide to shoreline landscaping in the Matanuska-Susitna Borough
- Soil Conservation Service, Kenai River landowner's guide

Illustrations are from: Federal Interagency Stream Restoration Working Group, Stream corridor restoration - principles, practices, and processes; and, Henderson, Dindorf, and Rozumalski, Landscaping for Wildlife and Water Quality

From: Eileen Probasco
To: Tim Hale
Cc: Theodore Eischeid
Subject: Proposed Ordinance concerning elimination of the 75 foot waterbody setback requirements
Date: Thursday, January 5, 2023 10:02:56 AM

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]

Hi Tim

I'm writing this to let you know that I am going to be at the next Fish & Wildlife Commission (FWC) meeting to address the ordinance referenced above. I see that you are one of the assembly representatives of the commission, so I wanted to give you the head's up. I see that Jesse is the other assembly rep, but he is leaving to his new position with the State.

My husband is on the FWC, and I had the chance to review his copy of the draft IM and ordinance (referred by the assembly to the Planning Commission), which is also going to the FWC at their January meeting. Needless to say, I have a lot of strong opinions on this topic.

I'm preparing a narrative (memorandum) of my concerns and am including MANY attachments and references that I believe DO NOT support this proposed ordinance. The main issue is that the ordinance is grossly inconsistent with many if not all of the borough's adopted plans and studies, see MSB 15.24.030 Comprehensive Plan and Purposes concerning water quality and habitat protection. My recommendation to the FWC will be that they adopt a Resolution recommending the Asssembly fail this ordinance. In addition, I will propose that their Resolution include a recommendation that if the assembly wishes to proceed with amendments to the waterbody setback regulations, that staff be given clear direction (in the form of an Assembly Resolution) to prepare an ordiance that will:

1. Keep the current required 75 foot waterbody setback
2. Add a section of code to include enforceable measures that can be used to mitigate shoreline degredation and water pollution, and protect riparian habitat on properties wishing to obtain legal status
3. NOT grant legal nonconforming status or a setback variance to existing structures currently in violation of the waterbody setback requirements unless they are required to meet the shorland mitigation measures
4. Only grant a variance to waterbody setbacks for future development if proper shoreland mitigation is required.

I don't know if the FWC will support my proposed Resolution but I'll bring it forward anyway, and will propose a similar recommendation to the planning commission. And I also plan on being at the Assembly meeting when it is up for public hearing.

Thanks Tim
Happy New Year

Eileen Probasco
(907) 354-3149 cell

Eileen Probasco EP
PO Box 2502
Palmer AK, 99645

Date: January 13, 2023

TO: Borough Fish and Wildlife Commission – for action at your January 19, 2023 meeting

RE: Ordinance 23-002 - An ordinance amending MSB 17.55 Setbacks for Shorelands and 17.80.020 Legal Nonconforming Structures to Allow Structures to be built within 75 feet of a Waterbody.

SUMMARY

MSB 17.55.020 Setbacks for Shorelands, is the very brief section of borough code which establishes minimum setbacks from waterbodies.

MSB 17.80.020 Legal Nonconforming Structures establishes the requirements and process for granting pre-existing legal nonconforming status to development that does not meet current standards, including development/structures currently within the waterbody setback.

17.55.020 SETBACKS FOR SHORELANDS.

(A) Except as provided in subsection (B) of this section, no structure or footing shall be located closer than 75 feet from the ordinary high water mark of a body of water. Except as provided otherwise, eaves may project three feet into the required setback area.

(B) Docks, piers, marinas, aircraft hangars, and boathouses may be located closer than 75 feet and over the water, provided they are not used for habitation and do not contain sanitary or petroleum fuel storage facilities. Structures permitted over water under this subsection shall conform to all applicable state and federal statutes and regulations.

(1) Boathouses or aircraft hangars which are exempt from a minimum shoreline setback for structures shall:

(a) be built over, in, or immediately adjacent to a waterbody and used solely for storing boats and boating accessories;

(b) be designed, constructed and oriented for primary access by boats or aircraft directly to a waterbody;

(c) not have more than incidental accessory access to a street or driveway; and

(d) not be usable as a garage or habitable structure without significant alteration.

(C) In the city of Wasilla, this section does not apply to structures where construction was completed prior to November 16, 1982. Elsewhere in the borough, this section does not apply to structures where construction was completed prior to January 1, 1987, if the present owner or owners of the property had no personal knowledge of any violation of the requirements of this section prior to substantial completion of the structures. The director of the planning department shall, upon application by a property owner, determine whether a property qualifies for an exception under this subsection.

(1) An application for a shoreline setback exception shall include a filing fee as established by resolution of the assembly.

(D) In this section, a "structure" is any dwelling or habitable building or garage.

(E) No part of a subsurface sewage disposal system shall be closer than 100 feet from the ordinary high water mark of any body of water. The planning commission shall require this distance be increased where necessary to protect waters within the borough.

17.80.020 LEGAL NONCONFORMING STRUCTURES.
(A) The following structures qualify as legal nonconforming structures without an administrative determination, however, an administrative determination may be issued if requested by the property owner:
(1) structures built lawfully and made nonconforming by adoption of subsequent ordinances;
(2) structures built in violation of the ordinance existing at the time of construction, then made legal by adoption of subsequent ordinance, and later made nonconforming by adoption of subsequent ordinances;
(3) permanent structures which were constructed lawfully after the date of adoption of the Acknowledgement of Existing Regulations, Chapter 17.01, but which were made unlawful after the date of start of construction due to adoption of subsequent regulations.
(B) The following structures require an administrative determination in order to be granted legal nonconforming status;
(1) structures granted a variance in accordance with Chapter 17.65;
(2) structures built in violation of shoreline setback ordinances existing at the time of construction, and subsequently granted an exemption from shoreline setbacks in accordance with MSB 17.55.020(C);
(3) permanent structures built in violation of ordinances existing at the time of construction, and subsequently granted legal nonconforming status in accordance with MSB 17.80.070.

The Ordinance as drafted proposes to delete those sections highlighted in yellow and add additional language that would, in summary:

1. **grant legal status to all structures which are currently in violation of the 75 foot waterbody setback requirement, upon adoption of the ordinance, without stipulations for site improvement for shoreline/waterbody protection.**
2. **In a nutshell, REMOVE the requirement for a 75 foot waterbody setback on all new construction, providing that the development is designed and constructed in accordance with plans sealed by a professional structural engineer licensed in the State of Alaska... etc. again, without stipulations for site improvements for shoreline/waterbody protection.**

BACKGROUND

(A) In 1964 the State of Alaska formed and designated the Matanuska Susitna Borough as a second class borough. Along with that designation comes the responsibility to do, at a minimum, three things:

Fund and provide an Educational system
Create and implement a comprehensive land-use plan
Fund these by property tax assessment

Currently the borough has a 2005 MSB Overall Comprehensive Plan, a variety of community comprehensive plans, specialty plans, lake management plans, public facilities plan, a wetlands management plan, and a transportation plan, to name a few. Title 15-Planning (Attachment A) of the Borough code establishes the Planning Commission and contains a list of the assembly adopted plans currently in place. Several pages from the 2005 MSB Overall Comprehensive Plan addressing water quality are included with that attachment. Title 17-Zoning (Attachment B) is one of the tools used to implement the recommendations in the adopted plans.

In summary, the regulations in Title 17 should be consistent with the goals and recommendations in Title 15. A majority of the adopted MSB Plans specifically contain recommendations on waterbody/ shoreline/habitat and water quality protection. Title 17 contains the very minimal requirements on waterbody or shoreline setbacks, which the Ordinance is proposing to change.

In addition to these borough plans supporting the protection of water quality, the Borough adopted (via Non-code Ordinance) Voluntary Best Management Practices for the Development Around Waterbodies in 2005. The Informational Memorandum (IM) and Ordinance 05-023 are included as Attachment C.

In addition to the items listed above, the assembly has funded and adopted a variety of studies, many of them initiated by this commission, in support of the "science" requested to justify the recommendations they make to agencies on behalf of the Borough. I did not have the time or resources to gather and specifically list these studies but I'm certain the planning staff has the information. One of the allegations I recall hearing from the United Cook Inlet Drift Association (UCIDA) is that one of the reasons why the numbers of returning salmon was declining in the Mat-Su was because the Borough is not doing anything to protect their water quality and fisheries habitat. Certainly, adoption of this ordinance would confirm that allegation.

(B) Lack of Justification:

1. Neither the draft Ordinance 23-002 nor the associated IM 23-002 contain specific justification for the changes being proposed by Assemblymembers Tew and Yundt. What they are hoping to accomplish, and why, is not stated.

2. In Ordinance 05-023 referenced in Attachment C, there are three and a half pages of WHEREAS statements justifying the action being taken for adoption of the BMP's. Those statements are still accurate and applicable. The proposed ordinance is a gross deviation from those statements.

3. The attachment to IM 23-002, *Shoreland Setbacks Analysis and Recommendation 1999* contains detailed recommendations for Setbacks and Minimum Performance Standards for development around waterbodies. The proposed ordinance is not even remotely consistent with those recommendations.

(C) The Borough's Fish and Wildlife Commission is charged with:

4.75.010 FUNCTIONS AND DUTIES.
(A) The commission shall advise and make recommendations to the assembly, borough manager, and/or any state or federal agencies, departments, commissions, or boards possessing jurisdiction in the area of fish, wildlife, and habitat on the interests of the borough in the conservation and allocation of fish, wildlife, and habitat.
(B) The commission may also advise the assembly and the borough manager on any other matter as to actions or issues for the borough to address on any other areas concerning fish, wildlife, habitat, administration, application, enforcement, or appointment to include political efforts, additional lobbying efforts, or any other position or action the borough should take on fish, wildlife, or habitat issues.

RECOMMENDATION
Based on the information I've referenced above, it is my suggestion that the Fish and Wildlife Commission adopt a resolution containing the following recommendations to the Assembly:

1. Retain the current required 75 foot waterbody setback
2. Add a section of code to include enforceable measures that can be used to mitigate shoreline degradation and water pollution and protect riparian habitat on development around waterbodies

3. **Do NOT grant legal nonconforming status to existing development currently in violation of the waterbody setback requirements unless they are required to meet the shoreland mitigation measures**
4. **Only grant a variance to waterbody setbacks for future development if proper shoreland mitigation is required.**

I've attached my draft Resolution for your consideration.

Respectfully Submitted,
Eileen Probasco
Past MSB Planning Director

DRAFT FWC RESOLUTION PROPOSED BY EILEEN PROBASCO
January 2023

WHEREAS, the Matanuska Susitna Borough is charged by the State of Alaska with Land Use Planning and Implementation; and

WHEREAS, Title 15 of the Borough Code contains a multitude of plans containing statements, goals and objectives about the protection of water quality and shoreline habitat; and

WHEREAS, Title 17 of the Borough Code contains only two sections with minimal regulations concerning waterbody setbacks,

WHEREAS, the Borough has also conducted a multitude of studies and adopted or facilitated other documents concerning waterbody setbacks, protection of water quality and shoreline habitat, which this ordinance is inconsistent with, including:

1. Voluntary Best Management Practices for Development Around Waterbodies
2. Economic Benefits of Sport Fishing in the Mat-Su
3. Shoreland Setbacks Analysis and Recommendation, 1999
4. More
5. Etc...
6.

WHEREAS, proposed Assembly Ordinance 23-002 Setback Ordinance Change is inconsistent with the 2005 overall Mat-Su Borough Comprehensive plan and planning documents the borough has adopted or facilitated; and

WHEREAS, proposed Assembly Ordinance 23-002 and the associated IM do not contain justification for it's adoption; and

WHEREAS, the language in proposed Assembly Ordinance 23-002 concerning allowing structures to be built within the 75 foot waterbody setback as long as they are built and designed in accordance with plans developed by a structural engineer does nothing to protect potential runoff, sedimentation, loss of shoreline or land riparian values, and

WHEREAS, adoption of this ordinance is contrary to the intent of the Best Management Practices for Development around Waterbodies, adopted by assembly Ordinance 05-023, which are intended to minimize;

- Runoff from impervious surfaces,
- Sedimentation from land disturbances,
- Nutrient enrichment from septic systems and fertilizers,
- Loss of shoreline and land riparian values; and
- Pollution from gasoline or oil, or other substances harmful to waterbodies

WHEREAS, the Borough Assembly established the Matanuska-Susitna Borough Fish and Wildlife Commission to ...*advise and make recommendations to the assembly, borough manager, and/or any state or federal agencies, departments, commissions, or boards possessing jurisdiction in the area of fish, wildlife, and habitat on the interests of the borough in the conservation and allocation of fish, wildlife, and habitat.*

NOW THEREFORE BE IT RESOLVED that the MSB Fish and Wildlife Commission hereby opposes the adoption of Ordinance 23-003; and

BE IT FURTHER RESOLVED that the commission recommends the Assembly fail the ordinance in its current format; and

BE IT FURTHER RESOLVED that the commission recommends if the Assembly wishes to proceed with amendments to the waterbody setback regulations, that staff be given clear direction to prepare an ordinance that will:

1. Keep the current required 75-foot waterbody setback
2. Add a section of code to include enforceable measures that can be used to mitigate shoreline degradation and water pollution and protect riparian habitat on properties in violation of the waterbody setback and wishing to obtain legal status, or wishing to obtain a waterbody setback variance
3. NOT grant legal nonconforming status or a setback variance to <u>existing</u> structures currently in violation of the waterbody setback requirements unless they are required to meet the shoreland mitigation measures
4. Only grant a variance to waterbody setbacks for <u>future</u> development if proper shoreland mitigation is required.

ADOPTED by the Matanuska-Susitna Borough Fish and Wildlife Commission this ____ day of _____, 2023.

Attachment A

15.24.030 COMPREHENSIVE PLAN AND PURPOSES.

(A) The assembly shall prepare, with the advice and assistance of the commission, and to revise with a written record of revisions made as necessary, a comprehensive borough-wide plan of development designed to:

(1) promote safety for vehicular and pedestrian traffic, prevent congestion and preserve the function of roads;
(2) secure safety from fire, flood, pollution, and other dangers;
(3) promote health and the general welfare;
(4) provide for orderly development with a range of population densities, in harmony with the ability to provide services efficiently, while avoiding over-concentrations of population;
(5) provide adequate light and air;
(6) preserve the natural resources;
(7) preserve property values;
(8) promote economic development;
(9) facilitate adequate provision for transportation, water, waste disposal, schools, recreation, and other public requirements.

(B) The comprehensive plan consists of the following elements, which are incorporated in this chapter by reference. If elements of the comprehensive plan conflict, the element most recently adopted shall govern.

(1) Matanuska-Susitna Borough Comprehensive Development Plan, Ord. 05-174 dated November 2005;
(2) Matanuska-Susitna Borough Coastal Management Plan,;
(3) City of Palmer Comprehensive Plan;
(4) City of Wasilla Comprehensive Plan.
(5) City of Houston Comprehensive Plan, as amended July 2003.
(6) Chickaloon Comprehensive Plan
(7) Chase Comprehensive Plan, adopted 2017;
(8) Matanuska-Susitna Borough Core Area Comprehensive Plan, September 1993, amended September 1997; amended September 2007;
(9) Glacier View Comprehensive Plan;
(10) Big Lake Community Council Area, Comprehensive Plan;
(11) Knik-Fairview Comprehensive Plan, adopted 1997;
(12) Long Range Transportation Plan, August 1997, adopted 1997; as amended December 5, 2017;
(13) Talkeetna Comprehensive Plan, January 1998, amended March 1999;
(14) Petersville Road Corridor Management Plan, adopted 1998;
(15) Lake Louise Comprehensive Plan, adopted 1998;
(16) Matanuska-Susitna Borough Recreational Trails Plan,;
(17) Sutton Comprehensive Plan, adopted 2000;
(18) Matanuska-Susitna Borough Parks, Recreation and Open Space Plan, adopted June 2001;
  (a) Lazy Mountain Recreation Area Master Plan, adopted 2014;
  (b) Crevasse Moraine Master Plan, adopted 2014;
  (c) Matanuska River Park Master Plan, adopted 2014; and
  (d) Ridge Trail Development Plan;
(19) Meadow Lakes Comprehensive Plan;
(20) Mat-Su Borough Primary Healthcare Plan 2005-2015, adopted March 2006;
(21) 2005 Y Community Comprehensive Plan, adopted March 6, 2007;
(22) Knik Arm Bridge and Toll Authority Historic Preservation Plan, adopted November 20, 2007;
(23) Lazy Mountain Comprehensive Plan, adopted March 4, 2008;
(24) Regional Aviation Systems Plan and Airport Location Study, adopted 2008;
(25) Matanuska-Susitna Borough Joint Land Use Study, adopted 2010;
(26) Economic Development Strategic Plan, adopted August 3, 2010;
(27) Matanuska-Susitna Borough Asset Management Plan: Natural Resource Management Units, adopted 2010, updated 2019;
(28) Matanuska River Management Plan;
(29) Point MacKenzie Community Comprehensive Plan, adopted 2011 (Ord. 11-052 dated July 19, 2011);
(30) Wetlands Management Plan;
(31) Hatcher Pass Government Peak Unit Asset Management and Development Plan;
(32) The Willow Area Community Historic Preservation Plan, adopted January 15, 2013;
(33) Willow Area Community Comprehensive Plan, adopted August 20, 2013;
(34) City of Houston Local Hazard Mitigation Plan;
(35) Matanuska-Susitna Borough Stormwater Management Plan;
(36) South Knik River Comprehensive Plan;
(37) Matanuska-Susitna Borough Energy Policy, adopted by Ordinance Serial No. 14-051;
(38) South Big Lake Road Realignment (West Susitna Parkway Extension) Access Management Plan;
(39) Matanuska-Susitna Borough Metropolitan Planning Organization (MPO) Self Assessment, January 2016;
(40) Louise Susitna Tyone Lakes Comprehensive Plan Update, adopted in June 2016, amending the Lake Louise Comprehensive Plan adopted 1998;

(41) Fishhook Comprehensive Plan, adopted 2017;
(42) Corridor Access Management Plan for Seldon Road Extension Church Road to Pittman Road;
(43) Matanuska-Susitna Borough Public Libraries Strategic Plan (2018-2022);
(44) 2018-2022 Coordinated Human Services Transportation Plan, adopted November 2018;
(45) Matanuska-Susitna Air Quality Management Plan, adopted 2018.

(C) Unless there is an imminent threat to the public health, safety, welfare, or a lake's water quality, lake management plans shall not be amended for a period of two years from the date of adoption, or the last amendment date. The following lake management plans have been adopted by the commission and assembly as parts of the overall borough comprehensive plans:

(1) Knik Lake, Lake Management Plan, May 1995, adopted 1995.
(2) Crooked Lake, Lake Management Plan, May 1995, adopted 1995.
(3) Honeybee Lake, Lake Management Plan, October 1995, adopted 1995.
(4) Rainbow Lake, Lake Management Plan, October 1995, adopted 1995.
(5) Island and Doubloon Lake, Lake Management Plan, May 1995, adopted 1995.
(6) West Papoose Lake, Lake Management Plan, May 1995, adopted 1995.
(7) John Lake, Lake Management Plan, May 1995, adopted 1995.
(8) Crystal Lake, Lake Management Plan, May 1995, adopted 1995.
(9) Bonnie Lake Area, Lake Management Plan, September 1996, adopted 1996.
(10) Wolf Lake, Lake Management Plan, July 1997, adopted 1997.
(11) Twin Island Lake, Lake Management Plan, July 1997, adopted 1997.
(12) Fish Lake, Lake Management Plan, August 1997, adopted 1997.
(13) Blodgett Lake, Lake Management Plan, August 1997, adopted 1997.
(14) Big Lake, Lake Management Plan, adopted August, 1998.
(15) Memory Lake, Lake Management Plan, adopted September 1998.
(16) Toad Lake, Lake Management Plan, adopted September 1998.
(17) Walby Lake, Lake Management Plan, adopted September 1998.
(18) Question, Little Question, Lake Five and Unnamed Lakes, Lake Management Plan, adopted September 1998.
(19) Marilee Lake, Lake Management Plan, adopted September 1998.
(20) Diamond Lake, Lake Management Plan, March 1999, adopted 1999.
(21) Christiansen Lake, Lake Management Plan, September 1999, adopted 1999.
(22) Neklasen and Lower Neklasen Lakes, Lake Management Plan, January 2000, adopted 2000.
(23) Marion Lake, Lake Management Plan, November 2000, adopted 2000.
(24) Long Lake (Houston), Lake Management Plan, November 2001, adopted 2001.
(25) Three Mile Lake, Lake Management Plan, November 2002, adopted 2002.
(26) Wolverine Lake, Lake Management Plan, June 2004, adopted 2004.
(27) Whiskey Lake, Lake Management Plan, June 2004, adopted 2004.
(28) Little Lonely Lake, Lake Management Plan, May 2005, adopted 2005.
(29) Jean Lake, Lake Management Plan, November 2005, adopted 2006.
(30) Liten Lake, Lake Management Plan, November 2005, adopted 2006.
(31) Shirley Lake, Lake Management Plan, adopted 2006.
(32) Florence Lake, Lake Management Plan, adopted 2006.
(33) Carpenter Lake, Lake Management Plan, adopted 2006.
(34) Stevens and Oriana Lake, Lake Management Plan, adopted 2007.
(35) Paradise Lake, Lake Management Plan, adopted 2007.
(36) Morvro Lake, Lake Management Plan, adopted 2007.
(37) Jacobsen Lake, Lake Management Plan, adopted 2008.
(38) Sunbeam and Suncrest Lakes, Lake Management Plan, adopted 2008.
(39) Little Beaver Lake, Lake Management Plan, adopted 2008.
(40) Lake of the Woods, Lake Management Plan, adopted 2010.
(41) Caswell Lake, Lake Management Plan, adopted 2014.

(D) The borough engages in land disposals in accordance with the authority contained in A.S. Title and in accordance with the procedures contained in MSB Title .

(E) The Matanuska-Susitna Borough Community Health Plan, 1997, has been adopted by the commission and assembly as part of the overall borough comprehensive plan.

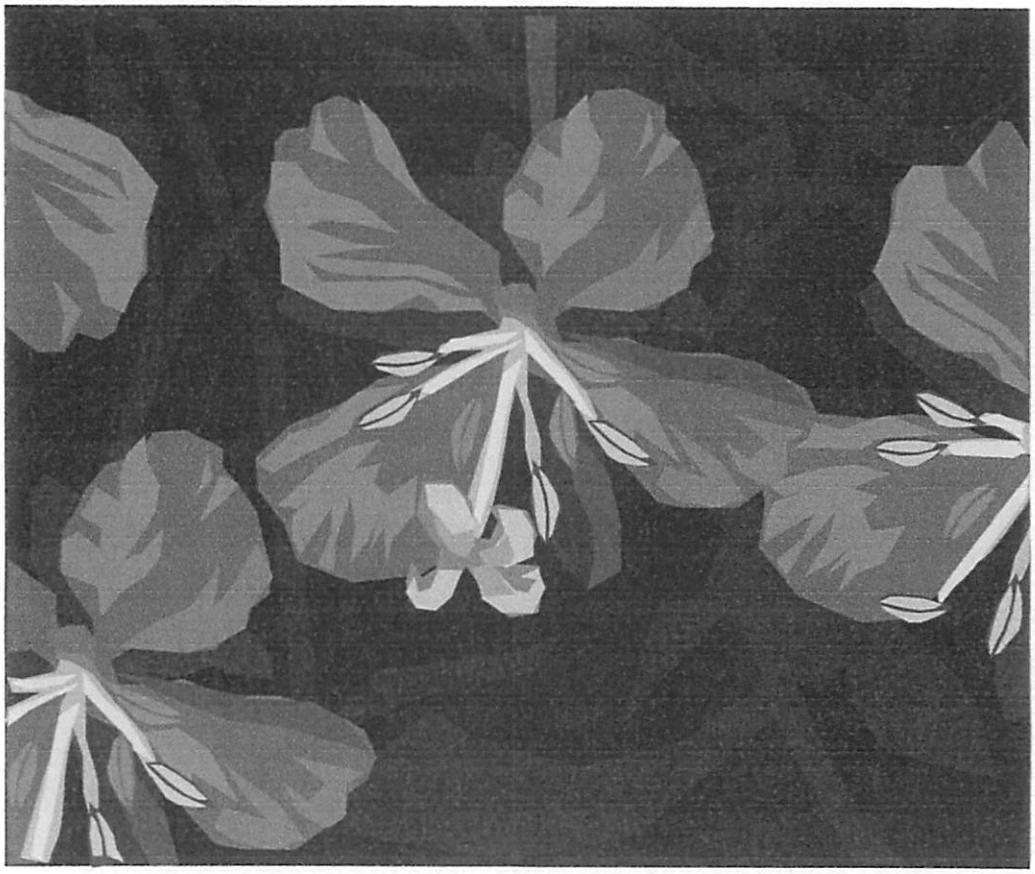
(F) Point MacKenzie Port Master Plan, January 1998, amended May 1999, amended February 2011, amended April 2016, has been adopted by the commission and assembly as part of the overall borough comprehensive plan.

(G) The Matanuska-Susitna Borough Rail Corridor Study, June 2003, has been adopted by the commission and assembly (adopted by the assembly as amended) as part of the overall Matanuska-Susitna Borough Comprehensive Plan.

(H) The Matanuska-Susitna Borough Hazard Mitigation Plan 2020 Update has been adopted by the assembly and the planning commission as part of the overall Matanuska-Susitna Borough Comprehensive Plan.

Matanuska-Susitna Borough

Comprehensive Development Plan



2005 Update

Matanuska-Susitna Borough Planning and Land Use Department

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Land Use:

The Borough is comprised of over 24,000 square miles containing urbanized, suburban, rural, and remote areas. There are twenty-six recognized communities, each distinguished with unique life styles and community values. While the Borough is distinguished with diversity in land use patterns and communities, a common thread exists throughout the Borough that seeks to preserve and enhance existing qualities that make living and working within the Matanuska-Susitna Borough a chosen and welcomed lifestyle.

Balancing the different needs and desires related to land use decisions is challenging. Some land use decisions need to be addressed in a consistent fashion throughout the Borough because they have a common affect on the population as a whole. Consistent application of Borough-wide land use decisions results in an effective, efficient, equitable policy. For example, the Borough created a Borough-wide seventy-five foot (75') shoreline setback for habitable structures. Developing consistent standards for businesses wishing to locate in the Borough is another reason for making some land use decisions at the Borough-wide level. Consistent standards allow the business community to better plan their investments and allow for better predictability for both industry and residents alike. Many land use issues are best addressed at a Borough-wide level because of the very nature of the issue. Examples of such issues include watersheds, groundwater, and waste disposal which affect large areas and multiple communities.

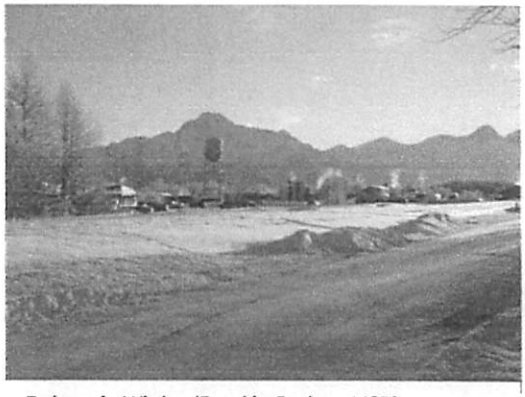
While many issues are better addressed at a regional or Borough-wide level, it is necessary to recognize that some land use issues are better addressed at the local community level. This is due to the unique characteristics embodied within the Borough's communities. For instance, communities with water and sewer infrastructure may prefer small lot development, while those communities without such infrastructure and having sensitive groundwater supplies may prefer large lot development. Certain communities may wish to preserve important historical sites or promote certain economic opportunities which may be irrelevant to other communities.

Some of the key reasons to manage land uses are to limit residential and commercial sprawl, limit proximity of incompatible uses, and to encourage uses that support one another. For instance, while it may not be appropriate for a loud, externally illuminated, busy industrial use to be located next to a residential use, there are reasons to encourage a modest-sized grocery store to be located within close proximity to residential properties. To maintain a healthy and diversified economy it is necessary to provide places for all development, especially commercial and industrial development; hence, land use regulations should accommodate such uses and provide investors with a clear understanding, supported by consistent policies, of where and how they may develop their specific investments. To support this land-use framework, the following goals and recommendations are provided:

> **Goal (LU-1):** *Protect and enhance the public safety, health, and welfare of Borough residents.*
>
> Policy LU1-1: Provide for consistent, compatible, effective, and efficient development within the Borough.

Goal (LU-2): *Protect residential neighborhoods and associated property values.*
Policy LU2-1: Develop and implement regulations that protect residential development by separating incompatible uses, while encouraging uses that support such residential uses including office, commercial and other mixed-use developments that are shown to have positive cumulative impacts to the neighborhood.

Goal (LU-3): *Encourage commercial and industrial development that is compatible with residential development and local community desires.*
Policy LU3-1: Develop and implement regulations that provide for non-residential development.
Policy LU3-2: Allow local communities, through local community based plans, to refine Borough-wide regulations addressing development patterns and impacts while maintaining consistency with the goals and policies of the Borough-wide Comprehensive Plan.


Palmer in Winter (Frankie Barker, MSB)

Goal (LU-4): *Protect and enhance the Borough's natural resources including watersheds, groundwater supplies and air quality.*
Policy LU4-1: Identify, monitor, protect, and enhance the quantity and quality of the Borough's watersheds, groundwater aquifers, and clean air resources.
Policy LU4-2: Population density standards should accommodate the natural system's ability to sustain varying density levels.

Goal (LU-5): *Recognize and protect the diversity of the Borough's land use development patterns including agricultural, residential, commercial, industrial and cultural resources, while limiting sprawl.*
Policy LU5-1: Develop and implement land use planning efforts that recognize, protect, and enhance the Borough's diverse land use development patterns and encourage local community land use decision-making, while limiting sprawl and maintaining consistency with the goals and policies of the Borough-wide Comprehensive Plan.
Policy LU5-2: Encourage and provide various lot size and population density standards to accommodate a variety of property owners and residents.

Goal (LU-6): *New developments greater than five (5) units per acre should incorporate design standards that will protect and enhance the existing built and natural environment.*

Goal (LU-7): *The borough should actively limit sprawl through setting appropriate density standards and encouraging residential and commercial development to occur in areas that are centrally located and within close proximity to public and private services.*

Policy PO1-3: Ensure adequate maintenance and operation funding prior to development of parks and recreational facilities.
Policy PO1-4: Ensure that parks and open spaces are provided using the following standards to determine the need for parks (Table 3).
Policy PO1-5: Actively promote through various land use techniques the preservation of agricultural land.

Table 3
Park and Open Space Levels of Service

Facility	Standard
Neighborhood Parks	5 acres/1,000 persons
Community Parks	10 acres/3,500 persons
Nature/Open Space Parks	15 acres/5,000 persons

Natural Resource Conservation. Natural areas and open spaces are a vital component of the health and well being of the Borough. Conservation and enhancement of the ecological resources found within the Borough should be a key component of its land use and park planning. In surveys and workshops, Borough citizens have consistently identified natural areas as being a key component of the Borough's quality of life.

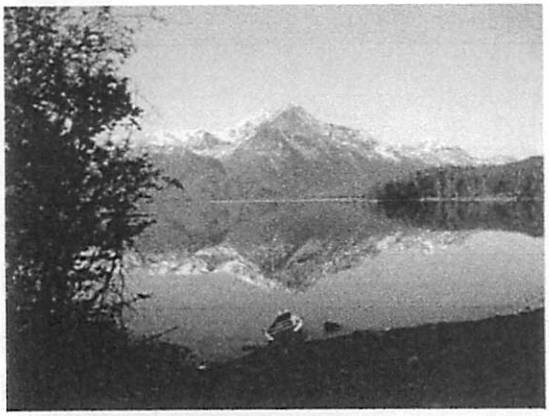
The Borough has hundreds of lakes, streams and rivers that provide valuable habitat for fish and wildlife, contribute to water quality and provide recreational opportunities for residents and visitors. Open space corridors serve many important functions, including recreation, fish and wildlife habitat, and the connection of individual features that comprise a natural system. For example, the "Crevasse Moraine" area in the Borough's Core Area provides such functions.

Two Moose
(Jackie Muncy, MSB Photo Contest Winner)

Goal (PO-2): *Protect and preserve natural resource areas.*
Policy PO2-1: Work cooperatively with numerous resource management agencies, community councils, and citizens to care for lakes, wetlands, streams, rivers, and wildlife habitat and corridors while providing public access for recreational opportunities that have minimal impacts to such areas.
Policy PO2-2: Preserve opportunities for people to observe and enjoy wildlife and wildlife habitats.
Policy PO2-3: Identify, through analysis, potential natural resource areas throughout the Borough that should be protected.

Community Quality:

The Matanuska-Susitna Borough's natural environment, with its abundant supplies of clean water, its beauty, and its other natural resources, has attracted people to our community for generations. Natural systems serve many essential biological, hydrological, and geological functions that significantly affect life and property in the Borough. Features such as lakes, wetlands, streams and rivers provide habitat for fish and wildlife, flood control, and groundwater recharge, as well as surface and groundwater transport, storage, and filtering. Vegetation, too, is essential to fish and wildlife habitat, and also helps to support soil stability, prevents erosion, and absorbs significant amounts of water, thereby reducing runoff and flooding. A well-functioning natural environment also provides clean air, which is becoming a growing concern as the Borough continues to develop. In addition to these functions, the natural environment provides many valuable amenities such as scenic landscape, community identity, open space, and opportunities for recreation, culture, and education.



Mud Lake, Knik Public Use Area
(Frankie Barker, MSB)

In addition to the aforementioned benefits, a healthy natural environment helps to fuel the Borough's economy. Industry and its employees are attracted to communities which are recognized as having a high quality of life. The natural environment is one of the key considerations or indicators of the definition of quality of life. Currently the Borough is recognized as a place to "work and play"; this recognition must be nurtured and protected in order for the Borough to continue its ability to attract business and industry in the years to come. Two specific industries that have capitalized on the Borough's quality of life are tourism and recreational opportunities. The Borough's citizens recognize and often comment upon the important role the natural environment plays in our quality of life.

The Borough's desire and duty to protect natural resources must be balanced with the Borough's obligations to:

- Accommodate future growth, and
- Provide a development process that is timely, predictable, and equitable to developers and residents alike.

Success in balancing these complex and often conflicting concerns depends in large part upon the provision of extensive opportunities for public participation, during the formulation of policies, programs, incentives, and regulations relating to the natural environment.

As a rapidly growing community with an abundance of environmental resources, the Borough has a daunting yet reachable task to manage such resources appropriately. The Borough's natural resources include several significant rivers and lakes, many supporting

significant fish populations. The Susitna and Matanuska Rivers act as significant drainage basins, and are hydrologically unpredictable, thus requiring adequate planning for erosion and flooding occurrences. The Borough also contains a vast number of wetlands, riparian and wildlife corridors, wilderness areas, and considerable topographic variation. Being partially located on both the north and west shores of Knik Arm presents additional unique concerns and opportunities associated with the marine environment. With this said, the Borough's challenge for the future will be to accommodate new and infill growth while protecting and enhancing natural systems on public and private lands.

Natural Water Systems. The Borough is currently embarking on a study/plan to address the past, current, and future impacts as well as evaluate and record the primary functions, existing problems and future opportunities within the Big Lake Watershed natural system. This effort is indicative of the importance planning efforts have when addressing Borough-wide watershed issues.

Development, through addition of impervious surface and removal of vegetation, increases the volume and flow rate of surface water runoff. If uncontrolled, this increases the peak flow and decreases summer base flow in stream channels. Property damage and loss of human life can result if stream channels are not large enough to contain the increased flows, or if the development has encroached on the natural floodplain of the stream or river. In addition, frequent high flows can cause excessive erosion and can destroy the complex channel structure that provides food and habitat for fish and other aquatic life.

Wetlands Class (Frankie Barker, MSB)

The retention of natural drainage systems should be given priority to altering such systems in most cases. However, many natural watercourses may be unable to accommodate unusually large storms or increased runoff from development, not to mention the meandering presence many of the Borough's streams and rivers have. In such cases, the natural stream and river systems should be preserved and enhanced by stabilizing the banks of watercourses. Preserving the natural drainage system to the greatest extent feasible and discouraging non-essential structures, land modifications, or impervious surfaces in the drainage system will assist in ensuring optimal natural functioning within the drainage area.

Increases in impervious surface resulting from development cause decreases in ground water recharge. This causes a decline in base flows and subsequent loss of habitat that impacts fish and wildlife populations. Moreover, the pollutants carried with such runoff including gasoline, oil, sediment, heavy metals, and herbicides, can potentially contaminate water supplies for numerous Borough properties which rely on well systems for drinking water.

Floodplains are lands adjacent to lakes, rivers, and streams that are subject to periodic flooding and erosion. Floodplains naturally store flood water, protect water quality, and are valuable for recreation and wildlife habitat. New development or land modification in

designated floodplains should be designed to maintain natural flood storage functions and minimize hazards to life and property. Areas subject to erosion, such as the banks along the Matanuska River, should be similarly managed to accomplish the same life and safety concerns.

The availability of clean water is essential to residential and business development and to the survival of vegetation, fish, animals, and humans in our ecosystem. Water quality is degraded when indiscriminate modifications to wetlands, watercourses, lakes, subsurface drainage, or associated natural areas occur, thus disrupting basin functions. In addition to water quality degradation, such actions can cause flooding, decreases in groundwater quantity, sedimentation, erosion, uneven settlement, or drainage problems. Land surface modifications and other development activity should be properly managed to avoid these problems.

Goal (CQ-1): *Protect natural systems and features from the potentially negative impacts of human activities, including, but not limited to, land development.*

Policy CQ1-1: Use a system-wide approach to effectively manage environmental resources. Coordinate land use planning and management of natural systems with affected state and local agencies as well as affected Community Council efforts.

Policy CQ1-2: Manage activities affecting air, vegetation, water, and the land to maintain or improve environmental quality, to preserve fish and wildlife habitat, to prevent degradation or loss of natural features and functions, and to minimize risks to life and property.

Policy CQ1-3: Guide development along the Borough's many glacially braided rivers such as the Matanuska River to preserve the resources and ecology of the water and shorelines, avoid natural hazards, minimize erosion and associated property damage and public welfare and safety.

Policy CQ1-4: Provide site restoration if land surface modification violates adopted policy or development does not ensue within a reasonable period of time.

Policy CQ1-5: Make information concerning natural systems and associated regulations available to property owners, prospective property owners, developers, and the general public,

Matanuska River (Frankie Barker, MSB)

Goal (CQ-2): *Manage the natural and built environments to achieve minimal loss of the functions and values of all drainage basins; and, where possible, enhance and restore functions, values, and features. Retain lakes, ponds, wetlands, streams, and rivers and their corridors substantially in their natural condition.*

Policy CQ2-1: Using a watershed-based approach, apply best available science in formulating regulations, incentives, and programs to maintain and, to the degree possible, improve the quality of the Borough's water resources.

Policy CQ2-2: Comprehensively manage activities that may adversely impact surface and ground water quality or quantity.
Policy CQ2-3: When appropriate, utilize Borough adopted "Best Management Practices" when managing watershed impacts.
Policy CQ2-4: Develop a "wetland banking" and "land trust" program to provide property owners and developers alternatives when considering development strategies on environmentally sensitive lands.

Implementation:

There are a broad range of measures necessary to implement the Comprehensive Plan involving a wide variety of people and organizations. It is the responsibility of the Borough, however, to put in place mechanisms that will promote the actions needed for implementation. Listed below are the primary methods that will be used to implement the Plan.

- Land-use regulations (SpUDs);
- Capital improvement program;
- Subdivision regulations.

Because of the broad range of plans that the Borough utilizes when developing and implementing its comprehensive planning efforts, the Borough's implementation methods consist of all of the most common means of implementing comprehensive plans with the exception of impact fees.

A comprehensive plan cannot be implemented entirely by codes and ordinances. Some recommendations made within the plan require other types of actions that only a governing body can take. Examples of these types of actions are: developing capital improvement programs; promoting redevelopment or in-fill development, and fostering good public participation, perhaps the keystone and the catalyst of most plan implementation techniques.

Obviously, there can be many other similar actions that can aid in implementing the comprehensive plan, none of which require codes and ordinances to be put into effect by which, nevertheless, are equally as important to assist with plan implementation. For example, periodic informational meetings with Borough community councils to discuss the comprehensive plan can aid in plan implementation. Exchanges with groups like the local Chamber of Commerce and other civic organizations will keep the plan in the forefront as individuals make business decisions and civic groups plan their community assistance activities. Collectively, actions by individuals and individual civic groups can add up toward accomplishing goals set forth in the plan. When government sponsored activities are linked to non-governmental actions real progress can be made.

Land-use Regulations. Land use regulations set the legal requirements for new development and modifications to existing uses. The vast majority of such regulations are found in zoning and subdivision codes as well as shoreline plans. The Borough uses both Borough-wide and special use district (SpUD) zoning ordinances. Borough-wide zoning ordinances address land use issues that are common throughout the Borough and are most effectively and

Attachment B

Chapter

MATANUSKA-SUSITNA BOROUGH INFORMATION MEMORANDUM IM No. 05-032

SUBJECT: Voluntary Best Management Practices for Development around Waterbodies

AGENDA OF: January 18, 2005

ASSEMBLY ACTION: 02 05-023 was adopted without objection. 2/1/05 (JAC)

MANAGER RECOMMENDATION: Introduce and set for public hearing.

APPROVED BY JOHN DUFFY, BOROUGH MANAGER:

Route To:	Department/Individual	Initials	Remarks
x	Originator	LF	
x	Planning and Land Use Director	S.J. (MWC)	
x	Finance Director		1/6/05
x	Borough Attorney		
x	Borough Clerk	M.D.	1/10/05

ATTACHMENT(S): Fiscal Note: Yes ____ No X
Ordinance Serial No. 05-023 (5 pages)
Planning Commission Resolution Number 04-59 (2 pages)
Best Management Practices Chart (1 page)
Draft Planning Commission Minutes, pages 2-5 (4 pages)

SUMMARY STATEMENT:

The intent of this non-code ordinance is to establish voluntary measures that will maintain or improve the health

S:\Planning & Land Use\Water & Air Quality Div\WATER\Shoreline Best Mgmt Practices\IM for Jan 18 BMPS.doc IM 05-032 Ord 05-023

Attachment C

of waterbodies and their associated shorelines and riparian areas. Best management practices are those practices that reduce pollution. They are widely used in forestry, agriculture, construction, and increasingly by land managers to mitigate the effects of population growth and urban development. Establishing best management practices to proactively address water quality and human health issues may help avoid future complex regulations and codes that exist in other parts of the country. Voluntary compliance with best management practices will also help maintain property values as property owners generally value clean water and healthy fish and wildlife populations.

Nonpoint source pollution (pollution that is caused by run-off from land and flooding) is considered by water quality managers to be the leading cause of water pollution nation-wide. Whereas point sources of pollution (such as those that come out of a pipe, or a spill) can be addressed through clean-up or elimination of the pollutant, nonpoint source pollution is more diffuse and not as easy to identify, monitor, or remediate. The effects build up slowly, but once they reach a certain level are difficult and costly to reverse. As an example, a lake can be gradually enriched with nutrients (phosphorus, nitrogen, and other substances that may be found in waterbodies in small quantities) from the watershed for decades without notice. When nutrient levels are high enough, however, the lake will quickly develop nuisance algal blooms or dense vegetation mats. The most egregious types of nonpoint source pollution are generally nutrients and sediments. Salts and other particulates are problems in some areas.

Taken alone, the Borough's 75 foot waterbody setback for habitable structures has limited effect in reducing nonpoint source pollution and maintaining water quality. Currently, property owners may adhere to Borough and State regulations related to waterbody development, but remove all natural vegetation along the water's edge and replace it with lawn or impervious surfaces. Preserving some natural shoreline, reducing the runoff from land to water, and decreasing sedimentation and erosion are important complimentary measures. The attached chart provides a brief rationale for each of the specific recommended best management practices.

Establishing voluntary best management practices around waterbodies has additional long-term benefits in addition

to water quality. Water recharge is improved when runoff is decreased, improving the land's capacity to provide drinking water. Decreasing impervious surfaces also helps regulate water flow by eliminating pulses of storm or flood waters. Visual screens are increased for property owners, and noise is reduced. The overall, long term benefits are numerous.

Planning Commission Resolution 04-59 and draft Ordinance Serial No. 05-023 were considered and passed by the Planning Commission on December 6, 2004. The Planning Commission made amendments as shown in the draft ordinance. Effectively, the amendments make the recommended practices more stringent.

The Planning Commission also requested that the ordinance be amended to include a Section 7 on the Alaska Department of Environmental Conservation (ADEC) requirements for septic systems around waterbodies. To avoid duplication with section 4, staff recommends that instead of adding a section 7 that section 4 be amended to include adherence to state regulations concerning septic systems around waterbodies. That change is reflected in the draft ordinance.

RECOMMENDATION OF ADMINISTRATION:

Staff recommends that the Assembly adopt Ordinance 05-023, adopting best management practices for development around waterbodies.

000538

MATANUSKA-SUSITNA BOROUGH
PLANNING COMMISSION RESOLUTION SERIAL NUMBER 04-59

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH PLANNING COMMISSION RECOMMENDING THE ASSEMBLY ADOPT VOLUNTARY BEST MANAGEMENT PRACTICES FOR DEVELOPMENT AROUND WATERBODIES.

WHEREAS, rapid urbanization is occurring in the Matanuska-Susitna Borough and presents a concern for the long term health of waterbodies, shorelines and riparian areas; and

WHEREAS, nonpoint source pollution stemming from urbanization is the greatest source of waterbody degradation nationwide; and

WHEREAS, adherence to best management practices will reduce nonpoint source pollution and prevent long term waterbody degradation from nonpoint source pollution; and

WHEREAS, existing Borough ordinances do not adequately address the causes of or impacts due to nonpoint source pollution; and

WHEREAS, property values will be maintained or enhanced and future waterbody remediation costs avoided if best management practices are adhered to.

NOW, THEREFORE, BE IT RESOLVED, that the Matanuska-Susitna Borough Planning Commission recommends the Borough Assembly adopt voluntary best management practices for development around waterbodies in order to minimize:

- Runoff from impervious surfaces; and
- Sedimentation from land disturbance; and
- Nutrient enrichment from septic systems and fertilizers; and
- Loss of shoreline habitat; and

IM 65-032
OR 05-023

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- Pollution from gasoline or oil, or other substances harmful to waterbodies.

Adopted by the Matanuska-Susitna Borough Planning Commission this 6 of December, 2004

HELGA LARSON, Chair

PRISCILLA M. GOFF, Planning Clerk

(SEAL)

IM 05-032
DA 05-023

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NON-CODE ORDINANCE

By: Borough Manager
Introduced: 01/18/05
Public Hearing: 02/01/05
Adopted: 02/01/05

MATANUSKA-SUSITNA BOROUGH
ORDINANCE SERIAL NO. 05-023

AN ORDINANCE OF THE MATANUSKA-SUSITNA BOROUGH ASSEMBLY ADOPTING VOLUNTARY BEST MANAGEMENT PRACTICES FOR DEVELOPMENT AROUND WATER BODIES.

WHEREAS, non-point source pollution (pollution that is caused by runoff from land and flooding) is one of the leading causes of waterbody degradation in areas of rapid development; and

WHEREAS, the Matanuska-Susitna Borough is experiencing exponential population growth; and

WHEREAS, the current Borough linear waterbody setback for habitable structures and garages provides limited protection from the effects of land-clearing, fertilizers, additional structures and other polluting activities around water bodies; and

WHEREAS, following best management practices for development around water bodies has been shown to significantly reduce non-point source pollution; and

WHEREAS, property values, riparian habitat, human health and water quality will be maintained or enhanced and future waterbody remediation costs avoided if best management practices are followed; and

WHEREAS, the Assembly finds that there is a need for reducing the impacts from non-point source pollution by recommending adherence to certain best management practices around water bodies.

BE IT ENACTED:

Section 1. Classification. This is a non-code ordinance.

Section 2. Establishment of voluntary best management practices. The intent of the proposed best management practices is to reduce non-point source pollution by minimizing:

1. runoff from impervious surfaces;

2. sedimentation from land disturbance;

3. nutrient enrichment from septic systems and fertilizers;

4. loss of shoreline and land riparian values; and

5. pollution from gasoline or oil, or other substances harmful to water bodies.

The Matanuska-Susitna Borough Assembly hereby adopts the following voluntary best management practices to be followed when developing around water bodies to read as follows:

1. To the extent feasible and practical, maintain the natural shoreline or riparian habitat.

a. Preserve a minimum 75 foot wide buffer of continuous, undisturbed native vegetation along at least 50 percent of the parcel's shoreline or streambank.

b. Along the remaining 50 percent of shoreline, limit vegetation removal to what is necessary to accommodate paths, docks, or other limited development.

2. To the extent feasible and practical, minimize impervious surfaces on shoreline lots.

a. Limit impervious surfaces to a maximum of 25 percent of lot area.

b. minimize impervious surfaces as much as possible within 75 feet of the water's edge.

3. Avoid adding sand beaches or adding fill material to lakeshore, stream banks or wetland areas.

4. Adhere to the state of Alaska regulations that require a 100 foot separation of septic systems from water bodies. Maintain septic systems so that nutrients and contaminants stay out of the water.

5. Use landscaping practices that will reduce degradation of waterbodies, including:

a. test soils to see if fertilizers are needed and if needed use sparingly;

b. maintain a small lawn area and plant native species to reduce fertilizer use; and

c. avoid fertilizer use completely within 50 feet of the water's edge.

6. In addition to maintaining the 75 foot setback for habitable structures and garages, maintain a minimum 75 foot distance from the water's edge for:

a. additional permanent or accessory buildings;

b. driveways, roads and other impervious surfaces;

c. livestock or dog quarters or yards;

d. manure or compost piles; and

e. long-term vehicle or equipment storage.

Reasonable exceptions may include boathouses, floatplane hangers, marinas, piers and docks that need to be closer than 75 feet to serve their purpose.

Section 3. Effective date. This ordinance shall take effect upon adoption by the Matanuska-Susitna Borough Assembly.

ADOPTED by the Matanuska-Susitna Borough Assembly this 1 day of February, 2005.

/S/

TIMOTHY L. ANDERSON, Borough Mayor

ATTEST:

/S/

MICHELLE M. MCGEHEE, CMC, Borough Clerk (SEAL)

PASSED UNANIMOUSLY: Woods, Allen, Colberg, Kvalheim, Simpson, Colver, and Vehrs

HOW CAN YOU HELP PROTECT WATER QUALITY?

Voluntary Best Management Practices For Development around Waterbodies

Best Management Practice	Rationale
Maintain the natural shoreline or riparian habitat. • Preserve a minimum 75 foot wide buffer of continuous, undisturbed native vegetation along at least 50% of the parcel's shoreline or stream bank. • Along remaining 50% of shoreline, limit vegetation removal to what is necessary to accommodate paths, docks, or other limited development.	Protects water quality by reducing nutrient loading in lakes and minimizing temperature changes to stream environments. Provides flood control and reduces erosion and sedimentation. Protects fish and wildlife habitat by providing cover, nest sites and spawning areas.
Minimize impervious surfaces on shoreline lots. • Limit to maximum of 25% of lot area. • Minimize as much as possible within 75 feet of the water's edge.	Impervious surfaces such as pavement, roof tops, and compacted soil allow runoff to enter waterbodies more readily. Runoff in residential or commercial areas may contain phosphorus and other nutrients that lead to oxygen deficits and algal blooms.
Avoid adding sand beaches or adding fill material to lakeshore, stream banks or wetland areas.	Sand or fill reduces water clarity, is harmful to aquatic life and may contain phosphorus that enriches waterbodies.
Adhere to the state of Alaska's 100 foot waterbody separation for septic systems and outhouses, and keep septic systems in good working order.	Bacterial contamination from poorly maintained or leaking septic systems or outhouses is a human health concern. Nutrients from poorly functioning septic systems or outhouses are waterbody pollutants.
Use landscaping practices that will reduce degradation of waterbodies, including: • Test soils to see if fertilizers are needed and use sparingly. • Design a smaller lawn to reduce fertilizer use. • Use native species that grow well without fertilizer. • Avoid fertilizer use completely within 50 feet of the water's edge.	Lawns are often over-fertilized, which leads to harmful levels of nutrients in the water. Lawns are not as effective as natural vegetation for pollution filtration. Lawns do not provide protective cover for fish and wildlife populations that are part of the waterbody system.
Maintain at least a 75' distance from the water's edge for: • Additional permanent or accessory buildings. • Driveways, roads and other impervious surfaces. • Livestock or dog quarters or yards. • Manure or compost piles. • Long-term vehicle or equipment storage. Exceptions may include boathouses, floatplane hangers, marinas, piers and docks that need to be closer than 75 feet to serve their purposes.	Protects human health and water quality by reducing contamination from animal waste, compost, fuels, sediment and other substances that pollute waterbodies.

Mat-Su Borough Ordinance 05-023 established voluntary measures that property owners can use to protect the quality of our lakes, streams and wetlands. For more information, contact the Matanuska-Susitna Borough, Department of Planning and Land Use at 861-8556.

MATANUSKA-SUSITNA BOROUGH

350 E Dahlia Ave., Palmer AK 99645 Ph.907.861-8606

MSB STAFF
Ted Eischeid

FISH AND WILDLIFE COMMISSION

Memorandum

RE: Orientation for new and renewing FWC members

Greetings and happy new year FWC member – it's time for ORIENTATION!

As the MSB staff person to the FWC, I am pleased to welcome you to your term on the MSB Fish and Wildlife Commission. This memo serves as my brief orientation to the FWC. The information contained herein is important to the successful functioning of the FWC on behalf of the citizens of the MSB regarding fish and wildlife issues.

I would highly recommend after reading through this memo that you spend some time exploring the FWC web page for a deep dive into the work the FWC has been involved in over the years: https://matsugov.us/boards/fishcommission

I also recommend you spend time investigating our Fish Hub webpage for additional background relevant to your FWC work: https://matsugov.us/fishhub

Thank you for your service.

Ted Eischeid, Planner II

Ted.eischeid@matsugov.ur

Office: 907.861-8696

MSB Cell: 907.795-6281

A brief history:

- The MSB Fish and Wildlife Commission (FWC), formerly the Mayor's Blue Ribbon Sportsmen's Committee, was formed in February 2007 to represent the interests of the Borough in the conservation and allocation of fish, wildlife, and habitat.
- The FWC advises the MSB Assembly and the State of Alaska Boards of Fish and Game regarding fish and wildlife practices and policies that affect the Mat-Su Borough.
- The FWC consists of eight representatives (meeting quorum minimum is five in attendance) from the following segments of the community:
    - Two representatives from the MSB Assembly
    - One sport fishing rep
    - One hunting rep
    - Four at-large reps
    - There is also a nonvoting *ex officio* seat for a former FWC member.
- FWC terms are for three calendar years, and there are NO term limits.

FWC duties, restrictions, and Officers:

A. The role of the FWC – from MSB Code:

CHAPTER 4.75: MATANUSKA-SUSITNA BOROUGH FISH AND WILDLIFE COMMISSION

Section

4.75.005 MEMBERSHIP.

(A) The commission is composed of nine members and shall consist of the following representatives:

(1) one sports fishing representative;

(2) one hunting representative;

(3) four at-large representatives;

(4) two borough assembly representatives; and

(5) one previous member who is a nonvoting member and does not count for the purposes of a quorum.

(B) All members of the commission shall be residents of the borough.

(C) The commission shall select from its members, on a yearly basis, a chair and vice-chair.

(Ord. 15-153, § 2, 2015; Ord. 12-052, § 3 (part), 2012)

4.75.007 TERM OF MEMBERS.

(A) Irrespective of the limits specified in MSB 4.05.050, a board member may serve more than two consecutive terms.

(Ord. 12-172, § 2, 2013)

4.75.010 FUNCTIONS AND DUTIES.

(A) The commission shall advise and make recommendations to the assembly, borough manager, and/or any state or federal agencies, departments, commissions, or boards possessing jurisdiction in the area of fish, wildlife, and habitat on the interests of the borough in the conservation and allocation of fish, wildlife, and habitat.

(B) The commission may also advise the assembly and the borough manager on any other matter as to actions or issues for the borough to address on any other areas concerning fish, wildlife, habitat, administration, application, enforcement, or appointment to include political efforts, additional lobbying efforts, or any other position or action the borough should take on fish, wildlife, or habitat issues.

(Ord. 15-122, § 2, 2015: Ord. 12-052, § 3 (part), 2012)

4.75.015 COMPENSATION.

(A) Commission members shall be reimbursed for mileage incurred in connection with meetings of the commission and attending related meetings on commission business in the same manner as borough employees are compensated for mileage expenses.

(Ord. 12-052, § 3 (part), 2012)

4.75.020 ASSEMBLY DETERMINATION, NO THIRD PARTY REMEDY.

Any issue regarding appropriateness of action or advice of the commission shall only be brought to and decided by the borough assembly who shall, in its sole and absolute discretion, decide whether to consider the issue and decide whether to take any action. Through the grant of power to advise in this chapter, the borough is specifically declining to grant a remedy in any third party to allege or enforce that the commission is acting outside their scope of duties.

(Ord. 15-122, § 3, 2015)

B. The role of the chair:

- Develops a working knowledge of Alaska's Open Meeting Act law.
- Works with staff to develop the agenda/packet and prepare for meetings.
- Presides over the meeting.
- Ensures that the meeting is fairly run, and maintains decorum and order.
- Manages public comment
    - Tips
- Develops a working knowledge of Roberts Rules of Order, referring to staff parliamentarian for advice when needed.
- Ensures that meeting is run efficiently, utilizing Roberts Rules of Order.
- Generally suspends comment on a proposal until all others have spoken to maintain the appearance of impartiality.
- Whenever the chair wishes to vigorously debate an agenda item, they turn over chairmanship on that agenda item to the vice-chair.
- Signs off on FWC approved minutes and resolutions.
- Is the primary representative/spokesperson of the FWC in meetings with MSB staff, Assembly, or the press (working through the MSB Public Affairs director).

4.05.110 OFFICERS.

(A) Each board shall have a chairperson and a vice chairperson. Officers shall be elected by a majority of the board members for a term of one year. Election of officers shall be the first order of business at any time that an officer's seat is not filled.

(B) The duties of the chairperson are:

(1) to open the meeting at the appointed time and determine that a quorum is present;

(2) to enforce the rules relating to debate, order, and decorum;

(3) to state and put to a vote all questions that legitimately come before the board as motions or that otherwise arise in the course of the meeting;

(4) if a motion is not in order, to rule it out of order; and

(5) to assign a member to note those members present and absent and ensure minutes are taken on all actions by the board at each meeting.

(C) The duties of the vice chairperson shall be to perform duties of the chairperson in the chairperson's absence.

(Ord. 04-080, § 11, 2004; Ord. 94-001AM, § 5 (part), 1994; Ord. 84-34, § 25 (part), 1984)

C. The role of Assembly Representatives to the FWC

- **Helps advise the FWC on how to avoid actions that make it "political".**
- **Advises the FWC on best practices for communicating with and advising the MSB Assembly.**
- **Accurately communicates FWC positions to the Assemblly.**
- **Assists the FWC in connecting with other policy makers and interested constituents.**
- **The two Assembly representatives coordinate so that there is always at least one of them participating in every FWC meeting.**

D. The role of staff:

- Works with the chair to develop the agenda and packet.
- Insures that the meeting is publically noticed and that the agenda/packet are posted online a minimum of five days prior to the meeting.
- Acts as a Roberts Rules parliamentarian as needed/requested.
- Keeps minutes unless that role is delegated to someone else.
- Assists the FWC in complying with the Alaska Open Meetings Act.
- Organizes the meeting, reserving locations and setting up remote participation options, and working with outside agencies/persons as needed in support of FWC business.
- Maintains and updates the FWC web page.

E. Alaska Open Meetings Act

Alaska's OMA works to insure that government operates in transparent fashion that engages the public. The main thing for FWC members to be aware of is that you may not talk to more than two other FWC members about a topic, regardless of the communication method. Any time more than three FWC members are engaged in communicating about a topic it falls under the OMA and it must be given proper public notice and open to the public to observe.

Additional OMA Resources:

https://gov.alaska.gov/wp-content/uploads/sites/2/Open-Meetings-Act.pdf

https://www.commerce.alaska.gov/web/Portals/4/pub/Alaska's%20Open%20Meetings%20Law.pdf

http://www.akleg.gov/basis/statutes.asp#44.62.310

F. Effectively engaging in meetings:

1. Attend the meetings

Your participation in FWC meetings is critical to the function of the FWC. If you are unable to attend a meeting please let staff know at a minimum seven days prior to the meeting, but preferably 10 or more days prior. The FWC needs to have five members present for a quorum, and each meeting requires

extensive staff time at taxpayer expense to prepare for. Please let us know when you can't attend a particular meeting.

2. Read your packet:

Packets are posted on the MSB web site the Friday before the FWC meeting. This posting is announced to FWC members and associates by an email. The packet is also printed and mailed to FWC members when possible on that same Friday, except for Assembly FWC representatives where it is placed in their MSB Assembly mailboxes. Due to the technical nature of FWC work it is best to read your packet prior to each meeting so you can be fully engaged and able to participate usefully on items of discussion.

3. Do your homework:

Read through your packet, develop questions, do additional research on action items as needed. If you want to consider a resolution on an agenda action item, please contact the chair for direction. Staff should be used to help write and/or edit resolutions, preferably prior to the meeting so they can be posted online and copies prepared for the meeting. A passed resolution trumps a passed motion.

4. Develop a working knowledge of Robert's Rules of Order:

Robert's Rules of Order allow for an efficient and orderly meeting. Becoming familiar with the basics of RR will help you be more effective in your FWC work as well as allow for a more efficient and shorter meeting.

In running an efficient meeting, our general practice when voting on a motion is the following:

- After discussion on the motion concludes, the chair will announce "is there objection on the motion before you" – if there are no objections uttered, then the chair will state that the "motion carries unanimously." If there is objection, the chair will hold a vote, voice or roll call as appropriate; however, if a member calls for a "vote division", the chair will then hold a roll call vote with assistance from staff. In general, there are no secret ballots allowed in FWC voting.

Here are some helpful links to help you develop a working knowledge:

- http://mrsc.org/Home/Explore-Topics/Governance/Legislative-Organization-Meetings-and-Process/Parliamentary-Procedure.aspx
- https://diphi.web.unc.edu/wp-content/uploads/sites/2645/2012/02/MSG-ROBERTS_RULES_CHEAT_SHEET.pdf

5. Agenda items:

Agenda items you want added to the meeting agenda should be presented to the chair at least 10 days prior to the meeting you want the item on the agenda. Agenda items cannot be added to the meeting agenda once that agenda is posted to the public; agenda items can be removed or their order changed on the agenda during the meeting by motion.

MATANUSKA-SUSITNA BOROUGH
DIRECTORY OF ORGANIZATIONS

MSB Fish and Wildlife Commission

Board Exp

Hale	Tim		Board Position	SPT Member 1 - Assembly Representative			
Company Representing				Term	10/6/2020	to	12/31/2024
PO Box 2918			Type of Term	1	Full & Partial		
Palmer	AK	99645	Member				
Home	(907) 590-8243	Work		Cell		E-mail	TimHaleDistrict1@gmail.com

Wood	Michael	E.	Board Position	SPT Member 2 - Sport Fishing Representative			
Company Representing				Term	1/12/2016	to	12/31/2024
PO Box 773			Type of Term	3	Full		
Talkeetna	AK	99676	Member	Chair			
Home	(907) 354-5815	Work	(907) 354-5815	Cell		E-mail	mollyhops@mac.com

Engel	Larry	J	Board Position	SPT Member 3 - Hunting Representative			
Company Representing				Term	2/20/2007	to	12/31/2024
16341 E Vera Wy			Type of Term	6	Full		
Palmer	AK	99645	Member				
Home	(907) 745-4132	Work		Cell		E-mail	larryengel@gci.net

Delo	Howard		Board Position	SPT Member 4 - At-Large			
Company Representing				Term	9/21/2010	to	12/31/2024
PO Box 520707			Type of Term	5	Full		
Big Lake	AK	99652-0707	Member				
Home	(907) 892-8796	Work		Cell		E-mail	hodelo@mtaonline.net

Zamzow	Kendra		Board Position	SPT Member 5 - At-Large			
Company Representing				Term	2/2/2021	to	12/31/2023
PO Box 1250			Type of Term	1	Full		
Chickaloon	AK	99674	Member				
Home	(907) 354-3886	Work		Cell		E-mail	klzamzow@chickaloon-nsn.gov

MATANUSKA-SUSITNA BOROUGH
DIRECTORY OF ORGANIZATIONS

MSB Fish and Wildlife Commission

Board Exp

Probasco	Peter	J	Board Position	SPT Member 6 - At-Large			
Company Representing				Term	2/2/2021	to	12/31/2023
PO Box 2502				Type of Term	1	Full	
Palmer	AK	99645	Member				
Home	(907) 745-8246	Work		Cell		E-mail	peprob@mtaonline.net

Couch	Andrew	N	Board Position	SPT Member 7 - At-Large			
Company Representing				Term	4/3/2012	to	12/31/2023
PO Box 155				Type of Term	4	Full	
Palmer	AK	99645	Member	Vice Chair			
Home	(907) 746-2199	Work	(907) 746-2199	Cell		E-mail	fishing@fish4salmon.com

Sumner	Jesse	M	Board Position	SPT Member 8 - Assembly Representative			
Company Representing				Term	11/16/2021	to	12/31/2023
350 E Dahlia Ave				Type of Term	1	Full	
Palmer	AK	99645	Member				
Home		Work		Cell	(907) 715-7388	E-mail	jessesumnerdistrict6@gmail.com

Sykes	Jim		Board Position	SPT Member 9 - Previous Member, Non-Voting			
Company Representing				Term	11/16/2021	to	12/31/2023
PO Box 696				Type of Term	1	Full	
Palmer	AK	99645	Member				
Home		Work	(907) 354-6962	Cell		E-mail	lzmtsykes@gmail.com

CODE ORDINANCE

Sponsored by:
Introduced:
Public Hearing:
Action:

MATANUSKA-SUSITNA BOROUGH
ORDINANCE SERIAL NO. 23-002

AN ORDINANCE OF THE MATANUSKA-SUSITNA BOROUGH ASSEMBLY AMENDING MSB 17.55 AND MSB 17.80 TO ALLOW BUILDINGS TO BE BUILT WITHIN 75 FEET OF A WATERBODY.

BE IT ENACTED:

Section 1. Classification. This ordinance is of a general and permanent nature and shall become a part of the Borough Code.

Section 2. Amendment of subsection. MSB 17.55.020 is hereby amended to read as follows:

(A) Except as provided in subsections **(F) and (G)** [(B)] of this section, no [STRUCTURE OR FOOTING] **building greater than 480 square feet** shall be located closer than 75 feet from the ordinary high water mark of a body of water. [EXCEPT AS PROVIDED OTHERWISE,] [E]**E**aves may project three feet into the required setback area.

[(B) DOCKS, PIERS, MARINAS, AIRCRAFT HANGARS, AND BOATHOUSES MAY BE LOCATED CLOSER THAN 75 FEET AND OVER THE WATER, PROVIDED THEY ARE NOT USED FOR HABITATION AND DO NOT CONTAIN SANITARY OR PETROLEUM FUEL STORAGE FACILITIES. STRUCTURES PERMITTED OVER WATER UNDER THIS

SUBSECTION SHALL CONFORM TO ALL APPLICABLE STATE AND FEDERAL STATUTES AND REGULATIONS.

(1) BOATHOUSES OR AIRCRAFT HANGARS WHICH ARE EXEMPT FROM A MINIMUM SHORELINE SETBACK FOR STRUCTURES SHALL:

(A) BE BUILT OVER, IN, OR IMMEDIATELY ADJACENT TO A WATERBODY AND USED SOLELY FOR STORING BOATS AND BOATING ACCESSORIES;

(B) BE DESIGNED, CONSTRUCTED AND ORIENTED FOR PRIMARY ACCESS BY BOATS OR AIRCRAFT DIRECTLY TO A WATERBODY;

(C) NOT HAVE MORE THAN INCIDENTAL ACCESSORY ACCESS TO A STREET OR DRIVEWAY; AND

(D) NOT BE USABLE AS A GARAGE OR HABITABLE STRUCTURE WITHOUT SIGNIFICANT ALTERATION.

(C) IN THE CITY OF WASILLA, THIS SECTION DOES NOT APPLY TO STRUCTURES WHERE CONSTRUCTION WAS COMPLETED PRIOR TO NOVEMBER 16, 1982. ELSEWHERE IN THE BOROUGH, THIS SECTION DOES NOT APPLY TO STRUCTURES WHERE CONSTRUCTION WAS COMPLETED PRIOR TO JANUARY 1, 1987, IF THE PRESENT OWNER OR OWNERS OF THE PROPERTY HAD NO PERSONAL KNOWLEDGE OF ANY VIOLATION OF THE REQUIREMENTS

OF THIS SECTION PRIOR TO SUBSTANTIAL COMPLETION OF THE STRUCTURES. THE DIRECTOR OF THE PLANNING DEPARTMENT SHALL, UPON APPLICATION BY A PROPERTY OWNER, DETERMINE WHETHER A PROPERTY QUALIFIES FOR AN EXCEPTION UNDER THIS SUBSECTION.

(1) AN APPLICATION FOR A SHORELINE SETBACK EXCEPTION SHALL INCLUDE A FILING FEE AS ESTABLISHED BY RESOLUTION OF THE ASSEMBLY.]

[(D) IN THIS SECTION, A "STRUCTURE" IS ANY DWELLING OR HABITABLE BUILDING OR GARAGE.]

(E) No part of a subsurface sewage disposal system shall be closer than 100 feet from the ordinary high water mark of any body of water. [THE PLANNING COMMISSION SHALL REQUIRE THIS DISTANCE BE INCREASED WHERE NECESSARY TO PROTECT WATERS WITHIN THE BOROUGH.]

(F) Buildings that are in existence or have commenced construction within 75 feet of a waterbody prior to April 1, 2023 are granted pre-existing legal nonconforming status in accordance with MSB 17.80.020(A).

(G) New buildings greater than 480 square feet, or proposals to enlarge or alter existing buildings granted pre-existing legal nonconforming status under (F) of

this section, may be located within 75 feet of a waterbody provided:

(1) they are designed and constructed in accordance with plans sealed by a professional structural engineer licensed in the State of Alaska in accordance with Alaska Statute 08.48.

(a) the building shall be designed in a manner that ensures structural integrity, provides suitable soils for a stable foundation, and protects surface and subsurface water quality.

(2) prior to construction, the engineered plans and specifications shall be submitted to the planning department for an engineering review by a public works engineer as part of a mandatory land use permit, in accordance with MSB 17.02.

(3) the development is constructed in accordance with local, state, and federal laws.

Section 3. Amendment of subsection. MSB 17.55.010(E) is hereby amended to read as follows:

(E) If a condemnation by a governmental agency reduces the building line setback of a structure below 25 feet, but there remains at least ten feet setback, and the setback reduced by the condemnation met the

requirements of this section prior to the condemnation, the resulting setback shall be the setback requirements for the lot.

(1) structures that have a reduced building setback due to condemnation under this subsection are granted pre-existing legal nonconforming status in accordance with MSB 17.80.020(A).

Section 4. Amendment of subsection. MSB 17.80.020(B) is hereby amended as follows:

(B) The following structures require an administrative determination in order to be granted legal nonconforming status;

(1) structures granted a variance in accordance with Chapter 17.65;

[(2) STRUCTURES BUILT IN VIOLATION OF SHORELINE SETBACK ORDINANCES EXISTING AT THE TIME OF CONSTRUCTION, AND SUBSEQUENTLY GRANTED AN EXEMPTION FROM SHORELINE SETBACKS IN ACCORDANCE WITH MSB 17.55.020(C);]

(3) permanent structures built in violation of ordinances existing at the time of construction, and subsequently granted legal nonconforming status in accordance with MSB 17.80.070.

Section 5. Effective date. This ordinance shall take effect

upon adoption.

ADOPTED by the Matanuska-Susitna Borough Assembly this - day of -, 2022.

EDNA DeVRIES, Borough Mayor

ATTEST:

LONNIE R. McKECHNIE, CMC, Borough Clerk

(SEAL)

MATANUSKA-SUSITNA BOROUGH INFORMATION MEMORANDUM **IM No. 23-002**

SUBJECT: AN ORDINANCE OF THE MATANUSKA-SUSITNA BOROUGH ASSEMBLY AMENDING MSB 17.55 TO ALLOW STRUCTURES TO BE BUILT WITHIN 75 FEET OF A WATERBODY.

AGENDA OF: December 20, 2022

ASSEMBLY ACTION:

MANAGER RECOMMENDATION: Refer to Planning Commission for 90 days.

APPROVED for MICHAEL BROWN, BOROUGH MANAGER:

Route To:	Department/Individual	Initials	Remarks
	Originator - Planning Director A. Strawn		
	Community Development Director		
	Public Works Director	12/8/22	
	Borough Attorney		
	Borough Clerk	12/13/22	

ATTACHMENT(S): Fiscal Note: YES ___ NO X
Shoreland Setbacks Analysis & Recommendation (1999) (23 pp)
Planning Commission Resolution 23-__ (pp)
Ordinance Serial No. 23-002 (6 pp)

SUMMARY STATEMENT:

This ordinance is at the request of Assembly Members Yundt and Tew.

A 75-foot waterbody setback was originally adopted in 1973 by assembly ordinance. The setback was briefly lowered to 45 feet in 1986 and again increased to 75 feet by voter initiative in 1987.

Over the years, hundreds of homes have been constructed in violation of the 75-foot waterbody setback ordinance. Most of the construction went undetected due to lack of any permitting requirement for development within the Borough. Additionally, when

violations are discovered, there is no easy or inexpensive remedy to the violation.

This ordinance allows structures to be built within 75 of a water body as long as long as they are built and designed in accordance with plans developed by a structural engineer. Nothing in this ordinance affects setbacks from property lines or public easements, including to-and-along easements.

RECOMMENDATION OF ADMINISTRATION:
Staff recommends the assembly refer this ordinance to the Planning Commission for review for 90 days.

Matanuska-Susitna Borough Shoreland Setbacks

Analysis and Recommendation

Prepared by:

Land Design North
510 L Street, Suite 101
Anchorage, Alaska 99501

IM 23-002
OR 23-002

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Introduction

Since 1973, the Matanuska Susitna Borough has been struggling with the designation and implementation of an appropriate waterbody setback distance from area lakes, streams, and wetlands to protect water quality and fish and wildlife habitat. From 1973 to the present, structural setbacks from waterbodies have ranged from 45 to 75 feet and have allowed accessory uses such as piers, marinas, boathouses and docks over the water. The setbacks to date have only regulated structure placement and have not regulated uses or activities within the setback zone. For example, there are currently no requirements to maintain natural vegetation or limit the amount of impervious surfaces.

The inherent challenge of the project is that people have varying goals and values relative to the use of water resources and lands. Over the years, arguments have been presented to maintain, increase, and decrease the setback distance. Arguments in favor of a lesser setback generally cite private property rights, undue hardships on developing land, increased views and access to waterbodies. Those in favor of greater setbacks cite improved water quality, enhanced fish and wildlife habitat, noise reduction, and improved aesthetic values.

In 1998, a Shorelands Steering Committee was formed to recommend goals and strategies to analyze and improve the management of shorelands and develop a Shorelands Management Plan. The results of their work can be found in Appendix A. In summary, the long-term goal of the Matanuska-Susitna Borough Shorelands Management Plan is to determine how inland lake basins, streams and wetlands function as ecosystems within the watershed and how to manage the many resources and values present in these systems in a sustainable manner. While this is an admirable goal, this long-term goal can be reached only through a comprehensive watershed study and the long-term investment of dollars, expertise and collaborative effort by government, universities and the private sector.

This report is intended to meet the more immediate need of resolving the shoreland setback issue and to establish effective performance standards for uses within the setback zone to minimize future requirements for mitigation or restoration of disturbed areas and degraded water quality. As the Mat-Su Borough continues to grow in population and becomes one of the most popular recreational destinations in Alaska, the threat of degradation to its waterbodies increases. An altered water system is not only difficult to restore, it is expensive and may never fully recover. This can mean declining property values, loss of recreational activities, loss of water-dependent businesses, and a decline in fish and wildlife populations. Simply put, no one wants to live, recreate or conduct business on a polluted waterbody.

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This purpose of this report is to review and incorporate by reference the work done to date on the Shoreland Management Plan and recommend a setback distance that will protect water quality in the Mat-Su Borough. This interim report also seeks to:

- Understand the intent and history of structural setback regulations in the Mat-Su Borough
- Define and understand the function of the relatively narrow strip of land (the riparian zone) surrounding a waterbody
- Review the role of setbacks as a management tool to enhance and protect water quality from residential, commercial and industrial development based on the literature review conducted by the Mat-Su Borough and supplemented by work done as part of the Big Lake, Lake Management Plan.
- Recommend a structural setback and performance standards

Finally, to help provide information of similar efforts in other jurisdictions, a literature review done by the Mat-Su Borough as part of the Shoreland Management Plan is provided in Appendix A. It briefly describes available literature on how other jurisdictions establish setbacks and manage shorelands, the use of buffer zones, the role of riparian vegetation, and the balancing of private property rights, public access and safety, and environmental issues. It should be noted that this review only provided a brief summary of the literature and did not analyze or document the different setbacks studied. For this reason, an analysis of setbacks done as part of the Big Lake, Lake Management Plan is being used for this report.

Setback History

An important aspect of evaluating regulations is to clearly understand their intent and historical context to determine if the existing regulation has been effective. Presented below is a brief synopsis of the Matanuska-Susitna Borough (MSB) setback ordinances and the Mat-Su Borough Coastal Management Program policy regarding setbacks to date.

- 1973. Borough adopts a 75-foot Setback (MSB ordinance 73-6). "Structures shall not be closer than 75 feet from the normal high water mark of a water course or body of water in a shoreland. The Commission may require a greater setback if it finds that a specific body of water possesses unique characteristics such as outstanding fish and aquatic life, shore cover, natural beauty or other ecological attribute. Boat houses may be located over the water provided they are not used for habitation and do not contain sanitary facilities." In subsequent years the ordinance was amended to legalize docks, piers and marinas over the water and require that they conform to state and federal regulations.

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- **1984.** The Mat-Su Borough Coastal Management Program (MSBCMP) goes into effect which, as outlined in Coastal Habitats Policy 2, upholds the 75 foot setback but eliminates all provisions to allow the Platting Board to reduce setback distances if certain conditions are met. Approved by the Coastal Policy Council (CPC) in **1983,** this policy raised issues of compliance with MSB ordinances and eliminated flexibility in the existing regulations.

- **1986.** Borough adopts a 45-foot setback (MSB ordinance **86-101).** "No structure or footing shall be located closer than 45 feet from the high water mark of a watercourse or body of water, except docks, piers, marinas, and boathouses may be located closer than 45 feet and over the water provided they are not used for habitation and do no contain sanitary facilities." "Exception: Does not apply to structures where construction was completed prior to January **1, 1987** if the present owner or owners of the property had no personal knowledge of any violation of the setback requirements prior to substantial completion of the structure."

- **1987.** The MSB submits revisions to the MSBCMP Coastal Habitats Policy 2 in order to create a more flexible policy. The Division of Governmental Coordination (DGC), staff to the CPC, determines that the proposed policy lacks enforceable language, and in cooperation with the **MSB** and the state, develops alternative policy language consistent with the Alaska Coastal Management Program. The revised policy is adopted by the CPC in March of **1988,** with provisions that the proposed uses and activities within **75** feet of the high water line "must be reviewed to ensure protection of water quality and fish and wildlife habitat." Additionally, water-dependent structures (including docks, piers, marinas, boathouses and floatplane hangars) are allowable within 75 feet provided "they are constructed and used in a way that minimizes adverse impacts to water quality and fish and wildlife habitat." Finally, the policy states that other uses and activities within **75** feet are also allowable if the proposed development "will have no sianificant adverse impacts on water quality and fish and wildlife habitat, and complies with other applicable federal, state, and local requirements."

- **1987.** Borough reinstates a 75-foot setback (MSB ordinance **87-59) .**The setback is changed to 75 feet with the provision that water dependent structures such as docks, piers and marinas are allowable within 75 feet if they conform to all applicable state and federal statutes and regulations, and so long as they "are not used for habitation and do not contain sanitary or petroleum fuel storage facilities."

- **1988.** Clarification and amendments (MSB ordinance **88-190).** The term "Shorelands" is defined, and the setback remains at 75 feet with the provision that "the Director of the Planning Department or the designee of the director shall upon application **by** a property owner, determine whether a property qualifies for an exception." There is also a subsection allowing the Planning Commission *to* increase the distance of a subsurface sewage disposal system from any body of water beyond the 100-foot zone "where necessary to protect waters within the Borough."

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Based on a review of above history, the two critical flaws in the current setback have been identified:

(1) The intended purpose of the waterbody setback appears to be to protect water quality and in turn fish and aquatic habitat; however, it is not clearly defined. It is recommended that the intent of the waterbody setback be clearly stated up front in future ordinances to facilitate enforcement and compliance. A property owner is more willing to comply with a regulation if they clearly understand its purpose and believe that the regulation is effective at achieving its purpose. To evaluate the effectiveness of a setback, it is critical to understand what is trying to be accomplished with the regulation. An example purpose statement might read as follows:

> "The intent of the waterbody setback is to preserve the integrity of the Borough's lakes, streams, rivers, and wetlands by maintaining and improving water quality, shore cover, fish and wildlife habitat, and aesthetic values."

(2) The setback only addresses the placement of structures. It does not address what can and cannot be done within the 75-foot setback area. The flaw with this approach is that locating buildings back from the waterbody may or may not meet the intent of the regulation. One of the greatest threats to water quality is Non Point Source (NPS) pollution. NPS pollution is defined as pollutants carried in runoff originating from various sources; precipitation moves over and through the ground and picks up pollutants from these sources and carries them into rivers, lakes, and groundwater. Some of the major sources and causes of NPS pollution adjacent to waterbodies are erosion and sedimentation (from cleared lots), septic systems, and runoff (carrying oils, chemicals, fertilizers and pesticides). A structure that is placed 75 feet back with vegetation cleared to the edge of the shoreline may increase the threat to water quality and in turn harm fish and wildlife habitat and the aesthetic qualities of the site by increasing the amount of NPS running into the waterbody. Whereas a structure setback of only 45 feet with vegetation retained between the structure and the shoreline may do more to protect water quality. The vegetation can slow runoff, trap sediment, and act as a natural filter to remove pollutants.

Another challenge with the history of setbacks in the Borough is the fluctuating distances and general lack of compliance by property owners. The low compliance is at least partially symptomatic of the lack of understanding of the ordinance's purpose. This has resulted in inconsistent development around waterbodies and in turn has made enforcement very difficult.

Function of BufferZones (Setbacks)

Literature associated with the protection of water quality defines buffer zones or setbacks as corridors of undisturbed natural vegetation or, where this is not present, grass or other erosion resistant vegetation, between a waterbody or wetland and an area of more intensive land use such as residential development. The use of natural buffer zones to protect water resources from pollution is attracting considerable attention within the United States and globally. Early research in this area stemmed from adverse impacts associated with timber and agriculture industries and has since evolved to consider the impacts of urban development including residential, commercial and industrial uses.

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To understand the impacts from development, it is important to understand the watershed concept. A watershed includes the entire land form drained by streams and rivers and is the ultimate water source for a lake. The visible area of a watershed is the surface on which rain and snow fall. The larger, invisible portion of the watershed lies beneath the surface where water seeps into the ground. A raindrop travels from a mountain top to a lake in three ways: (1) some is absorbed by the soil; (2) some collects on the ground in depressions; and (3) some flows overland. It is the overland flow or runoff that poses the greatest threat to water quality. With the overland flow, the raindrop forms rivulets, which in turn join to form streams, and the streams join to form rivers, and so on. Whatever that raindrop picks up from the land along its journey ends up in the water. The greater the amount and speed of runoff the greater the potential impacts. The primary benefits of a waterbody setback are:

- **Maintain and Protect Water Quality** – Improve the quality of water passing through the buffer zone by trapping suspended sediments and removal of toxic substances, nutrients and pathogens carried in the surface water runoff.

- **Anchor Shoreline and Stream Banks and Control Erosion** – The shallow water table in the riparian zone makes water available during the growing season, creating a healthy terrestrial plant habitat for both soil and woody-debris-rooted plants. These in turn reduce erosion by anchoring the soil and trapping suspended sediments.

- **Provide Flood Control** – During periods of high runoff riparian and upland wetlands store and convey flood water. This storage function has the dual effect of moderating peak flows during high runoff events and augmenting ground and surface water flows during low runoff periods.

- **Protect Fish and Wildlife Habitat** - Riparian zones typically support greater numbers and diversity of fish and wildlife. Many terrestrial and aquatic animals use this area for foraging and feeding, breeding and rearing their young, and taking protective cover during 1 or more life stage.

- **Promote Scenic, Recreational, and Quality of Life Values** – The setback serves as a physical buffer between human activities on land and on the water. Scenic, recreation and wildlife assets are enhanced by buffer zones and can increase property values. Setbacks around busy recreational lakes and rivers can also help to reduce noise impacts on surrounding land uses.

While most people can agree on the function of a buffer zone, research reveals that the width of setbacks varies greatly. It is generally accepted that the use of buffers is most effective when the setback criteria reflect:

- Site-specific characteristics of the development area (slope, topography, vegetation, vulnerability to soil erasion, surface and groundwater hydrology)

- Type of proposed disturbance or land use

- Existing land uses around streams and lakes within the watershed

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- Function of the buffer zone (sediment filtering, shading, shoreline stabilization by vegetation root systems, food and cover for fish and other wildlife)
- Resource aspects of greatest sensitivity and vulnerability to disturbance
- Flexibility in implementation

Unfortunately, this site-specific approach to defining setback distances requires significant resources to inventory all lands, develop a fair implementation process to avoid arbitrary and capricious decisions, and to enforce. For this reason, most governing bodies designate a set distance from a waterbody for structures and include minimum performance standards regulating the use of the buffer zone.

A number of studies have been conducted to understand the relationship of buffer strips of various distances to fish populations and aquatic habitat productivity in affected streams and the effects of development activities on lake water quality. Studies have also examined the effects of development activities which occur adjacent to or in proximity to lakes and streams to determine the actual effects of the disturbance and demonstrable reductions in impact with varying levels of separations (setbacks) between the development and the waterbody. Environmental parameters studied have included changes to:

- Stream flows
- Light intensity
- Water temperature
- Concentrations of suspended and settled sediments
- Presence of large woody debris
- Nutrient loads in surface runoff and groundwater
- Water-transported contaminants such as pesticides, herbicides, and fungicides

Below is a summary of some of the studies reviewed and the buffer widths that are recommended for the resource protection and the protection of fish and aquatic populations:

- **Stream Temperature:** For development or resource extraction activities which entail the removal of overstory vegetation along streams, buffer strips are one of the most effective means for maintaining water temperature in a range and seasonal pattern most beneficial to fish. Buffers greater than **100** feet have been found to provide as much shade as old growth undisturbed forest. Undisturbed buffer strips from **50 to 100 feet** in width were found to maintain water temperatures with a normal range under some circumstances, partially dependent on stream course orientation and the buffer placement.

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- Erosion and Sedimentation: In the Pacific Northwest, buffer strips **50 to 100** feet wide reduced stream sedimentation from adjacent patch-timber harvest activities; however, the sediment levels in the stream using the 50 to **100** foot buffer were **still** 50 percent greater than an undisturbed portion of the watershed. **A** more sensitive indicator of the effects of introduced sediments on streams is the measurement of changes to the permeability of streambed gravels. Streambed permeability has a more direct bearing on the success of survival for developing eggs and egg sac fry present in the gravels of the stream. Logging activities conducted with an adequate stream setback buffer have shown minimal changes to stream gravel permeability. Logging activities that did not incorporated setback buffers were found to decrease stream gravel permeability more than **50** percent for at least **6** years following logging.

- Large Woody Debris: Removal of nearly all riparian trees along streams can eliminate the source of large woody debris in second growth forests and old growth forests for a period of **40 to** 100 years after disturbance. Associated effects on fish habitat can include changes to riffle and pool frequency and loss of overhanging and undercut banks important to juvenile fish and changes in availability of critical overwintering habitat. For logging activities and similar clearing disturbances, studies have shown that buffer strips of ***50*** to **425** feet (British Columbia) and **15** to **130** feet (Southeast Alaska) produced more juvenile salmon in the summer and sheltered more juvenile salmon during the winter than areas without buffers.

- Water Quality: Buffer strips have been shown to improve or avoid declines in dissolved oxygen concentrations in streams primarily by keeping clearing debris and sediments out of streams and providing shade conditions that maintain natural water temperatures (cooler water contains higher levels of dissolved oxygen). Buffers of **20 to 130** feet have been shown to be effective in preventing logging slash from entering streams in the Pacific Northwest.

Cities and Boroughs throughout the United States and Canada use also setback criteria to protect development structures from the potential effects of flooding, stream bank migration, winter icing and to protect water quality and fish and wildlife habitat. Typically the setbacks are included as part of a more extensive zoning ordinance or Shoreland Protection Ordinance and detailed minimum development standards are used in conjunction with structural setbacks. Development standards typically regulate the type of uses, amount of impervious surfaces, and restrict tree cutting and the clearing of vegetation within the setback zones. Presented below is a summary of representative setbacks/buffer strips used by local governments including the key conditions that must be met as part of the setback.

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Location	*Setback (from ordinary high water mark)*
Municipality of Anchorage Title 21- Stream Protection	• A minimum of 25 feet wide on either side of the stream • No vegetation may be cleared or disturbed, no grading or excavation may be done, and no structures, fill or paving may occur within 15 feet of the stream. • Within the stream protection setback, located between 15 and 25 feet from the stream, landscaping is permitted.
Anchorage Wetlands Management Plan 1995 Setbacks from Wetlands	• Minimum setback is 25 feet. • 100 feet from anadromous fish streams • 85 feet from certain headwaters and tributaries • 65 feet from all other water bodies. • Allows for customized setback as part of the permitting process • Requires undisturbed buffers between 15 and 25 feet depending on wetland types and interactions • Setbacks and buffers shall remain undisturbed to the maximum extent
Willow Sub-Basin Area Plan Logging Buffer (Undisturbed Vegetation) Strips	• Minimum 50-foot buffer, larger setbacks to be determined on a site-specific basis
Susitna Area Plan - Logging Buffer (Undisturbed Vegetation) Strips	• Minimum 100 feet from anadromous fish streams or other acceptable measures • 100 feet to ¼ mile (greater than 300 feet for visual quality, recreation, and wildlife habitats • 100 foot buffer for wetlands greater than 100 acres with a locatable stream outlet • 60 foot buffer for wetlands 40 to 100 acres with no locatable stream outlet
Hatcher Pass Management Plan - Logging Buffer (Undisturbed Vegetation) strips	• 200 foot buffers on specific streams • 100 feet on all other perennial streams to include all riparian vegetation (but not less than 50 feet)
Alaska Department of Fish and Game – Timber Harvest Activity Buffer (Undisturbed Vegetation) Strips	• 100 foot setback buffer from stream or lake shoreline, the upland edge of all stream/lake contiguous wetlands, all fish streams, and all lakes connected by surface drainage to fish streams
Pacific Northwest - Logging Buffer (Undisturbed Vegetation) Strips	• Recommended 50 to 100 feet
Southeast Alaska - Logging Buffer (Undisturbed Vegetation) Strips	• Recommended 15 to 130 feet
Department of Environmental Programs, Metropolitan Washington Council of Governments	• A minimum setback buffer of 20 feet is recommended • 100 to 300 feet for adequate removal of the smaller sized sediment particles found in urban runoff
Bellevue, Washington Shoreline Overlay District	• No clearing, grading, excavating, or fill within 25 feet • No commercial parking facilities within 25 feet, • 25 foot setback for structures except docks, piers, and boathouses • Requires plan indicating methods for preserving shoreline vegetation and control of erosion

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Location	*Setback (from ordinary high water mark)*
York, Virginia Watershed Overlay District	• 200 foot buffer strip from tributary streams and public water supply reservoirs, maintained in natural state or planted with erosion resistant vegetation
Lake Tahoe Shorezone Tolerance Districts	Explicit development standards are based on physical characteristics for 8 shorezone districts. Three districts are summarized: • Backshore (defined as the area of wave run-up or instability plus 10 feet – whichever is greater) - Allowable base land coverage in this zone is 1%. Naturally occurring vegetation shall not be removed or damaged unless otherwise authorized under a permit. • District 1 (generally the beach area that separates lakes from marshes and wetlands) – Access to the shoreline shall be restricted to planned footpaths which minimize the impact to the backshore. Vegetation shall not be manipulated or otherwise disturbed except when permitted. • Districts 2 and 3 – Permitted development may be conditioned upon installation and maintenance of vegetation to stabilize backshore areas and protect eroding areas from further destruction.
Ozaukee County, Wisconsin shoreland Protection	• 75 feet for all buildings except piers, marinas. boathouses • Boathouses must be set back 2 feet. • Tree cutting – No more than 30 percent of the length shall be clear cut to the depth of the strip. Cutting of the strip shall not create a clear cut opening in the strip greater than 30 feet wide for every 100 feet of shoreline. In the remaining 70% length of the strip, cutting shall leave sufficient cover to screen cars, dwellings, accessory structures (except boathouses) from the water.
Douglas County, Wisconsin	• Minimum protection Zone-75 feet • Moderate protection zone –100 feet • Maximum protection zone -125 feet
Minnesota Department of Natural Resources	• Recommends shoreline vegetative buffers of a minimum of 15 to 25 feet • 30 feet setbacks will accommodate the needs of most shoreline wildlife
Statewide Standards for Management of Shoreland Areas - Minnesota	• Setbacks based on density and lot size. Setbacks range from 75 to 265 feet. 40,000 square foot lot with single family home requires 150 foot setback • At least 10 feet for accessory structures. • Limited clearing of trees and shrubs and cutting and pruning, and trimming of trees to accommodate the placement of stairways and landings, picnic areas, access paths, beach and watercraft access areas, and permitted water-oriented accessory structures as well as providing a view to the water from the principal dwelling site in shore and bluff impact zones is allowed provided that: - The screening of structures, vehicles, or other facilities as viewed from the water, assuming summer leaf on conditions, is not substantially reduced. - Along rivers, existing shading of water surfaces is preserved. • Impervious surface coverage of lots must not exceed 25 % of the lot area.
Landscape Planning Environmental Applications William Marsh, 1991.	Buffers widths generally greater than 50 to 100 feet in urban areas have been shown to be extremely efficient in sediment removal (up to 90 percent or more) if they meet the following design criteria: • Continuous grass/turf cover • Gentle gradients, generally less than 10 percent • Shallow runoff depth, generally not exceeding the height of the grass. • In hilly terrain, buffers should be located on upland surfaces and integrated with depression storage and soil filtration measures

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Recommended Setback

Properly incorporated into planning, design, permitting, and construction criteria, setback buffers are an invaluable tool for minimizing future requirements for mitigation or restoration of disturbed areas. It is recommended that the Borough retain the 75-foot setback and regulate the activities within the setback using performance standards to ensure that the intent of the setback is met. A 75-foot setback is justified for the following reasons:

- A comprehensive scientific evaluation of effective shoreline setback distances in the Borough has not been completed. Due to the magnitude of such a project and limited resources, it is unlikely it will be completed in the near future. In addition, the literature reveals that the widths of setbacks vary significantly even when based on sound scientific research. Literature generally supports site-specific setbacks; however, this is an unrealistic approach with the Borough's limited resources.

- Lacking scientific data gathered along the shorelands of the Mat-Su Borough, a change in the setback is politically unpopular and is a highly charged issue. Those in compliance with the 75-foot setback do not want to see a lesser setback and are concerned about view obstructions and other impacts to the waterbody environment. Regulating agencies and environmental groups would also resist a lesser setback because of adverse impacts and would like to see at least a 100-foot setback. A larger setback could result in more variances being required, increased non-compliance, and lengthy challenges.

- A process still exists to apply for a variance to reduce the setback if it presents the property owner with an undue hardship.

- Literature supports a setback of between 50 and 100 feet with the inclusion of minimum development standards. This indicates that 75 feet is a reasonable distance to offer at least some protection to natural resources under a variety of development scenarios.

Recommended Minimum Performance Standards

Effective performance standards or Best Management Practices are enforceable and can be consistently applied to all property owners. This will add increased protection to the Borough's waterbodies as they become more popular and more heavily populated, and it will help to bring Mat-Su Borough ordinances on shoreline development into compliance with the provision of the Mat-Su Borough Coastal Management Program (MSBCMP) that "proposed uses and activities within 75 feet of the high water line must be reviewed to ensure protection of water quality and fish and wildlife habitat."

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Regulation of activities within the 75-foot setback must focus on the following two concerns which can have a significant impact on water quality, fish and wildlife habitat, and the aesthetics of shorelands and waterbodies:

- **Loss of riparian vegetation:** Removal of existing vegetative cover in the riparian zone to provide shoreline access for boats, create lawn, or for other activities is likely to lead to erosion and sediment transport in runoff waters into the waterbody. Vegetation in this zone helps to filter sediment, nutrients, and pollutants out of surface runoff, while stabilizing banks, controlling erosion, and dissipating floodwaters. Additionally, many terrestrial and aquatic animals use this area for foraging, breeding and rearing their young, and taking protective cover.

- **Use of impervious surfaces:** An impervious, or nonporous surface is one that will not allow water infiltration such as blacktop, concrete and rooftops. Runoff water from these surfaces increases the rate at which pollutants and excess nutrients are carried the water. Impervious surfaces also interrupt natural drainage patterns and can cause shore degradation through concentration of runoff and erosion.

Uniform application and consistent enforcement of specific performance standards can effectively address the above concerns before development starts, at a point when such measures are both inexpensive to the property owner and easy to implement. Moreover, the following measures will also address visual impacts and can serve to buffer and reduce noise generated on the waterbodies.

1. Preserve a minimum 25-foot wide buffer of undisturbed native vegetation across a total of 30 percent of the parcel's shoreline. This zone is a permanent planting and should be left untouched, except for the removal of select or fallen trees. In the remaining 70 percent of the buffer zone, limited clearing of trees and shrubs and cutting and pruning of trees is permitted to accommodate the placement of stairways' and landings, picnic areas, access paths, beach and watercraft access areas, and permitted water-oriented accessory structures as well as providing a view to the water from the principal dwelling site is allowed provided that:

    - The screening of structures, vehicles, or other facilities as viewed from the water, assuming summer leaf on conditions, is not substantially reduced.
    - Along rivers, existing shading of water surfaces is preserved.

    These provisions shall not apply to the removal of dead, diseased or dying trees.

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2. In cases where the following land uses are present within the 75-foot buffer zone, an additional 15-foot wide vegetative buffer, the same length as the use, must be in place between the use and the shoreline to intercept runoff. Non-native vegetation can be used in this zone.

    - Driveway
    - Parking lot
    - Road
    - Car wash
    - Dog kennels
    - Boat Maintenance and Other Repair Activities

3. Any paved, impermeable, or roofed surfaces within the 75-foot buffer zone must have an infiltration bed of sufficient size to control the velocity and volume of runoff.

4. Impervious surface coverage of lots must not exceed 25 percent of the lot area.

5. Boathouses must be set back 2 feet from the water's edge, and are of a height and color so as not to detract from the natural beauty of the shoreline and shall not be used for human habitation.

6. Development shall be accompanied by a site plan indicating methods of preserving shoreline vegetation and for control of erosion during and following construction.

7. All structures, accessory buildings and ancillary facilities, other than those related to water use such as docks, piers, and boat houses shall be set back a minimum of 30 feet from the ordinary high water mark.

8. Parking shall not be permitted over water or within 30 feet of the shoreline.

In cases where a property owner seeks a variance from the 75-foot buffer, it is recommended that the above performance standards still apply.

Conclusion

Some regulation is necessary to preserve the value and enjoyment of the Borough's waterways, especially as they grow in popularity for residential and recreational use. A recommended 75-foot setback with minimum performance standards begins to address the protection of water quality and fish and wildlife habitat. In addition, the vegetated setback also serves an important function in the protection of values associated with quality of life to include noise reduction and aesthetics.

However, because water quality is intrinsically linked to the day to day activities of residents and users on and surrounding the waterbody, education is also critical to preserving the resource. Therefore, it is also recommended that in addition to the Matanuska-Susitna Borough's Property Owner's Guide to Shoreline Landscaping, a booklet containing Best Management Practices for waterfront property owners be developed promoting responsible development. Example Best Management Practices might include the following.

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- Protect bare soil surfaces. Vegetation is the best protection because it both absorbs and uses water. Seed and mulch exposed soil within the watershed as soon as possible after disturbance (gardens, construction sites, etc.).

- Use fertilizer sparingly. All fertilizers are carried in runoff and dissolve into the groundwater. Use non-phosphate varieties.

- Do not concentrate or channelize water flow unless absolutely necessary. On undisturbed slopes, water percolates through soil slowly. When all runoff is focused on one spot, such as a culvert or roof gutter, the natural protection of the ground surface is often not sufficient to prevent this extra flow from breaking through to bare soil. If runoff must be directed, protect the outflow area with an energy dissipator, such as rock or securely anchored brush, that will withstand storm flows.

- Prevent water from running off roads, driveways, roofs or lawns directly into lakes and streams. Direct surface runoffs into natural depressions, or flat, wooded areas, where the water can seep into the around slowly.

- Keep septic tanks maintained. Pump every 2-3 years for year-round homes: every 5-6 years for seasonal cottages. This expense is well worth every penny. Pumping is the key to keeping your septic system working. It *is* far less expensive to pump than to have a new leaching field installed.

- Avoid the use of phosphate containing detergents.

- Don't wash vehicles near the waterbodies.

- Use lawn clippings and leaves as mulch for shrubs and gardens. Pile these where they will not be washed into the waterbodies by heavy rains.

- Don't provide feed for wild ducks and geese. As pretty as these may be, large numbers of Canada Geese have become major problems and polluters (fecal coliform) of lakes elsewhere in the state.

- Place manure and composting piles as far as you can from the waterbodies or from drains or ditches which lead directly to lakes or streams.

- Limit human use or animal use of vulnerable areas. Trails can channel the flow.

- Establish temporary berms during construction to contain runoff overflow.

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IM 23-002
OR 23-002

DRAFT
October 28, 1998

MATANUSKA-SUSITNA BOROUGH
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Planning and Land Use Department, Code Compliance Division
(907)745-9853 FAX:(907) 745-9876 E-mail: ccb@msb.co.mat-su.ak.us

SHORELANDS MANAGEMENT STUDY
QUESTIONNAIRE

The Planning Department of the Matanuska-Susitna Borough has an FY99 **309** Enhancement Grant from the Alaska Coastal Management Program (ACMP) to study how people want the ***shorelands*** to be managed. As the communities of the Borough, especially their outdoor activities and amenities, continue to attract new residents, businesses, and visitors, how much value will people place on integrating the natural framework of creeks, rivers, lakes, and drainage basins with the life-styles and economic opportunities of the Borough?

The Planning Department is asking for help from a broad spectrum of interests. Whatever your background, the Borough is interested in your local knowledge, phrasing of problems, and ideas for managing the ***shorelands.*** How can the ***shorelands*** be integrated into a community that places great value on private market activities and community organizations, and has a strong dislike for government regulation?

1. What are **your current activities** and **uses** of the ***shorelands?***

- ☐ residence or second home
- ☐ camping or temporary residential use
- ☐ commercial or industrial business
- ☐ fishing or hunting
- ☐ guiding or tourism
- ☐ job or work
- ☐ walking, bicycling, **skiing,** or other non-motorized recreation
- ☐ boating, flying, snow machining, or other motorized recreation
- ☐ access to waterways
- ☐ sightseeing or traveling through Borough

What are your **other activities or uses?:**

2. Does anything **displease, disturb, or threaten** you about uses and activities on the ***shorelands?***

- ☐ Disruption from motorized vehicles, boats and airplanes
- ☐ Rudeness among residents, visitors, and neighbors
- ☐ Infringement of privacy and property rights
- ☐ Declining fishing and hunting opportunities
- ☐ Interference with private market
- ☐ Shrinking of job opportunities
- ☐ Fragmented habitat and wildlife systems
- ☐ Flood damage from bluff failure and changing stream patterns
- ☐ Declining environmental quality
- ☐ Crowded recreation and tourism destinations
- ☐ Limited public access to public lands and waters
- ☐ Loss of heritage and damage to artifacts

IM 23-002
OR 23-002

DRAFT
September 29, 1998

Can you identify other **problems** and **threats** regarding ***shorelands?:***
What do you **want to see happen** on the ***shorelines?***

- ❑ **A** linked and adequate system of habitat for small and large wildlife
- ❑ Positive protections of anadromous streams in development projects
- ❑ Encouragement of existing riparian vegetation and protection of natural systems in developing areas
- ❑ Protection of the native vegetation, soils, and waterways in large natural areas
- ❑ **An** overall system to avoid the dangers to life and property from flooding
- ❑ Identification of development opportunities and incentives that are consistent with ***shorelands***
- ❑ Integration of ***shorelands*** with fire safety
- ❑ Encouragement of commercial and industrial patterns that incorporate the values of ***shorelands***
- ❑ Identification of access and other needs of resource based industries
- ❑ Preservation of quality recreational and tourism opportunities
- ❑ Friendliness and cooperation among neighbors, visitors, and residents
- ❑ Identification and integration of heritage resources in ***shorelands*** activities and uses
- ❑ Public procedures that encourage partnerships and a cooperative spirit to protect and develop ***shorelands***

What else would you **like to happen** in the ***shorelands?***

4. What can be done to **better manage** the ***shorelands?***

- ❑ Maintain existing rules regarding the 75 feet setback
- ❑ Easier methods for the public to follow
- ❑ Graphic examples of riparian vegetation and improvements
- ❑ Funding for pilot projects that others may follow
- ❑ Mapping of potential development and significant preservation areas
- ❑ Improvements and vegetation in accord with a plan that will protect the ***shorelands***
- ❑ Discouragement of patterns that result in cumulative impacts
- ❑ Protection of valuable existing uses and activities from more intense development
- ❑ Significant incentives to encourage appropriate development in ***shorelands***
- ❑ Nurturing of partnerships and resource sharing arrangements among organizations
- ❑ Outreach and public information programs to encourage and motivate private businesses

What other **methods or tools** could be used to manage the ***shorelands?***

FURTHER COMMENTS:

If you are interested in providing additional information, specialized knowledge, or insight, or participating in the Advisory Committee or the other ***shorelands*** activities please indicate your **name, phone number, fax, e-mail,** and/or **mailing address:**

PLEASE FOLD AND MAIL
THIS SELF-ADDRESSED AND STAMPED QUESTIONNAIRE

IM 23-002
OR 23-002

DRAFT
October 28, 1998

MATANUSKA-SUSITNA BOROUGH
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SHORELANDS MANAGEMENT STUDY
SHORELANDS STEERING COMMITTEE
(INTERIM)

AGENDA
(anticipation of public process and study)

INTRODUCTIONS

APPROVAL OF AGENDA

HANDY MEETING RULES
(consensus of people at meeting)

- One person speaks at a time
- Briefly Identify yourself, interests, and background
- Practice good listening skills
- Do not repeat comments of others
- Keep comments brief and on the subject
- Avoid being judgmental of others
- Share your background and information openly
- Defer to the meeting coordinator
- Seek consensus and avoid group voting and decision-making
- Place objectives of study and borough above special interests

PURPOSE OF PROJECT
Review of staff information and background
Background, input, and questions from others

IDENTIFICATION OF PEOPLE AND INTERESTS TO HELP WITH STUDY
(This is the focus and most important activity of the meeting-see attached memo
The remainder of the agenda is for your information and comment)
Interests
Groups
People

PUBLIC PROCESS AND INFORMATION

IM 23-002
OR 23-002

DRAFT
October 28, 1998

Schedule
Questionnaires
Interim Steering Committee
Public Forum
Workshops
Announcements and newsletters

SHORELANDS MANAGEMENT STUDY
Background and literature review
Issues and problems
Goals and objectives
Management Policies and Strategies

IM 23-002
OR 23-002

Proposed OR 23-002 changes to MSB Waterbody Setback Code: Specific amendments proposed

Kendra Zamzow, FWC Member

Original Code	New Code Changes	Notes Per K.Z.
17.55.20 (A) Except as provided in subsection (B) of this section, no structure or footing shall be located closer than 75 feet from the ordinary high water mark of a body of water. Except as provided otherwise, eaves may project three feet into the required setback area.	(A) Except as provided in subsections (F) **and (G)** [(B)] of this section, no [STRUCTURE OR FOOTING] **building greater than 480 square feet** shall be located closer than 75 feet from the ordinary high water mark of a body of water. [EXCEPT AS PROVIDED OTHERWISE,] [E]**E**aves may project three feet into the required setback area.	Blanket allowance for any structure 480 square feet or less to be built right at water's edge. **Impact to fish? Yes, potentially.**
[(B) DOCKS, PIERS, MARINAS, AIRCRAFT HANGARS, AND BOATHOUSES MAY BE LOCATED CLOSER THAN 75 FEET AND OVER THE WATER, PROVIDED THEY ARE NOT USED FOR HABITATION AND DO NOT CONTAIN SANITARY OR PETROLEUM FUEL STORAGE FACILITIES. STRUCTURES PERMITTED OVER WATER UNDER THIS SUBSECTION SHALL CONFORM TO ALL APPLICABLE STATE AND FEDERAL STATUTES AND REGULATIONS. (1) BOATHOUSES OR AIRCRAFT HANGARS WHICH ARE EXEMPT FROM A MINIMUM SHORELINE SETBACK FOR STRUCTURES SHALL: (A) BE BUILT OVER, IN, OR IMMEDIATELY ADJACENT TO A WATERBODY AND USED SOLELY FOR STORING BOATS AND BOATING ACCESSORIES; (B) BE DESIGNED, CONSTRUCTED AND ORIENTED FOR PRIMARY ACCESS BY BOATS OR AIRCRAFT DIRECTLY TO A WATERBODY; (C) NOT HAVE MORE THAN INCIDENTAL ACCESSORY ACCESS TO A STREET OR DRIVEWAY; AND (D) NOT BE USABLE AS A GARAGE OR HABITABLE STRUCTURE WITHOUT SIGNIFICANT ALTERATION.	Entire section (B) is removed	Section B defines the types of structures that can be within 75 feet of a water body. The section is not necessary if ANY engineered structure can be there. **Impact to fish? Yes, potentially. Particularly in that nothing in code would prevent driveways, garages, fuel storage etc from being at water's edge.**
(C) IN THE CITY OF WASILLA, THIS SECTION DOES NOT APPLY TO STRUCTURES WHERE CONSTRUCTION WAS COMPLETED PRIOR TO NOVEMBER 16, 1982. ELSEWHERE IN THE BOROUGH, THIS SECTION DOES NOT APPLY TO STRUCTURES WHERE	Entire Section (C) is removed	Section C grandfather's in structures and provides a mechanism for current owners of older properties to get a variance allowing the building to be close to water.

CONSTRUCTION WAS COMPLETED PRIOR TO JANUARY 1, 1987, IF THE PRESENT OWNER OR OWNERS OF THE PROPERTY HAD NO PERSONAL KNOWLEDGE OF ANY VIOLATION OF THE REQUIREMENTS OF THIS SECTION PRIOR TO SUBSTANTIAL COMPLETION OF THE STRUCTURES. THE DIRECTOR OF THE PLANNING DEPARTMENT SHALL, UPON APPLICATION BY A PROPERTY OWNER, DETERMINE WHETHER A PROPERTY QUALIFIES FOR AN EXCEPTION UNDER THIS SUBSECTION. (1) AN APPLICATION FOR A SHORELINE SETBACK EXCEPTION SHALL INCLUDE A FILING FEE AS ESTABLISHED BY RESOLUTION OF THE ASSEMBLY.]		**Impact to fish?** Possibly. Depends on how use of the property has changed since property was built. There is a need for people to be able to get a variance for buildings built before the code was written.
Original Code	**New Code Changes**	**Notes Per K.Z.**
[(D) IN THIS SECTION, A "STRUCTURE" IS ANY DWELLING OR HABITABLE BUILDING OR GARAGE.]	Entire Section (D) removed	Defines structures that can be grandfathered. **Impact to fish?** See above.
(E) No part of a subsurface sewage disposal system shall be closer than 100 feet from the ordinary high water mark of any body of water. [THE PLANNING COMMISSION SHALL REQUIRE THIS DISTANCE BE INCREASED WHERE NECESSARY TO PROTECT WATERS WITHIN THE BOROUGH.]	Part of Section (E) removed	Retains the requirement for sewer/septic systems to be 100 feet from a water body, but removes ability of Planning Commission to require a wider setback. **Impact to fish?** Potentially. Depends on the experience of people on the PC. DEC might be a better authority on the issue.
No Section F in the original	**(F) Buildings that are in existence or have commenced construction within 75 feet of a waterbody prior to April 1, 2023 are granted pre-existing legal nonconforming 17.80.020(A).**	Grandfather's in current (and soon to be built) homes. **Impact to fish?** Yes, potentially. Homes and garages tend to be much bigger now than ones built in the 1980s (grandfathered in Section C) with potentially greater impacts. While there is a need for people to be able to get variances, there is also a need to educate

		builders and enforce code so that codes are not routinely violated – which would potentially impact fish.
Original Code	**New Code Changes**	**Notes Per K.Z.**
No Section G in the original	**(G) New buildings greater than 480 square feet, or proposals to enlarge or alter existing buildings granted pre-existing legal nonconforming status under (F) of this section, may be located within 75 feet of a waterbody provided:** **(1) they are designed and constructed in accordance with plans sealed by a professional structural engineer licensed in the State of Alaska in accordance with Alaska Statute 08.48.** **(a) the building shall be designed in a manner that ensures structural integrity, provides suitable soils for a stable foundation, and protects surface and subsurface water quality.** **(2) prior to construction, the engineered plans and specifications shall be submitted to the planning department for an engineering review by a public works engineer as part of a mandatory land use permit, in accordance with MSB 17.02.** **(3) the development is constructed in accordance with local, state, and federal laws.**	Allows buildings of any size and any type to be built to water's edge as long as it is structurally sound and "protects surface and subsurface water quality". **Impacts to fish?** Yes, potentially. Stable foundation will be ensured by engineer requirement, but there is no requirement for a professional to determine if water quality will be impacted. Scenarios under which impacts could occur include: the type of soil between structure and water affects how quickly contaminants move or are retained/obstructed; rain (runoff) or flooding or spring breakup that washes motor vehicle contaminants (copper, oils, etc) into water body; Some ways in which fish could be affected without effects on WQ are: removal of vegetation around the water body that helps to cool the stream (generally less important for large rivers and lakes, but may provide very localized cool areas); removal of vegetation that provides habitat for insects that are food for fish

Section 3. Amendment of subsection. MSB 17.55.0lO(E) is hereby amended to read as follows: (E) If a condemnation by a governmental agency reduces the building line setback of a structure below 25 feet, but there remains at least ten feet setback, and the setback reduced by the condemnation met the requirements of this section prior to the condemnation, the resulting setback shall be the setback requirements for the lot. **(1) structures that have a reduced building setback due to condemnation under this subsection are granted pre-existing legal nonconforming status in accordance with MSB 17.80.020(A).**	Adds a section	Allows buildings that have a very small setback because of government condemnation to be in compliance with code. **Potential impacts to fish?** Yes. See above.
Original Code	**New Code Changes**	**Notes Per K.Z.**
Section 4. Amendment of subsection. MSB 17.80.020{B) is hereby amended as follows: (B) The following structures require an administrative determination in order to be granted legal nonconforming status; (1) structures granted a variance in accordance with Chapter 17.65; [(2) STRUCTURES BUILT IN VIOLATION OF SHORELINE SETBACK ORDINANCES EXISTING AT THE TIME OF CONSTRUCTION, AND SUBSEQUENTLY GRANTED AN EXEMPTION FROM SHORELINE SETBACKS IN ACCORDANCE WITH MSB 17.55.020(C);] (3) permanent structures built in violation of ordinances existing at the time of construction, and subsequently granted legal nonconforming status in accordance with MSB 17.80.070.	Removes Section 4 (B) (2)	Says that buildings built closer than 75-feet don't need to apply for a variance **Potential impacts to fish?** Yes.
Section 5. Effective date. This ordinance shall take effect upon adoption.	Unchanged	

MATANUSKA-SUSITNA BOROUGH

FISH & WILDLIFE COMMISSION RESOLUTION SERIAL NO. FWC 23-01

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH FISH AND WILDLIFE COMMISSION RECOMMENDATIONS TO THE PROPOSED WATERBODY SETBACK ORDINANCE 23-002.

WHEREAS, the Matanuska-Susitna Borough has a vested interest in utilizing science-based standards and forward looking policies to help ensure a balance between the critical fish and wildlife resources of the region with other needs of the population, including responsible resource development; and

WHEREAS, the Matanuska-Susitna Borough is home to roughly 15% of the state's population and covers over 25,000 square miles, and continues to be the fastest growing region of Alaska with abundant aquatic resources encompassing two major river systems, all six of the Alaska-designated recreation rivers, and contains a multitude of lakes, rivers, and streams supporting fish and wildlife; and

WHEREAS, the Matanuska-Susitna Borough has spent over $20 million on aquatic restoration projects in the borough, replacing more than 100 culverts that have restored over 67 stream miles and 6,224 lake acres of anadromous fish habitat; and

WHEREAS, healthy habitat not only supports our fish and wildlife, but ensures clean water for our communities and key economic opportunities for Alaskans; and

WHEREAS, economic studies in our region in 2007 and 2017 show the significant positive economic impact sport fishing has on the economy of the MSB, including $56 million in direct spending benefits to the MSB

in 2017 alone, with additional economic benefits from healthy wildlife populations, both of which require adequate and quality habitat locally; and

WHEREAS, an intent of waterbody setbacks is to protect life and property that support a high quality of life while helping maintain clean water and quality fish and wildlife habitat.

NOW, THEREFORE, BE IT RESOLVED, that the MSB FWC submits the following comments regarding the proposed waterbody setback OR 23-002:

1. The FWC recognizes the importance of choosing development options that minimize impacts to critical fish and wildlife resources while appropriately managing the impacts from potential nonpoint source water pollution using best management practices whenever possible like bio-swales that help intercept polluted runoff from degrading water bodies.

2. The FWC believes impacts to critical fish and wildlife resources should be avoided when possible, and minimized and fully mitigated when not possible within the impacted watersheds.

3. The FWC recommends that the current 75’ waterbody setback code be maintained for streams and rivers.

4. The FWC recommends that the proposed OR 23-002 be amended to only apply to lake setbacks.

5. For new development subject to this ordinance the FWC recommends that the proposed 23-002 be amended to incorporate the following nonpoint pollution mitigation options:

a. For new developments, design and construct a water management system that collects and directs storm water from the development into bio-swales that are no closer than 25’ to the water body’s high water mark, and that receives approval in the site plan approved by a licensed engineer; or

b. For new developments, design and construct a 25’ riparian buffer of native vegetation (not lawn) from the water body’s high water mark that will be developed and maintained by the developer while subject to this ordinance, and that receives approval in the site plan approved by a licensed engineer;

6. For previous development violating the current 75’ waterbody setback subject to this ordinance the FWC recommends that the proposed OR 23-002 be amended to incorporate the following nonpoint pollution mitigation options that would be approved by a licensed engineer that it has been designed and built in a way that protects surface and subsurface water quality in order to attain their grandfathered status:

a. The FWC recommends that developments violating the current ordinance would have to design and construct a water management system that collects and directs storm water from the development into bio-swales that are no closer than 25’ to the water body’s high water mark; or

b. The FWC recommends that developments violating the current ordinance would have to institute a 25’ riparian buffer of native vegetation (not lawn) from the water body’s high water mark that will

be developed and maintained by the developer while subject to this ordinance.

7. The FWC recommends that any waterbody setback ordinance changes incorporate public education strategies and appropriate enforcement options for infractions.

ADOPTED by the Matanuska-Susitna Fish and Wildlife Commission this 19th day of January, 2023

_____

Mike Wood, FWC Chair

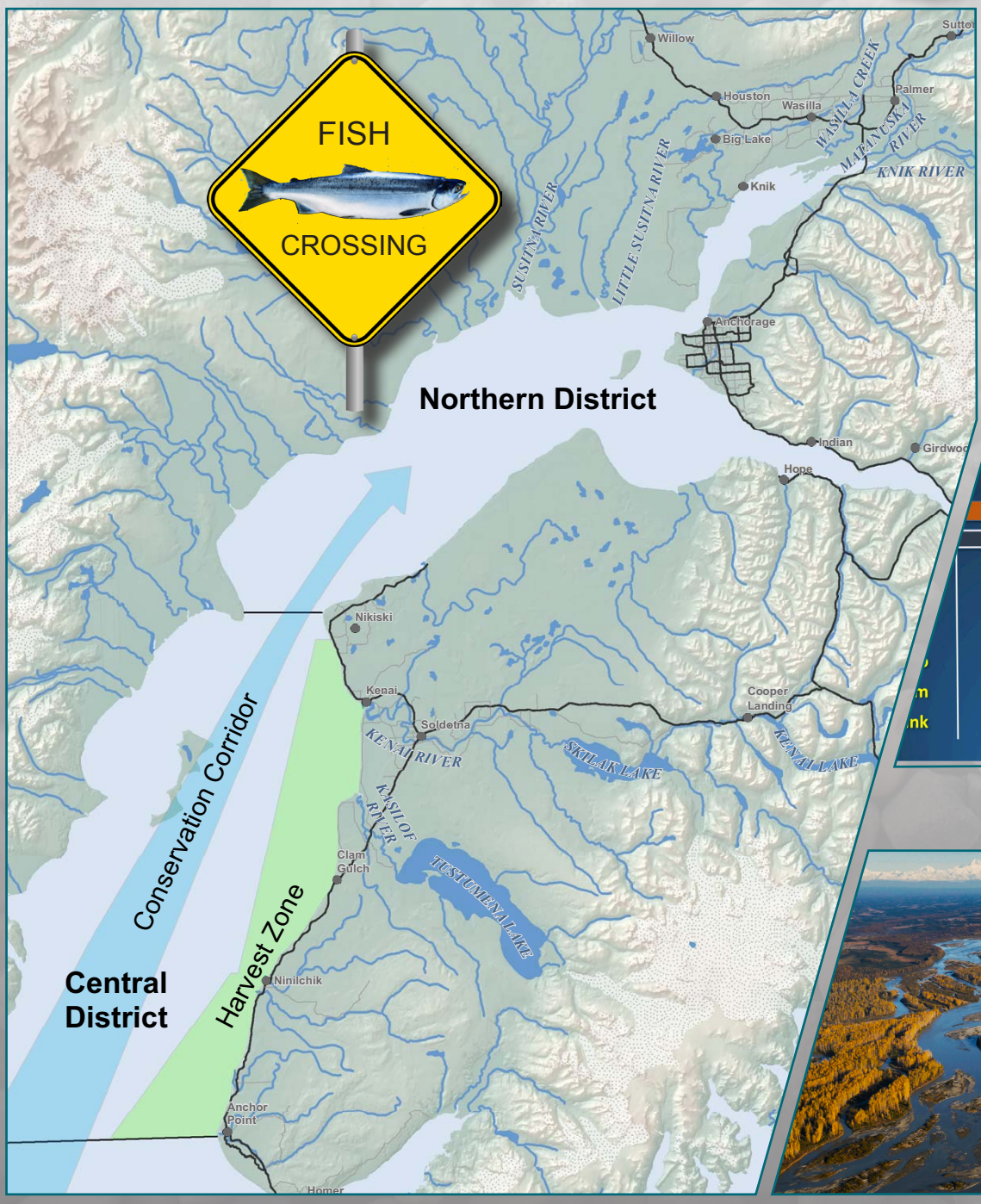
ATTEST:

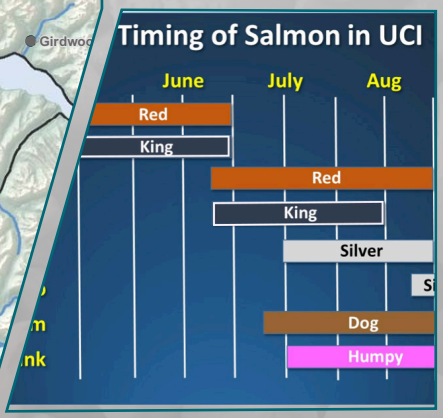
_____

Ted Eischeid, MSB Staff

It Takes Fish To Make Fish 2020

The Corridor is Working – Refine It





Matanuska-Susitna Borough Fish and Wildlife Commission

MSB Fish and Wildlife Commission

Matanuska-Susitna Borough Fish & Wildlife Commission: Left to right: front, Assembly Member Howard Delo, Larry Engel, Amber Allen, Assembly Member, Tamara Boeve. Assembly Member, Dan Mayfield, Chair: Mike Wood, Andy Couch

Our Experience

- 8-member volunteer board, appointed by the Mayor, including two Borough Assembly Members
- 12 years of combined experience on the Alaska Board of Fisheries with three years as Chair, 70+ years of combined expertise as State biologists, 35+ years combined experience as fishing guides and nine years as a commercial setnetter
- Directed $9.5 million in Borough, State, and Federal appropriations toward science, genetic research, and fish passage improvements

Our Goals

- Enhance the Conservation Corridor in the Central District Drift Gillnet Fishery Management Plan in July and early August (Proposals 129, 133) with mandatory area restrictions to regular fishing periods.
- Continue protection for identified Stocks of Concern – particularly Susitna Sockeye.
- Increase inriver returns of coho salmon to Northern Cook Inlet river systems by establishing an orderly transition from sockeye management to coho management.
- Adopt Chinook (King Salmon) management plans and strategies that address early run King salmon in the Northern Cook Inlet (Proposals 199, 215, 217, 219)
- Personal Use Fishery: Maintain or extend personal use fishing opportunity for Alaskan residents of the Northern Cook Inlet who choose to harvest salmon with net gear. (Proposal 234-238)
- Establish inriver or OEG (Optimal Escapement Goals) for salmon escapement in the Northern Cook Inlet

Recommendations

The Commission recommendations to the 2020 Board of Fisheries

1. Enhance the Conservation Corridor in the Central District drift gillnet fishery—it is working as designed

The Conservation Corridor provides strategic time and area closures in the center of Cook Inlet and expands use of terminal fishing areas based on abundance of the Kenai and Kasilof sockeye. Following corridor adoption, significant increases were observed in sockeye and coho salmon runs to the Mat-Su, local sport fisheries and escapements. The uptick in salmon numbers is part of what we, the Commission, were asking for when the 2014 Alaska Board of Fisheries adopted the current drift gillnet fishery management plan.

2. Continue to protect Stocks of Concern—particularly Susitna sockeye

Susitna sockeye are currently a Stock of Yield Concern. Continuing declines and chronic escapement failures also qualify this stock for listing as a stock of management and conservation concern. Susitna sockeye are tremendously diverse but inherently less productive than Kenai and Kasilof populations which drive Upper Cook Inlet commercial fisheries. Freshwater productivity of Susitna sockeye also appears to be declining. The combination of declined productivity and continuing high harvest rates are a recipe for extinction. Freshwater production problems are imperative for limiting exploitation, not an excuse for continued over fishing in the mixed stock commercial fishery.

3. Limit commercial drift gillnet fishing in August to avoid excessive coho harvest

Most of the commercial drift gillnet fishery is closed by regulation in August when less than 1% of the season's total sockeye harvest is caught on two consecutive fishery openers. This rule provides exhibility to extend the commercial fishing season when the sockeye run is late and signicant numbers continue to be available for harvest. The rule also ensures that commercial harvest of sport-priority coho and Kenai kings is limited after the sockeye run winds down. This closure rule, as adopted, was meant to be absolute except as otherwise provided under the commissioner's authority to manage to meet escapement goals as a first priority.

4. Continue to provide robust personal use opportunities where stocks permit

Over 25,000 to 30,000 households now participate in the UCI personal use fishery, harvesting approximately 325,000 or more sockeye salmon for the period 2013 to 2018, primarily from Kenai or Kasilof rivers. The majority of participation comes from residents of areas outside the Kenai Peninsula including the Mat-Su as other regional personal use opportunities are quite limited. The Commission supports maintaining and enhancing personal use fishery opportunities wherever possible. Commercial fishery limitations including closure "windows" are essential for delivering fish to the rivers when sockeye are running. The Commission also supports proposals to increase inriver goals for Kenai late-run sockeye for consistency with current inriver harvest levels.

Matanuska Susitna Borough
Fish and Wildlife Commission

Alaska Board of Fisheries
After Action Report

February 7 – February 17, 2020

Submitted by
Mac Minard
Northwestern Natural Resource Consultants

I. Meeting Outcome Goals

There were five Matanuska Susitna Borough Fish Wildlife Commission (MSBFWC) outcome goals for the 2020 Board of Fish Meeting:

1) **Expand protections for northern bound salmon while affording commercial fisheries opportunity to harvest surplus sockeye salmon.**
    a. Strengthen the Conservation Corridor in the Central District Drift Gillnet Fishery Management Plan in July and early August (proposals 129, 133)
    b. Establish a 2% rule move applicable date to July 31 (Proposal 195)

2) **Maintain protections for identified Stocks of Concern – particularly Susitna Sockeye**
    a. Continue the use of terminal stock fishery management using the expanded harvest corridor (proposals 129, 133)
    b. Raise in river goals in Kenai late run sockeye (proposal 88)

3) **Increase in-river returns of coho salmon to MT/SU river systems by establishing an orderly transition from sockeye management to coho management.**

    a. Establish an end date for Central District Drift Gillnet Fishery by use of the 2% rule and with no provision for continued commercial fishing in areas 3 and 4. (Proposals 133,195) and move the effective date to July 31.
    b. Strengthen coho preamble in draft plan and late run Kenai River sockeye salmon management plans (Proposal 127)

4) **Adopt Chinook (King Salmon) management plans and strategies that address early run King salmon in the Northern District** and provide predictable and transparent management action (proposals 199, 214, 215, 217, 219)

5) **Personal Use Fishery:** Create a personal use fishery in the Susitna River to extend personal use fishing opportunity for Alaskan residents of the Northern District who choose to harvest salmon with net gear. Proposal 234 (amended)

II. Preparations and Coordination

In the months prior to the Board of Fish meeting the Mat/Su Borough Fish and Wildlife Commission (MSBFWC) met frequently to develop and review regulatory proposals and to develop strategy for the upcoming meeting. Leadership provided by the Commission members which included very knowledgeable people and two former Board of Fisheries members made this effort very successful. Close coordination with Department staff and open discussions with Board of Fisheries members helped to inform the preparations by the MSBFWC.

The Mat Su Public Affairs office was called upon to retool the 2017 Fish Booklet for the 2020 meeting; changes included important sections describing differential productivities in the Mat Su and the Kenai drainages (pages 14 and 15) and updating and editing the conservation corridor and terminal harvest area discussions. Editorial support from commission members and continued refinement by staff resulted in a compelling work telling the Mat Su story in a highly effective and strategic manner.

Written Products and Social Media

1) A report titled *It Takes Fish to Make Fish 2020 The "Corridor" is working – Enhance It* developed as a supporting document for the Mat Su by staff and Stefan Hinman.

The graphics, maps and easy to use format made the material highly effective and was used extensively in preparing Board members and Commission members concerning the issues and priorities. This report tells a compelling story that established a level of understanding and credibility necessary to gain Board of Fish member's confidence. Public Affairs staff deserve a great deal of credit for their work. This booklet was distributed as part of the on-time comments and as PC 83.

2) Public Affairs created a strategic, compelling The half-page ad featured in the Frontiersman —"Fishzilla" by the Public Affairs office engaged disinterested readers and draw them to testify. That ad coupled with the web page story map https://www.matsugov.us/bof developed by Webmaster Jack Horner and GIS expert Kenny Kleewein can be credited with increasing the representation of the Mat Su to levels not seen before.

3) On social media, prior to the Board of Fisheries Meeting, Public Affairs staff posted an original post characterizing why residents should go and participate.

IX. Evaluation of Goals

The MSBFWC team went into the Board meeting with five clearly stated goals for the outcome of the meeting.

The following is an assessment of those goals.

1) **Expand protections for northern bound salmon while affording commercial fisheries opportunity to harvest surplus sockeye salmon.**

This goal was met fully. Passage of proposal MSBFWC proposal 133 (6 to 1) takes out one district wide commercial opening in July at middle tier and puts commercial drift fishermen in the expanded terminal harvest area for all of August as opposed to district wide coho fishery. Additionally, 133 eliminates drift gillnet fishing during the first week or two of August when the drift gillnet fishery is now restricted to the expanded terminal harvest area. Fishing may resume in this area (district 3) after the rest of the inlet is closed by the 1% rule.

Passage of Proposal 133 will keep the commercial drift fleet out of the conservation corridor and establishes a terminal fisheries management strategy that will provide immediate and significant protections for salmon destined to the Northern District.

- A subsequent vote brought forward in RC 112 to reconsider Proposal 133 failed 2 to 5.
- A request for emergency petition RC 192 filed the last hour of the last day of the meeting also failed 2 to 5.

In addition, MSBFWC proposal 195 amended (proposal 192 amended) the 1 percent rule becoming effective at July 31 instead of August 7th will have positive effects.

Additionally, and very significantly, was the Commissioners' clarification of how and when the Department will calculate the 1% rule; applied to any and all periods, regardless of where the fishery were permitted to take place. Action was passed 5 to 2.

Increasing the late-run sockeye goal as part of KRSA proposal 88, will also have positive benefits for Northern district stocks, in as much as it will necessarily reduce the need to aggressively commercially fish the sockeye run. Proposal 88 passed 5-2.

With the collective emphasis on terminal stock fisheries management for Kasilof and Kenai sockeye, it is fair to say that Northern bound salmon stocks now enjoy the most conservative set of regulations applied in decades.

2) **Maintain protections for identified Stocks of Concern – particularly Susitna Sockeye**

This goal was met. Following robust discussion of the status of stocks of concern in the Northern District and the conclusion that the yield sock of concern for Susitna Sockeye was no longer applicable, there was agreement that the Board would maintain a conservative strategy and avoid any significant increases in directed harvest. This position was leveraged to help with passage of 133 and the increases to late run sockeye goals in the Kenai river and was used to defeat numerous commercial fishing expansion proposals, therefore maintaining protections.

3) **Increase in-river returns of coho salmon to MT/SU river systems by establishing an orderly transition from sockeye management to coho management.**

This goal was met. Perhaps the most noticeable thing coming out of this meeting will be the increase in coho that will be returning to the Mat Su. Proposals 133 and 195 (amended in 192), in combination, will result in measurable improvements to the coho salmon return to the Mat Su. Clarify the use of the one-percent rule as part of the orderly transition of the sockeye management to coho management. It is our expectation that sport fisheries that have previously been restricted will see improvement and provide for increased opportunity. The Commission efforts are to be credited for the significant increase in commerce that will be realized by an improved level of sport fishing opportunity.

4) **Adopt Chinook (King Salmon) management plans and strategies that address early run King salmon in the Northern District and provide predictable and transparent management action (proposals 199, 214, 215, 217, 219)**

This goal was met. The approach we used to meet this goal was to work with department staff to produce alternative language in the form of RC 156, as proposal 217, a combined proposal that melded multiple proposals into a concise action that addressed Susitna River and Little Susitna river king salmon and establishing a king salmon OEG from 16.000 to 22,000 for the Yentna River, passed 7 - 0.

file:///C:/Users/MACMIN~1/AppData/Local/Temp/rc156_ADFG_Sub_Language_Proposals_215,217,219.pdf

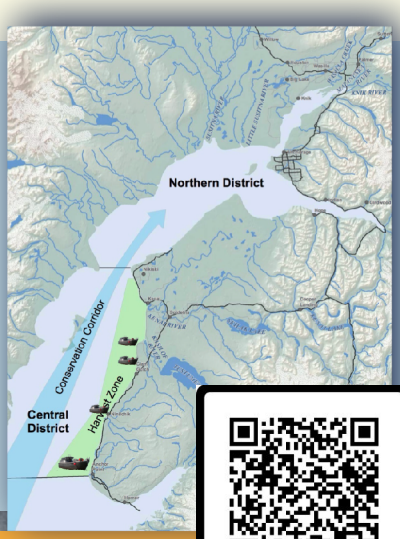
5) **Personal Use Fishery: Create a personal use fishery in the Susitna River to extend personal use fishing opportunity for Alaskan residents of the Northern District who choose to harvest salmon with net gear. Proposal 234 (amended)**

This goal was met fully. The MSBFWC took a lead role in developing and refining proposal 234 to create a viable yet limited personal use fishery as seen by RC 132 file:///C:/Users/MACMIN~1/AppData/Local/Temp/rc132_ADF&G_for_Payton_Substitute_language_prop_234.pdf

King and Silver Salmon are the economic drivers of Mat-Su sport fisheries

Direct spending on MSB sport fisheries fell from $141 million in 2007 to $57 million in 2017, a decrease of 59%

In 2014, a 7-0 vote at the Alaska State Board of Fisheries set in motion a sea of change in how the commercial fisheries are managed in Upper Cook Inlet under the Central Drift Gillnet Management Plan. Regulatory teeth were put in place that allow more northern bound fish to pass through a gauntlet of commercial fishing nets, into the Mat-Su Basin, where the shallow braided river channels and sloughs challenge even the toughest of returning salmon.



Fish & Wildlife Priorities

- Enhance the Conservation Corridor in the Central District.
- **Increase State funding for fish weirs located in the MSB and increase genetic sampling to improve salmon management**
- Hold State Board of Fish meetings at a neutral site, such as Anchorage, rather than in the MSB or Kenai Peninsula Borough
- **Fully match Federal funds from license fees to maximize Federal dollars for Fish and Game**
- Continued improvements to the MSB fish passage culvert program.
- **Support collaboration between the State and Federal management to reduce bycatch.**

Proposed BOF 24 FWC Goals for Consideration at 1/19/23

From Member AC:

**Utilizing regulations conservative enough to provide for established escapement goals, re-establish or rebuild reasonable common use coho and Chinook salmon harvest opportunities in Northern Cook Inlet freshwaters, more similar to harvest opportunities from 2000 -- 2009.

1. Provide protective / conservative management for former Stocks of Concern – particularly Susitna Sockeye and Northern Cook Inlet Chinook Salmon.

2. Increase inriver returns of coho salmon to Northern Cook Inlet streams by establishing an orderly transition from sockeye management to coho management.

3. Adopt Chinook (King Salmon) management plans and strategies that address early run king salmon in Northern Cook Inlet (Proposals 199, 215, 217, 219)

4. Personal Use Fishery: Maintain or extend personal use fishing opportunity for Alaskan residents in Northern Cook Inlet to harvest salmon with net gear. (Proposal 234-238)

5. Establish inriver or OEG (Optimal Escapement Goals) for salmon escapement in Northern Cook Inlet.

Proposed ADFG Game Season Summary Meeting Questions for Consideration at 1/19/23

Group **A**

1. What are ADF&G's most recent Moose population / bull to cow / and calf to cow data for GMUs 14A. 14B, 16A, 16B, 13A?

2. What year(s) was the most recent moose data collected from those same subunits?

3. What is the moose population objective range for GMUs 14A, 14B, 16A, 16B, and 13A?

4. After ADF&G's first moose browse survey (done several years ago) what is the follow up data on the condition of Mat-Su Valley moose browse?

5. How will our recent heavy snowfall in the Mat-Su Valley affect the number of antlerless moose permits given out for GMU 14A, 14B, and 13A for the 2023 / 2024 hunting season?

Group **B**

1. I would like an update on moose harvests in units 13A, 13D, 14A, 14B, and 14C. I would like to know how many tags were sold, how many bulls were harvested, how many cows were harvested, and how many calves were harvested. I would like to know where and when ADFG performed surveys of moose populations, and the population figures for the last 5 years.

2. I would like a general overview of the results of harvests and populations for caribou in units 13 and 14

3. I would like a general overview of the harvests and populations for sheep in unit 13A

4. What is the state of habitat for wildlife? Are there areas that are now doing a better or worse job of supporting different species than in the past 20-50 years? If so, what appear to be the primary causes?

5. What issues keep ADFG wildlife up at night? What are they watching that we should be aware of?

From: Theodore Eischeid
To: Maija DiSalvo (Maija.DiSalvo@matsugov.us)
Bcc: Andy Couch (fishing@fish4salmon.com); Howard Delo (hodelo@mtaonline.net); jessesumnerdistrict6@gmail.com; Jim Sykes; Kendra Zamzow; Larry Engel (larryengel@gci.net); Mike Wood; Mike Wood (mollyhops@icloud.com); Pete and Eileen Probasco; Tim Hale - MSB Assembly (TimHaleDistrict1@gmail.com)
Subject: RE: Cook Inlet Salmon
Date: Wednesday, January 4, 2023 1:41:00 PM

[This message sent BCC to FWC members]

Further insight on this issue from the Alaska Journal of Commerce, dated 12/27/22: Alaska Journal | Council has 4 months to fix Cook Inlet salmon fishery management plan

Ted

From: Theodore Eischeid
Sent: Tuesday, December 27, 2022 3:51 PM
To: Maija DiSalvo (Maija.DiSalvo@matsugov.us) <Maija.DiSalvo@matsugov.us>
Subject: FW: Cook Inlet Salmon

[This message sent BCC to FWC members]

Below is further detail on NPFMC action earlier in December on the Cook Inlet Salmon FMP action.

Best,

Ted

From: Nicole Watson - NOAA Affiliate <nicole.watson@noaa.gov>
Sent: Friday, December 23, 2022 12:35 PM
To: Theodore Eischeid <Ted.Eischeid@matsugov.us>
Cc: David Witherell - NOAA Affiliate <david.witherell@noaa.gov>; Diana Evans <diana.evans@noaa.gov>
Subject: Cook Inlet Salmon

[**EXTERNAL EMAIL** - CAUTION: Do not open unexpected attachments or links.]
Ted,

Thank you for following up regarding the Cook Inlet Salmon agenda item.

At the December meeting, the Council conducted its initial review of the Cook Inlet Salmon FMP Amendment analysis, which evaluates alternatives to manage salmon fishing in the Federal waters of upper Cook Inlet. The analysis describes and evaluates the impacts of the four management alternatives under consideration by the Council, noting that two of these are not viable based on court decisions. For the next version of the analysis, staff will provide additional details on Federal oversight and other operational details that would result from implementing Alternative 2 or 3. The Council elected not to select a preliminary preferred alternative at this time, and anticipates taking final action on this amendment at

the April 2023 Council meeting.

Additional information, including the initial review document and presentations, can be found in the eAgenda link by clicking here, and scrolling to agenda item C3.

Feel free to reach out with any further questions or concerns.

Respectfully,
Nicole Watson

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Nicole M. Watson, PhD Candidate | Fishery Analyst
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North Pacific Fishery Management Council
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