HB

328

AMENDMENT

OFFERED IN THE HOUSE

TO HB 328 (VERSION C)

Page 2, lines 15-18 Delete all material

ALASKA STATE LEGISLATURE

Chair
STATE AFFAIRS

Member
RESOURCES

Member
HEALTH, EDUCATION AND SOCIAL SERVICES

Member
WAYS AND MEANS

Session:
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REPRESENTATIVE PAUL SEATON
House District 35

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345 W. Sterling Highway
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Sponsor Statement HB 328

Alaska has a reputation for pure water and vibrant wild fish stocks. HB 328 seeks to maintain the long-standing prohibition on pollution mixing zones in Alaska's freshwater spawning areas. HB 328 transfers into statute a regulation that has governed wastewater discharges for many successful years of industrial and municipal expansion in Alaska.

HB 328 aids municipalities and industry by preventing man-made ditches or holding ponds that are invaded by spawning fish from being reclassified as freshwater spawning areas. This language solves the "Valdez Situation" cited by the Alaska Department of Environmental Conservation (ADEC) as a primary rationale for the regulation change. In that case, the city created a ditch from its wastewater treatment facility to saltwater, and the ditch was subsequently invaded by spawning pink salmon. This ditch was then classified as a spawning area requiring the wastewater discharge parameters to be reduced to a purity that the city's wastewater treatment plant would not be able to feasibly meet. HB 328 also allows other municipal wastewater facilities to have a mixing zone re-authorized if successful spawning occurs in the mixing zone after initial authorization, solving the concerns of many municipalities across the state.

HB 328 designates a spawning area to be a physical place in a river where fish spawning occurs. According to testimony from ADEC staff and the Commissioner of the Department of Fish and Game, the standard practice among regulators has been to determine where and when spawning occurs, and to employ seasonal restrictions on development activities in order to control impacts to the environment. However, in relation to the authorization of mixing zones in freshwater, there has never been explicit statutory or regulatory authorization for this practice. There was no reference to this practice in either of the previous Mixing Zone proposals.

In the summer of 2004 and again in 2005 ADEC released proposals to lift the prohibition on pollution mixing zones in freshwater spawning areas. These proposals were met with intense opposition from coastal municipalities, commercial and sport fishing industry groups, the federal government, state fish and game advisory committees, and hundreds of individuals, families, and

businesses who testified that allowing pollution in freshwater spawning areas would have a detrimental effect on the physical environment where the largest freshwater spawning populations on earth occur. Additionally, commercial fishing groups were unified in the concern that their recent successes in salmon marketing would be undermined if this important water quality safeguard was abolished.

Recently, ADEC adopted a version of the proposed regulations that both consolidate and modify the mixing zone regulations found at 18 AAC 70.240 through 18 AAC 70.020. The new regulations specifically exclude resident freshwater sport fish and resident subsistence fish spawning areas from the prohibition on mixing zones. Additionally, the new regulations allow any pollution mixing zone to be permitted year-round in freshwater salmon spawning areas if spawning salmon were not found in the area when the mixing zone was authorized, but were later found successfully spawning in the mixing zone. The new regulations also change the regulatory definition of a "spawning area" to mean a point in time. This allows regulators to authorize mixing zones in all spawning areas when it is determined that salmon spawning will not be occurring. All of these changes present significant departures from established public policy.

HB 328 does not negate other substantive changes ADEC has made in their attempt to streamline and consolidate the mixing zone regulations. HB 328 does not change regulations that allow for site-specific exemptions from state water quality standards and the granting of short-term variances from the standards, both of which can be applied to allow activities such as placer mining. Placer mines may also have a mixing zone in an area determined to not be an area where spawning occurs.

HB 328 protects municipalities and industry while maintaining the high standard of water quality and fisheries protection that has been a centerpiece of Alaska policy for years.

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HB 328
Sectional Analysis

Section 1 (a)

Prohibits the Alaska Department of Environmental Conservation from authorizing a mixing zone in an area of a lake, stream, river or other flowing fresh water body where anadramous or resident fish are spawning or have existing redds or nests. With the exception of "lake" this language is taken directly from the current regulations at 18 AAC 70.255(h). The 2005 ADEC mixing zone proposed regulation includes lakes along with streams, rivers and other flowing fresh waters. HB 328 includes lakes, mirroring this proposed regulatory language.

Section 1 (b)

Clarifies that the prohibition on mixing zones in freshwater spawning areas does not apply to a mixing zone for a municipal wastewater discharge if spawning was not ongoing in the mixing zone at the time the mixing zone was initially authorized, but the mixing zone was subsequently invaded by spawning fish.

Section 1 (c) (1)

Defines "area" as the physical location where spawning occurs.

Section 1 (c) (2)

Clarifies that the prohibition applies to spawning areas of naturally occurring lakes, streams, rivers, or other flowing fresh water even if these waters have been modified or altered by construction or remediation. It further clarifies that the prohibition on mixing zones in spawning areas does not apply when spawning occurs in the water of an entirely man-made holding pond or channel. However, if these holding ponds and channels have been created for the purpose of facilitating fish spawning, mixing zones are prohibited in them.

Section 1 (c) (3)

Defines "mixing zone".

24-LS1273\C
Bullock
4/5/06

CS FOR HOUSE BILL NO. 328( )

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTY-FOURTH LEGISLATURE - SECOND SESSION

BY

Offered:
Referred:

Sponsor(s): REPRESENTATIVES SEATON, OLSON, GATTO AND LEDOUX, Kerttula, Gara

A BILL

FOR AN ACT ENTITLED

"An Act prohibiting mixing zones in freshwater spawning waters."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

*** Section 1.** AS 46.03 is amended by adding a new section to read:

Sec. 46.03.065. Prohibition of mixing zones in spawning waters. (a) Except as provided in (b) and (c) of this section, the department may not authorize a mixing zone for lakes, streams, rivers, or other flowing fresh water in an area of

(1) anadromous fish spawning; or

(2) resident fish redds for

(A) Arctic char;

(B) Arctic grayling;

(C) brook trout;

(D) burbot;

(E) cutthroat trout;

(F) Dolly Varden;

(G) lake trout;

(H) landlocked coho, king, and sockeye salmon;

(I) northern pike;

(J) rainbow trout;

(K) sheefish; or

(L) whitefish.

(b) The prohibition in (a) of this section does not apply to the renewal of a municipal or village wastewater facility's mixing zone authorization during the useful life of the wastewater facility for an area where spawning was not ongoing at the time of the initial authorization and the mixing zone became a spawning area after the date of the initial authorization.

(c) The prohibition in (a) of this section does not apply to a mixing zone for a suction dredge placer mine or a mechanical placer mine if

(1) the turbidity level of the mixing zone has been authorized by the Department of Environmental Conservation;

(2) the mixing zone extends not more than 500 feet downstream of the point of discharge;

(3) the mixing zone is at least 500 feet away from the closest mixing zone in the same body of water; and

(4) the Department of Environmental Conservation with the concurrence of the Department of Natural Resources, or, in an area designated under AS 16.20, with the concurrence of the Department of Fish and Game,

(A) restricts the discharge to periods when spawning is not occurring; and

(B) finds that the mixing zone will not adversely affect the present and future capability of the area for spawning, incubation, or rearing of fish included in (a) of this section.

(d) In this section,

(1) "area" means the physical location where spawning occurs;

(2) "lakes, streams, rivers, or other flowing fresh water" includes lakes, streams, rivers, or other flowing fresh water that have been altered by remediation or construction activities; the term does not include an artificially constructed facility for

water, wastewater, holding, or channeling, unless the artificial facility is constructed for the purpose of facilitating fish spawning;

(3) "mixing zone" means an area in a water body surrounding or downstream of a discharge where the effluent plume is diluted by the receiving water, within which water quality standards specified by the department under AS 46.03.050 - 46.03.120 may be exceeded;

(4) "village" has the meaning given in AS 46.07.080.

*** Sec. 2.** The uncodified law of the State of Alaska is amended by adding a new section to read:

APPLICABILITY. AS 46.03.065, enacted in sec. 1 of this Act, does not apply to a suction dredge placer mine or a mechanical placer mine with a permit in effect on the effective date of this Act until the operator applies for a reauthorization of that permit.

FISCAL NOTE

STATE OF ALASKA
2006 LEGISLATIVE SESSION

Fiscal Note Number:
Bill Version: CSHB 328(FSH)
() Publish Date:

Revision Date/Time (Note if correction):
Dept. Affected: Dept of Environmental Conservation

Title: Ban Mixing Zones in Spawning Areas
RDU: Division of Water
Component: Water Quality

Sponsor: Seaton, Olson, Gatto, Ledoux, Kerttula & Gara
Requester: House Resources Committee
Component No.: 2062

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Personal Services	31.9					
Travel	11.0					
Contractual	8.1					
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	**51.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
CAPITAL EXPENDITURES						
CHANGE IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	51.0					
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
TOTAL	**51.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Estimate of any current year (FY2006) cost: 0.0
Check this box (X) if funding for this bill is included in the Governor's FY 2007 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*

This legislation prohibits mixing zones in spawning areas even when no spawning fish, eggs or alevins are present. This new policy will require that the Department revoke and reissue authorizations to 32 placer mines where current permits authorize mixing zones during timing windows when spawning fish, eggs and alevins are not present. This would be a one-time effort in FY 07.

This legislation conflicts with current Department regulations which will need to be revised to conform with the new policy. Because the regulations are part of the state's Water Quality Standards under the federal Clean Water Act, some federal requirements apply, including a mandatory public hearing on the proposed regulations changes. The Department must provide the regulations and documentation to the

(cont.)

Prepared by: Lynn J. Tomich Kent — Phone 907-269-7599
Division: Director — Date/Time 3/31/06 11:00 AM
Approved by: Kurt Fredriksson — Date 3/31/2006
Agency: Department of Environmental Conservation

ANALYSIS CONTINUATION

(Continued from page 1)

Environmental Protection Agency (EPA) who must review and approve the new regulations before they can be used for Clean Water Act purposes such as wastewater discharge permitting. It is a one-time effort in FY 07 to revise the regulations and seek EPA approval of them.

Personal services ($31.9) for a seven-month nonperm Env. Program Specialist III to notify mine operators, process new authorizations including public notice and comment, provide technical and field assistance to mine operators in planning for and complying with the new authorizations, and to draft regulations changes, take them through the public review process, and justify the changes to the Environmental Protection Agency.

Travel ($11.0) for four field trips to provide technical/compliance assistance in Interior and Western Alaska, scheduled to reach multiple remote mine sites per trip; public meetings and hearings on the authorizations and proposed regulations changes.

Contractual ($8.1) for public notice newspaper advertisements of proposed authorizations and regulations, hearing stenographer, meeting rooms for public meetings and hearing.

FISCAL NOTE

STATE OF ALASKA
2006 LEGISLATIVE SESSION

Fiscal Note Number:
Bill Version: HB328-DNR-OHMP-01-2
() Publish Date:

Revision Date/Time (Note if correction):
Dept. Affected: Natural Resources

Title: Prohibiting mixing zones in freshwater spawning areas
RDU: Resource Development
Component: Office of Habitat Management & Permitting
Sponsor: Seaton, Olson, Gatto, Ledoux, Kerttula, and Gara
Requester: House Special Committee on Fisheries
Component No.: 2682

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL EXPENDITURES						
CHANGE IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2006) cost: 0.0

Mark this box (X) if funding for this bill is included in the Governor's FY 2007 budget proposal: [ ]

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*

There is no fiscal impact associated with implementation of this legislation.

Prepared by: Kerry M. Howard, Executive Director
Phone 907-465-3176
Division: Office of Habitat Management & Permitting
Date/Time 1/24/2006 - 8:30:00 AM
Approved by: Michael Menge, Commissioner
Date 1/24/2006
Agency: Natural Resources

(Revised 9/7/2005 OMB)

FISCAL NOTE

STATE OF ALASKA
2006 LEGISLATIVE SESSION

Fiscal Note Number: 1
Bill Version: CSHB 328(FSH)
(H) Publish Date: 1/30/06

Revision Date/Time (Note if correction):
Dept. Affected: Dept of Environmental Conservation

Title: Prohibiting mixing zones in freshwater spawning areas
RDU: Division of Water
Component: Water Quality
Sponsor: Seaton, Olson, Gatto, Ledoux, Kerttula, and Gara
Requester: House Special Committee on Fisheries
Component No. 2062

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
CAPITAL EXPENDITURES						
CHANGE IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
TOTAL	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Estimate of any current year (FY2006) cost: 0.0
Mark this box (X) if funding for this bill is included in the Governor's FY 2007 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*

This bill has no effect on DEC resources.

Prepared by: Lynn J. Tomich Kent
Phone 907 269-7599
Division: Director
Date/Time 1/18/06 3:15 PM
Approved by: Kurt Fredriksson
Date 1/18/2006
Agency: Department of Environmental Conservation

(Revised 9/7/2005 OMB)

Department of Environmental Conservation
CSHB 328 Testimony
House Special Committee on Fisheries
January 27, 2006

The Department of Environmental Conservation appreciates the opportunity to provide its position and comments on the CS for HB 328.

The Department is opposed to CSHB 328 for the following reasons:

1. **CSHB 328 is not necessary to protect anadromous salmon from either a scientific or a perception basis.**

   The Department of Environmental Conservation's regulations prohibit mixing zones in anadromous salmon spawning areas. CSHB 328 would put in statute the same protections for the five species of anadromous salmon that have been part of DEC's regulations since 1975.

   While these protections are not necessary from a scientific perspective, they go beyond science to address the need to protect salmon marketing and the public perception that Alaska's salmon are clean and healthy.

2. **There is no justification for extending the mixing zone prohibition to protect the salmon marketing effort to protect "non-salmon" fish species.**

   CSHB 328 would prevent DEC from authorizing a mixing zone in a non-salmon fish spawning area (Sec. 46.03.063(b)(2)) even in cases where science can show the mixing zone will have no adverse effect on spawning. There is no justification for extending the mixing zone prohibition which is intended to protect salmon marketing efforts to non-salmon fish species. Alaska needs to encourage and support responsible community growth and development of its natural resources.

   DEC's regulations allow exceptions to the prohibition of a mixing zone in "non-salmon" spawning areas when site specific conditions show that the fish species will be protected or any adverse impacts will be mitigated as determined by habitat and fisheries biologists with the Departments of Fish and Game, and Natural Resources.

   Alaska's communities and businesses should be allowed to use mixing zones if fish are protected. There is no justification for restricting responsible community growth and resource development that can comply with the state's requirements for the growth and propagation of fish.

DEC Comments

3. **CSHB 328 would prohibit mixing zones in spawning areas for lampreys and smelts.**

DEC would be prevented from authorizing a mixing zone in all anadromous fish spawning areas. Lampreys and smelts are fish species included in the definition of anadromous fish. Unlike the importance of salmon to Alaska's social and economic wellbeing, DEC does not believe non-salmon fish species justify an absolute prohibition on mixing zones that can comply with the scientifically based water quality standards for growth and propagation of fish.

4. **CSHB 328 would prohibit mixing zones that have become a fish spawning area unless the discharge was from a municipal wastewater facility.**

It is possible for mixing zones to become spawning areas even though spawning was not occurring when the mixing zone was first authorized. DFG has discovered fish spawning in a mixing zone previously authorized for a drinking water utility, and in some cases for domestic wastewater facilities. Successful fish spawning in a mixing zone is evidence that the water quality in the mixing zone is not harmful to fish. Allowing mixing zones in areas that have become successful spawning areas should be allowed for any facility type, not just municipal wastewater facilities. Businesses and communities should not lose their mixing zones just because they are doing such a good job treating their wastewater that fish start spawning in them.

5. **CSHB 328 includes a definition of "area" that is counter to both past and current practices by the Departments of Fish and Game and Natural Resources when determining spawning areas on both a spatial and temporal basis.**

The relative sensitivity of Alaska's fish resources is seasonal. Impacts from responsible community and resource development can be avoided by limiting uses and activities to times of the year when the fish resources are not there or other seasonal conditions eliminate adverse impacts to the fish resources. Alaska's resource agencies have traditionally employed "seasonal restrictions" to control development impacts to the environment.

There are 32 currently permitted facilities with discharges that do not have an adverse effect on fish, in part due to timing restrictions imposed on their discharge via permit conditions. CSHB 328 would require the Department to cancel those permits and limit future permitting in similar situations without any net environmental benefit to the fish.

6. **CSHB 328 relies upon a new undefined term, "useful life" when referring to renewal of a mixing zone authorization for a municipal wastewater facility.**

As many facilities age, they are upgraded to varying degrees from minor modifications to almost complete reconstruction. DEC knows of no standard or criteria for determining a facility's "useful life."

The "useful life" of a facility is also irrelevant to the properties and effects of a mixing zone or the methods necessary to protect fish.

7. **CSHB 328 is inconsistent with the current statute for protection of fish and game (AS 41.14.870), interference with salmon spawning streams and waters (AS 16.10.010), or submission of plans and specifications (AS 16.20.060).**

   Alaska's legislature has enacted a protective legal framework for all waters important to fish with additional protection for rivers, lakes and streams that are important for salmon spawning, rearing, or migration. State approval must be received from DEC, DNR, or DFG prior to the construction in, or use of waters important to fish spawning, rearing or migration.

   CSHB 328 prohibits all mixing zones in all anadromous fish and other specifically listed fish spawning areas. However, CSHB 328 does not amend or repeal the provisions in other state law that permit the use of fish spawning areas if there are no adverse impacts from that use. CSHB 328 conflicts with current legislative policy not specifically amended or repealed by CSHB 328.

8. **DEC is responsible for, and must be accountable for, setting and enforcing standards for environmental protection.**

   DEC has a duty under state statute to set and enforce standards for the prevention of pollution and protection of Alaska's environment (AS 44.46.020). The legislature has also directed DEC to "determine what qualities and properties of water indicate a polluted condition actually or potentially deleterious, harmful, detrimental, or injurious to . . . aquatic life or their growth and propagation" (AS 46.03.070).

   It is appropriate that the legislature hold DEC accountable for carrying out the duties and responsibilities spelled out in statute. However, we do not believe it is appropriate for the legislature to assume responsibility for carrying out the duties and responsibilities assigned to the executive branch by statute.

STATE OF ALASKA

FRANK H. MURKOWSKI, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF WATER
OFFICE OF THE DIRECTOR

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January 26, 2006

Representative Gabrielle Ledoux
Co-Chair, House Special Committee on Fisheries
State Capitol, Room 403
Juneau, AK 99801-1182

Representative William Thomas, Jr.
Co-Chair, House Special Committee on Fisheries
State Capitol, Room 428
Juneau, AK 99801-1182

Dear Representatives Ledoux and Thomas,

Thank you for providing an opportunity for the Department of Environmental Conservation and other members of the administration to testify on House Bill 328 at the January 20 hearing of the House Special Committee on Fisheries. Several questions came up during the hearing (paraphrased below) and some additional information may help to put the administration's position in context.

Is there a comprehensive list of all currently authorized mixing zones?

The Department's current permit tracking data system does not specifically track the details of authorized mixing zones, however, the Department can provide general information on authorized mixing zones (see Enclosure 1).

How many wastewater discharge authorizations are issued each year?

In FY 2005, the State issued 155 wastewater discharge authorizations; 72 of those included an authorized mixing zone (21 of them in freshwater).

How does the Department track compliance with authorized mixing zones and how many inspections does the Department conduct?

Many permitted facilities (with and without authorized mixing zones) are required to conduct self-monitoring and to report the results of that monitoring to the Department and to the Environmental Protection Agency (EPA). These "discharge monitoring reports" are reviewed by the Department for compliance with permit conditions.

Printed on Recycled Paper

During FY 2005, the Department conducted 128 compliance inspections. Facilities chosen for inspection are based on a risk-based ranking system. Samples were collected at a quarter of the inspections to independently verify facility monitoring reports. Since the state currently shares permitting and compliance authority with EPA, they also conducted facility inspections in Alaska. EPA conducted 71 inspections at facilities with wastewater permits during the same State FY 2005 time period. Not all of the State or EPA inspections involve facilities with authorized mixing zones.

Are there facilities that have a mixing zone authorization with timing restrictions on their discharge to avoid spawning areas?

Enclosure 2 is a list of authorized mixing zones where there are timing restrictions on the discharge to avoid spawning areas. Many facilities that have authorized mixing zones in waters identified in the anadromous waters catalog, the state list of waters important to the spawning, rearing and migration of anadromous fish. However, these mixing zones are not in spawning areas of listed waterbodies.

The Committee requested clarification from the Departments of Fish and Game (F&G) and Natural Resources (DNR) regarding the definition of spawning area.

Fish spawning areas are essential to maintain viable fish populations and must be properly protected. For purposes of permitting various types of activities, the Office of Habitat, Management and Permitting at DNR and DF&G define "freshwater fish spawning areas" as areas within lakes, streams, rivers, or other flowing fresh waters that offer suitable habitat for fish spawning and where spawning adults, incubating eggs, or alevins are present. In identifying and managing spawning areas, the agencies consider the temporal and spatial aspects of spawning habitats and activity, the proposed activity, and potential impacts in such a manner that the continued long-term use and availability of spawning habitat is properly protected.

Does the permit applicant determine if their proposed discharge will be to a spawning area?

No. Past and current practice (and now codified in the Department's new regulations) require the Department to defer to the best professional judgment of F&G or DNR to determine whether a proposed mixing zone will affect salmon or resident fish spawning areas. Enclosure 3 is an example of a document used by the Department when gathering information about potential mixing zones. This document includes a section completed with information from DNR or F&G regarding spawning areas (highlighted in the enclosure).

Does the Department have the discretion to choose which agency (F&G or DNR) provides fish protection input into mixing zone authorization decisions?

No. The Department consults with the resource agency that has jurisdiction over the waterbody where the proposed discharge will occur. F&G has authority over waters in

legislatively designated special areas (AS 16.20.050) and DNR has authority over all other waters (AS 41.14.870).

I would be happy to provide any other information requested by the committee.

Sincerely,

Lynn J. Tomich Kent

Lynn J. Tomich Kent
Director

Enclosures

cc. House Special Committee on Fisheries members
Representative Paul Seaton

Enclosure 1

Currently Authorized Mixing Zones

157 Municipal Wastewater Treatment Plants

Municipal Wastewater (Sewage) Treatment plants discharge to both fresh and marine water. Their mixing zones vary in size.

204 Seafood Processors

Most of the seafood processors discharge to marine waters under several general and individual permits, the bulk of them under general permits. The mixing zone under these general permits is described as a cylindrical volume of water, with a horizontal radius of 100 feet from the diffuser and the full depth of the waterbody.

59 Placer Mines

Placer mines operate under a general permit, with site-specific, freshwater mixing zones.

15 Oil and Gas Related Facilities

All oil and gas related facilities with authorized mixing zones discharge to marine waters.

3 Large Mines (all others meet WQS at end of pipe or do not discharge to surface water)

Greens Creek Mine has domestic and industrial discharges to marine waters of Hawk Inlet. Red Dog Mine has an industrial discharge to Ikalukrok and Red Dog Creeks. Usibelli Coal mine is in the process of collecting data that will support future mixing zone authorizations for their multiple discharges into Hoseanna Creek.

1 Fertilizer Plant

Agrium has an industrial discharge to Cook Inlet

Enclosure 3

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

18 AAC 70.250 – 70.260 Mixing Zone Calculations **Region:** NON-YUKON, NON-SE TRIB

OPERATOR
APMA #
Effluent Disch. (gpm)
Receiving Waterbody

QUAD:
NPDES:

HYDROLOGY **DATA INPUT** **Calculated By:** **Agency:** ADEC

Upstream Drainage Area		square miles
Annual Precipitation (in.)		from USGS Water Resources Investigations Report 93-4179
% Watershed Forested		digitized from 1:63,360 USGS Quadrangle
Channel Slope (ft./ft.)		digitized from 1:63,360 USGS Quadrangle

RECEVING WATERBODY CHARACTERISTICS **Source:** OHMP/DNR **Reviewer:**

Response Type:

AS 41.14.840	
AS 41.14.870	
5 AAC 95.060 (Special Areas)	
No Known Fish / No Permit Required	
No Survey / No Permit Required At This Time	

Anadromous Fish Spawning (Y/N)	
Resident Fish Spawning Redds (Y/N)	
Fish Migratory Corridor (Y/N)	
Spawning/Incubation Window	
Escapement Index/Weir/Tower (Y/N)	
MZs Allowed? (Y/N/Conditioned)	
Authorized Period:	Year-round

Fish Species Present / OHMP Decision Rationale

STREAM DISCHARGE REGRESSION (cfs)
(Ashton and Carlson)

July - Aug.	7Q10 low flow	-1.00
July - Aug	1Q2 high flow	0

CALC. END-OF-PIPE NTU LIMIT ##### NTU
(Calculate using 7Q10 Low Flow)

Is Calculated Limit >1,500 NTU? #####
APPROVED END-OF-PIPE NTU LIMIT ##### NTU

GENERALIZED HYDRAULIC CHANNEL MORPHOLOGY (Bray 1982) - 1Q2 BANKFULL

Channel Width (feet)	0.00	r^2=0.962	Width = 2.38 * discharge (cfs) ^ 0.53
Channel Depth (feet)	0.00	r^2=0.871	Depth = 0.266 * discharge (cfs) ^ 0.33
Mean Channel Vel. (fps)	0.00	r^2=0.499	Velocity = 1.58 * discharge (cfs) ^ 0.14

GENERALIZED HYDRAULIC CHANNEL MORPHOLOGY (Bray 1982) - 7Q10 LOW FLOW

Channel Width (feet)	#NUM!	r^2=0.962	Width = 2.38 * discharge (cfs) ^ 0.53
Channel Depth (feet)	#NUM!	r^2=0.871	Depth = 0.266 * discharge (cfs) ^ 0.33
Mean Channel Vel. (fps)	#NUM!	r^2=0.499	Velocity = 1.58 * discharge (cfs) ^ 0.14

CALC. DOWNSTREAM LOCATION OF 95% COMPLETE MIXING (1Q2 High Flow) ##### feet
(from Yearsley, EPA) (0.45*Width^2*Mean Vel.)/0.6*Depth*(32*Depth*Slope)^.5 Std. Dev. = +/- 30%

CALC. DOWNSTREAM LOCATION OF 95% COMPLETE MIXING (7Q10 Low Flow) #NUM! feet
(from Yearsley, EPA) (0.45*Width^2*Mean Vel.)/0.6*Depth*(32*Depth*Slope)^.5 Std. Dev. = +/- 30%

EXPLANATIONS/COMMENTS

1. End-of-pipe limit (C2) =((stream discharge/effluent discharge)+1) * 5 NTU; assumes 0 NTU background
2. Std. Error of the 7Q10 Low Flow Discharge Estimate: +32% / -24%
3. Std. Error of the 1Q2 High Flow Discharge Estimate: +21% / -17%
4. Regional hydrograph regressions may generate negative numbers. In those cases assume zero flow and set end-of-pipe limits at AK WQS
5. When calc. downstream location of 95% complete mixing is greater than 1 mile the mixing zone is truncated to 1 mile.

COMPARISON OF PROVISIONS IN THE OLD AND THE NEW MIXING ZONE REGULATIONS AND IN HB 328/SB225

Prepared by the office of Rep. Seaton

OLD MIXING ZONE REGULATIONS	NEW MIXING ZONE REGULATIONS	HB 328/SB 225	DIFFERENCES
SPAWNING AREA PROHIBITION **18 AAC 70.255. Mixing zones: In-zone quality and size specifications** (h) For streams, rivers, or other flowing fresh waters subject to (e)(3) of this section, a mixing zone will not be authorized in an area of (1) anadromous fish spawning; or (2) resident fish spawning redds for Arctic grayling, northern pike, rainbow trout, lake trout, brook trout, cutthroat trout, whitefish, sheefish, Arctic char (Dolly Varden), burbot, and landlocked coho, king, and sockeye salmon.	**SPAWNING AREA PROHIBITION** **18 AAC 70.240** (e) In lakes, streams, rivers, or other flowing fresh waters, a mixing zone will not be authorized in a spawning area or allowed to adversely affect the present and future capability of an area to support spawning, incubation, or rearing of any of the five species of Pacific salmon. (f) In lakes, streams, or other flowing fresh waters, except as provided in (g) of this section, a mixing zone will not be authorized in a spawning area for Arctic Grayling; northern pike; lake trout; brook trout; sheefish; burbot; landlocked coho salmon, king salmon, or sockeye salmon; or anadromous or resident rainbow trout, Arctic char, Dolly Varden, whitefish or cutthroat trout. (g) The Department may authorize a mixing zone in a spawning area of a lake, stream, river or other flowing fresh water for the species listed in subsection (f) if, after consultation with the Department	**SPAWNING AREA PROHIBITION** The department may not authorize a mixing zone for lakes, streams, rivers, or other flowing fresh water in an area of (1) anadromous fish spawning; or (2) resident fish redds for (A) Arctic char; (B) Arctic grayling; (C) brook trout; (D) burbot; (E) cutthroat trout; (F) Dolly Varden; (G) lake trout; (H) landlocked coho, king, and sockeye salmon; (I) northern pike; (J) rainbow trout; (K) sheefish; or (L) whitefish	The language of HB 328 is taken from the old regulatory language. HB 328 also adds "lakes" to the spawning area mixing zone prohibition. In both the old regulation and HB 328 there is a flat prohibition on mixing zones applying to all anadromous fish spawning areas, and in the egg redds or nests of numerous different freshwater resident species. In contrast, the newly adopted mixing zone regulations contain a prohibition only on mixing zones in the spawning areas of any of the five species of Pacific salmon. Mixing zones may be authorized in a spawning area for resident freshwater and non-salmon anadromous species. Mixing zones may also be authorized in areas that may support spawning, incubation, or rearing of any of the five species of Pacific salmon, as long as the pollutant will not adversely affect the present and future capability of the area to support these activities.

	of Natural Resources, Office of Habitat Management and Permitting, or the Department of Fish and Game if with a legislatively designated special area under AS 16.20, the department finds the applicant has (1) demonstrated that the discharge does not contain pollutants at concentrations that exceed the criteria for growth and propagation of fish, shellfish, and other aquatic life, and wildlife established in 18 AAC 70.020(b) and that the discharge will not adversely affect the capability of the area to support future spawning, incubation, and rearing activities; (2) submitted a mitigation plan approved by the Department of Fish and Game under 5 AAC 95.900 if within a legislatively designated special area under AS 16.20; or (3) submitted a mitigation plan approved by the Department of Natural Resources, Office of Habitat Management and Permitting, and incorporating as part of the discharge authorization, using the methods established in 11 AAC 195.010.		

OLD MIXING ZONE REGULATIONS	NEW MIXING ZONE REGULATIONS	HB 328/SB 225	DIFFERENCES
SPATIAL AND TEMPORAL SPAWNING AREAS No reference found	**SPATIAL AND TEMPORAL SPAWNING AREAS** (j) For purposes of this section, the department will defer to the Department of Natural Resources, Office of Habitat Management and Permitting or the Department of Fish and Game to determine spawning areas, both spatially and temporally.	**SPATIAL AND TEMPORAL SPAWNING AREAS** No reference	The old Mixing Zone regulations do not make reference to spatial and temporal spawning areas. Neither of the two previously proposed mixing zone regulations made reference to spawning areas as spatial and temporal entities. The new mixing zone regulations contain this language, implying that mixing zones will be allowed in areas that at some part of the year are used for spawning. "A mixing zone could be allowed when spawning salmon, eggs, or larvae are not present, state officials said. For example, a placer miner could "operate for a very small window of time" in some salmon spawning streams in Alaska, said Lynn Kent, director of the Environmental Conservation Department's Division of Water."* --- *"Mixing Zone Change Fuzzy for Fishermen" Elizabeth Bluemink, Juneau Empire, January 15, 2006

OLD MIXING ZONE REGULATIONS **EXCEPTIONS TO THE SPAWNING AREA PROHIBITION**	NEW MIXING ZONE REGULATIONS **EXCEPTIONS TO THE SPAWNING AREA PROHIBITION**	HB 328/SB 225 **EXCEPTIONS TO THE SPAWNING AREA PROHIBITION**	DIFFERENCES
No exceptions found	(i) The provisions of (e),(f) and (g) of this section do not apply to the renewal of a mixing zone authorization where spawning was not occurring at the time of the previous authorization, but successful spawning, incubation and rearing has occurred within the mixing zone subsequent to the previous authorization of that mixing zone.	"lakes, streams, rivers, or other flowing fresh water" includes lakes, streams, rivers, or other flowing fresh water that have been altered by remediation or construction activities; the term does not include an artificially constructed facility for water, wastewater, holding, or channeling, unless the artificial facility is constructed for the purpose of facilitating fish spawning.	The new mixing zone regulations contain a clause that allows a mixing zone in flowing fresh water to be re-permitted if spawning, incubation, or rearing occurs within the active mixing zone. HB 328 contains an exemption for mixing zones in man-made ditches and holding ponds by prohibiting reclassification of these areas as freshwater spawning areas if they are subsequently colonized by spawning fish.

Enclosure 2 Mixing Zones with Discharge Timing Restrictions to Avoid Spawning Areas

Mine	Waterbody	Marine/ Fresh	Fish Species	Timing Restrictions to avoid spawning areas.
Merrill Placer Mine	Falls creek	Fresh	Salmon	No discharge from 7/16 to 5/14
Tiaga Placer Mine	Dry Creek	Fresh	Salmon	No discharge 6/16 to 4/30
Tiaga Placer Mine	Aloha Creek	Fresh	Salmon	No discharge from 6/16 to 4/30
Tiaga Placer Mine	Comeback Creek	Fresh	Salmon	No discharge from 6/16 to 4/30
Tweet Placer Mine	Kougrok River	Fresh	Salmon and Non-Salmon	No discharge from 9/1 to 6/15
Lohman Placer Mine	Lower Coffee Creek	Fresh	Non-Salmon	No discharge from 7/10 to 6/15
Wolff Placer Mine	Walker Fork 40-Mile River	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Read Placer Mine	Vault Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Smith Placer Mine	Deadwood Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Stout and Lanager Placer Mine	Quartz Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Polar Mining Placer Mine	Goldstream Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Willis Placer Mine	Crooked Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Earth Movers of Fairbanks Placer Mine	Fairbanks Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Mayo Placer Mine	Deadwood Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
McCloskey Placer Mine	Deadwood Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Arctic Gold Placer Mine	Garfield Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Bras Placer Mine	Canyon Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Cogdon Placer Mine	Quail Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Frantz Placer Mine	Linda Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Clack-Wiltz Placer Mine	Ganes Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Loud Placer Mine	Harrison creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Newby Placer Mine	Little Boulder Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Wicken Placer Mine	Gold Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15

Enclosure 2 Mixing Zones with Discharge Timing Restrictions to Avoid Spawning Areas

Diversified Lines Placer Mine	North Fork Hardscr Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Northern Placer Mine	Emma Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Miase Placer Mine	Hammond River	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Rosander Placer Mine	Colorado Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Great Divide Placer Mine	Little Boulder Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Pacific Mining	Porcupine Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Tainter Placer Mine	Prospect Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Kopperberg Mining Placer Mine	Faith Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15
Souther Placer Mine	Fairbanks Creek	Fresh	Non-Salmon	No discharge from 5/1 to 6/15

Note: 3 placer mine mixing zones in waterbodies with both anadromous and resident fish denied where timing restrictions cannot avoid spawning areas.

Nyac Placer Mine	Tuluksak River	Fresh	Anadromous and Resident	No MZ granted. Habitat said no time when wastewater can be discharged. Applicant must meet WQS at end of pipe.
Nyac Placer Mine	Bear Creek	Fresh	Anadromous and Resident	No MZ granted. Habitat said no time when wastewater can be discharged. Applicant must meet WQS at end of pipe.
Nyac Placer Mine	California Creek	Fresh	Anadromous and Resident	No MZ granted. Habitat said no time when wastewater can be discharged. Applicant must meet WQS at end of pipe

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

November 1, 2004

Nancy Sonafrank
Water Quality Standards Section Manager
Alaska Department of Environmental Conservation
610 University Drive
Fairbanks, Alaska 99709

Dear Ms. Sonafrank:

The National Marine Fisheries Service (NMFS) has reviewed proposed revisions to the Mixing Zone sections of the Alaska Water Quality Standards. The Alaska Department of Environmental Conservation (DEC) is proposing several changes to the Mixing Zones sections of the Water Quality Standards in 18 AAC 70.240 through 70.270 to:

- Improve clarity and reduce redundancy;
- Allow mixing zones in certain fish spawning areas where there will be no adverse effect on the capability of an area to support fish spawning, rearing, or incubation (the proposed regulations provide for consideration of measures that would offset the potential adverse effects of mixing zones on aquatic resource); and
- Simplify some technical provisions including those dealing with risk assessment, flow calculations, and mixing zone models.

NMFS supports efforts by DEC to improve clarity and reduce redundancy in regulation, and many of the proposed amendments to the Alaska Water Quality Standards appear to yield no substantive change. However, NMFS opposes the proposed regulation to allow for mixing zones in certain fish spawning areas. This proposed revision is a significant change from the existing prohibition on mixing zones in spawning and rearing habitat of resident and anadromous fish. Water quality standards are premised on levels that do not adversely affect fish and/or their habitat, and any mixing zone (i.e., an allowable variance from water quality standards) could adversely affect fish and their habitat. The proposed change allows for the interpretation of data that are weak (based on acute toxicity information) and the interpretation or extrapolation of that data may be flawed. Applying acute toxicity data to a situation where chronic impacts occur (as in a mixing zone) and fish embryos and larvae are present may adversely affect living marine resources including Essential Fish Habitat (EFH). Our specific comments on the amendment to the Water Quality Standards at 18 AAC 70 are enclosed and include comments from our research scientists at the Auke Bay Laboratory.

NOAA Report

National Marine Fisheries Service (NMFS)
Comments on the Draft Revision of Mixing Zone Regulations, 18 AAC 70.240-270

NMFS opposes the proposal to allow mixing zones in areas of spawning and rearing habitat. Scientific research, including research conducted by NMFS, increasingly indicates that these habitats are critical to the survival of numerous fish species, including prey species, and that the early life stages that utilize these habitats are extremely sensitive to chronic pollution. Chronic pollution over time in spawning and rearing habitats will place those populations at risk over the long term, leading to a diminishing of the stock and possibly to localized extinction.

Allowing mixing zones for pollutants in water generally is based on two assumptions: (1) exposure to fish will be transient, and (2) short exposures to toxicant levels will be below acute toxicity levels. These assumptions might be met with adult transient fish moving through an area, but are not likely to be met if there are resident fish, a rearing area, and most importantly, a spawning area. Developing salmon eggs and larvae will be in spawning gravels for months, and any exposure they receive from elevated levels in a mixing zone would be chronic. Predicting impacts of chronic toxicity using acute toxicity information is fundamentally flawed because the mechanisms of toxicity are intrinsically different between acute toxicity (narcosis) and chronic toxicity. In other words, simply applying a dilution safety factor of 100 or some other value does not have relevance when calculating the potential chronic impacts to embryos and developing larvae.

The preponderance of recent scientific evidence to emerge from toxicological studies suggests that concentrations as low as one part per billion of PAH (polynuclear hydrocarbons) can adversely impact developing fish embryos. As our understanding of toxic effects of contaminants increases, the evidence suggests that the goal of most fisheries pollution mitigation should be to avoid exposing spawning areas to environmentally persistent contaminants, especially in situations such as mixing zones where fish eggs and larvae are exposed chronically.

Streams and estuaries sustain the vulnerable early developmental life stages of many fish species. Salmon eggs, larvae, and juveniles use both stream and estuary for much of the first year of life, and the juveniles of many marine species use the estuaries for nursery grounds. The principal threat to these species is not from acutely toxic concentrations that can result in mortality, but in the more subtle effects of low-level contaminant exposures to these sensitive life stages. Incubating eggs are very sensitive to long-term exposures to those pollutants such as hydrocarbons, pesticides, and PCBs that sequester onto lipid molecules in the developing embryos. These environmentally persistent organic pollutants remain in the eggs as they develop. The result is that fewer juveniles survive, so that recruitment from the early life stages is reduced and adult populations may not be replaced at sustainable levels.

Most of the toxicity models currently in use for fish assume a disruption of the nervous system leading to narcosis and eventual death. Water quality standards for mixing zones are predicated on this model of how toxic chemicals work. Recent research indicates that pollutants such as polycyclic aromatic hydrocarbons (PAHs) are unlikely to act as narcotic agents in early life stages of fish that have been chronically exposed as embryos. Instead embryonic exposures result in edema of the yolk sac.

hemorrhaging, disruption of cardiac function, binding of aryl hydrocarbon receptors, enzyme induction, mutation and heritable changes in progeny, craniofacial and spinal deformities, neuronal cell death, anemia, reduced growth, and impaired swimming (White et al. 1999, Barron et al. 2003, Billiard et al. 1999. 2002, Brinkworth et al. 2003, Marty et al. 1997, Incardona et al. in press). Exposure to sunlight results in a 48 fold increase in toxicity of PAH to fish larvae (Barron et al. 2002) and resulted in 2 ppb becoming toxic to the calanoid copepods that form much of the diet of developing juvenile fishes (Duesterloh et al. 2002).

Early life stages are more vulnerable to both the chemical effects of toxicants, and to the ecological consequences. In a developing embryo, cellular damage may be replicated many times as tissues develop and enlarge, resulting in a tissue that is severely compromised in function at later life stages. The embryo may develop normally for some time, as it may not need this tissue until a later life stage, thus the consequences of damage may not be apparent immediately. This concept was demonstrated eloquently when salmon embryos were exposed in controlled laboratory conditions to low levels of crude oil, and then tagged and released to the marine environment. A variety of symptoms were evident in many of the resulting larvae, from mortalities to deformities, to even the more subtle effects on growth from very normal appearing animals. Delayed impacts on growth were evident at 19 parts per billion total PAH, and the ecological consequence (suffering increased levels of predation) was evident when fewer adults returned from the oil exposed groups (Heintz 2000). Exposure of developing embryos to 5 and 19 ppb total PAH resulted in a subsequent 20% and 40% reduction in marine survival among the returning adults. Exposure of incubating herring eggs to weathered oil caused significant morphological defects at 9 ppb, and effects of more weathered oil were significant at concentrations as low as 0.2 ppb PAH; chromosomal aberrations were observed at 0.7 parts per billion (ppb) (Carls et al. 1999). Over time reductions in adult recruitment will slowly and subtly result in lower populations, eventually leading to extinction of the stock. This situation has probably been the primary mechanism leading to missing populations in urban estuaries.

Allowing persistent organic pollutants into the environment also results in creating long-term reservoirs of pollution that are available to organisms. Hydrocarbons, pesticides, and PCBs tend to adsorb to organic tissue, and can be transferred up the food chain, or can be adsorbed to inorganic matter in sediments, where they can remain bioavailable for years. There is a substantial uptake of these compounds, especially in many invertebrate species that do not have the biochemical mechanisms to purge their systems of the pollutants (Varanasi et al. 1989, 1992; Meador et al. 1995). There is a growing body of evidence of accumulations of persistent organic pollutants in the cold sink of the arctic, and Alaskan waters with many lipid rich compartments (copepods, forage fish, target species, marine mammals) is becoming more contaminated each year from pollutants originating in other major geographic areas. We would not want to accelerate this problem with local releases with more direct routes to Alaskan fish resources.

The concern regarding chronic pollution to embryos applies to non-organic pollutants as well, because the concepts are the same, although the literature is sparse. In this case, the contaminant is not necessarily trapped in the tissues for long periods of time because of the high affinity of large organic molecules in lipids, but remains in tissues because of the continuous replacement by the chronic mixing zone source. In other words, in both cases a tissue load is present. The second major principle is that chronic exposure to embryos and larvae are special biological situations. Because of the long

incubation time, the exposure to embryos and larvae is chronic, and any extrapolation from acute toxicity tests and mechanisms does not apply. Small and seemingly innocuous interruptions or interferences with the embryo development process can have lethal effects, whether they are immediately obvious or delayed, and are very subtle to detect. Chronic studies with embryos and subsequent wild releases are the only concrete way to detect sublethal effects that will affect returning adult numbers. NMFS is concerned that the proposed changes to the water quality standards would shift the burden of proof – meaning that non-harmful acute tests could be used inappropriately to judge the potential harm of chronic exposures to embryos and larvae, thereby underestimating actual effects.

Based on research conducted by NMFS and others, we recommend that DEC not approve mixing zones for areas of fish spawning and rearing. Using acute toxicity data and toxicity models is inappropriate for the protection of fish embryos and larvae in a chronic exposure situation. The populations exposed will be at considerable risk over time, and those exposed stocks can be expected to diminish over time to levels that may not support subsistence, sport, or commercial harvests.

Specific Comments

18 AAC 70.240 (c)(4)(B) As written, this section states that DEC will approve a mixing zone as proposed or with conditions, only if it finds that available evidence reasonably demonstrates that an effluent or substance will "... be treated to remove, reduce, and disperse pollutants, using methods found by the department to be the most effective and technologically and economically feasible, consistent with the highest statutory and regulatory treatment requirements."

The regulations should be more specific. Statutory and regulatory treatment requirements differ around the country, and for certain discharges there are areas in the country with higher treatment requirements than Alaska. What standard will be used to assess whether a mixing zone is "consistent with the highest statutory and regulatory treatment requirements"?

18 AAC 70.240 (c)(4)(B) This section states that mixing zones will not "create a public health hazard through encroachment on existing uses of the waterbody for water supply or contact recreation."

How is encroachment on existing uses defined? Should this be cross referenced to statutes that cover water rights?

18 AAC 70.240 (c)(4)(D) "the mixing zone will not in streams, rivers, or other flowing fresh waters, result in a reduction in fish population levels;"

Are individual fish kills acceptable? How will the population be tracked to insure that there will not be a reduction in fish populations?

18 AAC 70.240 (c)(4)(E) "the mixing zone will not in streams, rivers, or other flowing fresh waters, adversely affect the capability of an area to support spawning, incubation or rearing of anadromous or resident fish;"

Water quality standards are premised on levels that do not adversely affect fish and/or their habitat, and any mixing zone (i.e., an allowable variance above water quality standards) could adversely affect fish and their habitat.

18 AAC 70.240 (c)(4)(F) "the mixing zone will not in streams, rivers, or other flowing fresh waters, result in permanent or irreparable displacement of indigenous organisms;"

Again, if a mixing zone is a variance to water quality standards, indigenous organisms may find areas where the levels of pollutants exceed water quality standards to be inhospitable.

18 AAC 70.240 (d)(8) DEC will approve a mixing zone, as proposed or with conditions, only if the DEC finds that available evidence reasonably demonstrates that within the mixing zone the pollutants discharged will not "exceed acute aquatic life criteria at and beyond the boundaries of a smaller initial mixing zone surrounding the outfall, the size of which shall be determined using methods approved by the department."

With no spatial limits on the size of the smaller initial mixing zone, a very large initial mixing zone could be permitted, allowing large areas to exceed acute aquatic life criteria. We recommend specifying that the initial mixing zone must not extend beyond the immediate vicinity of the outfall. Also, this section needs to clarify what is meant by "... methods approved by the department." Some examples of the types of those methods would be helpful. In addition, NMFS suggests that the sentence read "... aquatic life criteria ***to*** and beyond.

18 AAC 70.240 (e)(1)(A) DEC will approve a mixing zone, as proposed or with conditions, only if it finds that the mixing zone is as small as practicable and will comply with the following size restrictions, unless DEC finds that evidence is sufficient to reasonably demonstrate that these size limitations can be safely increased: "(1) for estuarine and marine waters, measured at mean lower low water, (A) the cumulative linear length of all mixing zones intersected on any given cross section of an estuary, inlet, cove, channel, or other marine water may not exceed 10 percent of the total length of that cross section;"

Does the cumulative linear length refer to the perimeter of the waterbody?

18 AAC 70.240 (f) "For streams, rivers, or other flowing fresh waters, in calculating the maximum pollutant discharge limitation, the volume of flow available for dilution must be determined using the actual flow data collected concurrent with the discharge or using other methods approved by the department."

If the discharge can occur 24 hours a day seven days a week, year round, what part of the annual flow would be used?

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Should you have any questions regarding these comments please contact Ms. Jeanne Hanson at (907) 271-3029.

Sincerely,

James W. Balsiger
Administrator, Alaska Region

Enclosure

cc: NMFS HCD – Susan Walker
NMFS Auke Bay Lab – Jeep Rice
Records – Lori Durall

USFWS, ADNR-OHMP, ADEC – Anchorage

Lisa McGuire
U.S. EPA, Region 10
Water Quality Standards and Planning Unit
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Current regulations allowing for short term variances from state water quality standards

18 AAC 70.200. Short-term variance

(a) In its discretion, the department will grant a short-term variance from the antidegradation policy standard of 18 AAC 70.015 or the water quality criteria of 18 AAC 70.020(b) for

(1) a one-time, temporary activity that is a nonpoint source of water pollution; and

(2) a temporary activity associated with the placement of dredged or fill material affecting a specific waterbody.

(b) The department will grant a short-term variance only if an applicant shows to the department's satisfaction that

(1) wastes or substances that might adversely affect water quality are controlled, using methods the department finds most effective;

(2) the activity will be conducted in a manner to mitigate water quality impacts, using methods the department finds most effective; and

(3) the activity, when completed, will not cause a long-term, chronic, or recurring violation of the water quality standards.

(c) The department will, in its discretion, grant a short-term variance by geographic area or project, or for a specific event. The term of a variance will be as short as practicable, and will, at the latest, expire when the projects is completed.

(d) A person seeking a short-term variance shall submit a written request and proceed in accordance with 18 AAC 15.020 - 18 AAC 15.100. The request must state the

(1) location, time, duration, and type of activity for which the variance is sought;

(2) reasons why the activity is required;

(3) a real extent and quantified degree of variance from the applicable criteria;

(4) detailed construction and operating plans, including water pollution control and mitigation measures; and

(5) activity's estimated impact on the uses of the water involved, including recreation and use for habitat, rearing, growth, or migration by fish, shellfish, other aquatic life, and wildlife.

(e) The department will, in its discretion, treat an application for a permit under Sec. 404 of the Clean Water Act as an application for a short-term variance.

History: Eff. 11/1/97, Register 143

Authority: AS 46.03.020

Northern Dynasty position on mixing zones. From "Response to the Nushagak Mulchatna Watershed Council: 180 questions about the Pebble Project"

22. Will the tailings be capped after processing is complete? What will be used?

Yes, the tailings will be capped although the specific materials to be used will not be known until Northern Dynasty completes its Reclamation Plan.

In general, capping may be carried out using water, soils or mine rock. Sometimes, capping is achieved by applying 'soil amendments' and planting in order to get a self-sustaining plant community established. In such cases, capping with other materials is not necessary.

Northern Dynasty's Reclamation Plan, which must be in place before mine permits are issued, will specify what capping techniques will be employed and the nature of the medium to be used.

23. What will the tailings impoundment look like after reclamation?

Northern Dynasty is still developing its mine plan for the Pebble Project, including its Reclamation Plan. The steps taken to reclaim disturbed areas following mine closure will be fully defined within the mine planning materials to be submitted for permit application sometime next.

In general, reclamation will include land contouring, establishing native plant cover, wetland creation and the development of surface water drainage channels. Embankments will likely be visible as gently sloping earthen landforms with level crests and generally straight alignments.

In the area of the tailings pond where 'potentially reactive' materials are stored, water cover will be maintained to avoid acidic conditions. This could be accomplished by building a flooded porous rock fill with a revegetated cap along the perimeter, along with a shallow pond over the remainder of the surface.

The rest of the tailings facility will contain non-reactive sand and silt-size rock particles. It may be reclaimed through a combination of methods, including re-vegetation and surface ponds.

→ 24. *What exactly is a Mixing Zone? Will Northern Dynasty use a Mixing Zone?*

A 'Mixing Zone' is a three-dimensional area in a surface water body specified in a discharge permit, within which Aquatic Life Standards do not have to be met.

These zones are generally specified where an 'end-of-pipe' discharge does not meet Aquatic Life Standards, but where mixing with receiving water will result in those standards being met further downstream. Some discharges do not need 'Mixing Zones' because they already meet Aquatic Life Standards, while others do because they do not meet these standards.

There are no current plans for a 'Mixing Zone' at the proposed Pebble mine.

Current regulations allowing for site-specific water quality designations

18 AAC 70.235. Site-specific criteria

(a) The department will, in its discretion, establish a site-specific water quality criterion that modifies a water quality criterion set out in 18 AAC 70.020(b)

(1) in a permit, certification, or approval as described in (b) of this section; or

(2) in regulation as described in (c) of this section.

(b) If the department finds that the natural condition of a waterbody is demonstrated to be of lower quality than a water quality criterion set out in 18 AAC 70.020(b) , the natural condition constitutes the applicable water quality criterion. Upon application or on its own initiative, the department will determine whether a natural condition of a waterbody should be approved as a site-specific water quality criterion in a permit, certification, or approval issued by the department. Before making the determination, the department will issue public notice of a proposed approval under this subsection and provide opportunity for public comment. If a natural condition of a waterbody varies with time, the natural condition will be determined to be the prevailing highest quality natural condition of the waterbody measured during an annual, seasonal, or shorter time period before discharge or operation, or as the actual natural condition of the waterbody measured concurrent with discharge or operation. The department will, if necessary to adequately protect water quality,

(1) determine a natural condition for one or more seasonal or shorter time periods to reflect variable ambient conditions; and

(2) require additional or continuing monitoring of natural conditions as a condition of a permit, certification, or approval.

(c) Upon application, or on its own initiative, the department will, in its discretion, set site-specific criteria in regulation if the department finds that the evidence reasonably demonstrates that the site-specific criterion will fully protect designated uses in 18 AAC 70.020(b) and that

(1) for reasons specific to a certain site, a criterion in 18 AAC 70.020(b) is more stringent or less stringent than necessary to ensure full protection of the corresponding use class; or

(2) a criterion would be better expressed in terms different from those used in 18 AAC 70.020(b) .

(d) The department will set a site-specific criterion under (c) of this section for the "growth and propagation of fish, shellfish, other aquatic life, and wildlife" use classes in 18 AAC 70.020(a) (1)(C) and 18 AAC 70.020(a) (2)(C) only if the department finds that the evidence is sufficient to reasonably demonstrate that

(1) the species or habitats present, or expected to be present under natural conditions, are more sensitive or less sensitive to a substance than indicated by the criterion, and a site-specific criterion is required to prevent adverse effects or to alleviate an unnecessarily restrictive general criterion; or

(2) the natural characteristics of the receiving environment would increase or reduce the biological availability or the toxicity of a substance, or otherwise alter the substance, and a site-specific criterion is

required to prevent adverse effects or to alleviate unnecessarily restrictive general criterion.

(e) An applicant seeking a site-specific criterion under this section shall provide all information that the department determines is necessary to modify an existing criterion. The department will, in a timely manner, request and review for completeness, information submitted under this subsection. In all cases, the burden of proof is on the applicant seeking a site-specific criterion.

History: Eff. 11/1/97, Register 143; am 4/29/99, Register 150

Authority: AS 46.03.010

AS 46.03.020

AS 46.03.050

AS 46.03.070

AS 46.03.080

AS 46.03.090

AS 46.03.100

AS 46.03.110

AS 46.03.710

AS 46.03.720

Editor's note: The development documents for site-specific criteria established under 18 AAC 70.235 (b) in a permit, certification, or approval may be reviewed in or requested from the department's Juneau office.

Mixing Zone regulations adopted January 12, 2006.
Spawning area language at 18 AAC 70.240 (e)-(j)

(5) result in undesirable or nuisance aquatic life;

(6) produce objectionable color, taste, or odor in aquatic resources harvested from the area for human consumption;

(7) cause lethality to passing organisms; or

(8) exceed acute aquatic life criteria at and beyond the boundaries of a smaller initial mixing zone surrounding the outfall, the size of which shall be determined using methods approved by the department.

(e) In lakes, streams, rivers, or other flowing fresh waters, a mixing zone will not be authorized in a spawning area or allowed to adversely affect the present and future capability of an area to support spawning, incubation, or rearing of any of the five species of Pacific salmon.

(f) In lakes, streams, rivers, or other flowing fresh waters, except as provided in (g) of this section, a mixing zone will not be authorized in a spawning area for Arctic Grayling; northern pike; lake trout; brook trout; sheefish; burbot; landlocked coho salmon, king salmon, or sockeye salmon; or anadromous or resident rainbow trout, Arctic char, Dolly Varden, whitefish, or cutthroat trout.

(g) The Department may authorize a mixing zone in a spawning area of a lake, stream, river or other flowing fresh water for the species listed in subsection (f) if, after consultation with the Department of Natural Resources, Office of Habitat Management and Permitting, or the Department of Fish and Game if within a legislatively designated special area under AS 16.20, the department finds that the applicant has

(1) demonstrated that the discharge does not contain pollutants at concentrations that exceed the criteria for growth and propagation of fish, shellfish, and other aquatic life, and wildlife established in 18 AAC 70.020(b) and that the discharge will not adversely affect the capability of the area to support future spawning, incubation, and rearing activities;

(2) submitted a mitigation plan approved by the Department of Fish and Game under 5 AAC 95.900 if within a legislatively designated special area under AS 16.20; or

(3) submitted a mitigation plan approved by the Department of Natural Resources, Office of Habitat Management and Permitting, and incorporated as part of the discharge authorization, using the methods established in 11 AAC 195.010.

(h) The Department may require the applicant, in a mixing zone authorization under (g) of this section, to monitor effluent, ambient water quality, and biological conditions to determine whether unanticipated adverse effects on spawning, incubation and rearing of species identified in subsection (f) are occurring.

(i) The provisions of (e), (f) and (g) of this section do not apply to the renewal of a mixing zone authorization where spawning was not occurring at the time of the previous authorization, but successful spawning, incubation and rearing has occurred within the mixing zone subsequent to the previous authorization of that mixing zone.

(j) For purposes of this section, the department will defer to the Department of Natural Resources, Office of Habitat Management and Permitting or the Department of Fish and Game to determine spawning areas, both spatially and temporally.

(k) The department will approve a mixing zone, as proposed or with conditions, only if it finds that the mixing zone is as small as practicable and will comply with the following size restrictions, unless the department finds that evidence is sufficient to reasonably demonstrate that these size restrictions can be safely increased:

(1) for estuarine and marine waters, measured at mean lower low water,

(A) the cumulative linear length of all mixing zones intersected on any given cross section of an estuary, inlet, cove, channel, or other marine water may not exceed 10 percent of the total length of that cross section; and

(B) the total horizontal area allocated to all mixing zones at any depth may not exceed 10 percent of the surface area;

(2) for lakes, the total horizontal area allocated to all mixing zones at any depth may not exceed 10 percent of the lake's surface area;

(3) for streams, rivers, or other flowing fresh waters, the length of a mixing zone may not extend beyond the computed point of complete mixing, as determined using a standard river flow mixing model or other methods accepted by the department;

(4) for streams, rivers, or other flowing fresh waters, the length of a mixing zone may not extend downstream beyond the location where the department determines that a public health hazard reasonably could be expected to occur.

(*l*) For streams, rivers, or other flowing fresh waters, in calculating the maximum pollutant discharge limitation, the volume of flow available for dilution must be determined using

(1) the actual flow data collected concurrent with the discharge; or

18 AAC 70.255. Mixing zones: In-zone quality and size specifications

(a) The size, location, or other limits of a mixing zone set by or under this chapter will be established in a discharge permit, certification, or order issued by the department under the appropriate chapter in this title.

(b) Water quality criteria must be met at the boundary of the mixing zone. A discharge may not cause or reasonably be expected to cause

(1) lethality to passing organisms in the mixing zone; or

(2) a toxic effect in the water column, sediments, or biota outside the boundaries of the mixing zone.

(c) Human health and chronic aquatic life criteria apply at and beyond the boundaries of the mixing zone.

(d) Acute aquatic life criteria apply at and beyond the boundaries of a smaller initial mixing zone surrounding the outfall. The smaller initial mixing zone for application of acute criteria must be sized to prevent lethality to passing organisms. Methods for calculating the boundaries of the smaller initial mixing zone for application of acute criteria, unless otherwise specified by the department, must follow procedures under Alternatives 2, 3, or 4 in Section 5.1.2 of the United States Environmental Protection Agency's Water Quality Standards Handbook, Second Edition, August 1994, EPA-823-B-94-005a.

(e) Unless the department finds that evidence is sufficient to reasonably demonstrate, in accordance with this section, that the size limitations of a mixing zone can be safely increased, a mixing zone must comply with the following size restrictions:

(1) for estuarine and marine waters, measured at mean lower low water,

(A) the cumulative linear length of all mixing zones intersected on any given cross section of an estuary, inlet, cove, channel, or other marine water may not exceed 10 percent of the total length of that cross section; and

(B) the total horizontal area allocated to mixing zones may not exceed 10 percent of the surface area;

(2) for lakes, the total horizontal area allocated to all mixing zones may not exceed 10 percent of the lake's surface area; and

(3) for streams, rivers, or other flowing fresh waters, subject to (f), (g), and (h) of this section, the length of a mixing zone may not extend downstream beyond the limits described in (A) or (B) of this paragraph, whichever is closer to the point of discharge, as follows:

(A) beyond the computed point where the variation in the concentration of a water quality parameter across a stream, river, or other flowing fresh water is predicted to be less than five percent, as determined using a standard river flow mixing model accepted by the department; or

(B) beyond the location where the department determines that a public health hazard reasonably could

be expected to occur.

(f) For streams, rivers, or other flowing fresh waters subject to (e)(3) of this section, in calculating the maximum pollutant discharge limitations, the volume of flow available for dilution must be determined using

(1) the actual flow as determined by gauging data collected concurrent with the discharge; or

(2) for conventional or nontoxic substances, the default 2-year, 3-day low flow (3Q2) appropriate to the period of discharge; for toxic substances, the 10-year, 7-day low flow (7Q10) as the chronic criteria design flow and the 10-year, 1-day (1Q10) as the acute criteria design flow for protection of aquatic life; for carcinogens, the harmonic mean flow as the design flow for the protection of human health; these low flows must be calculated using methods of Ashton and Carlson, *Determination of Seasonal, Frequency and Durational Aspects of Streamflow with Regard to Fish Passage Through Roadway Drainage Structures*(1984), Carlson, *Seasonal, Frequency and Durational Aspects of Streamflow in Southeast and Coastal Alaska*(1987), or another appropriate regional regression flow model approved by the department; numeric water quality criteria apply at all design flows that are equal to or greater than these critical low flows.

(g) For streams, rivers, or other flowing fresh waters subject to (e)(3) of this section, a mixing zone may not result in

(1) permanent or irreparable displacement of indigenous organisms; or

(2) a reduction in fish or shellfish population levels.

(h) For streams, rivers, or other flowing fresh waters subject to (e)(3) of this section, a mixing zone will not be authorized in an area of

(1) anadromous fish spawning; or

(2) resident fish spawning redds for Arctic grayling, northern pike, rainbow trout, lake trout, brook trout, cutthroat trout, whitefish, sheefish, Arctic char (Dolly Varden), burbot, and landlocked coho, king, and sockeye salmon.

History: Eff. 11/1/97, Register 143

Authority: AS 46.03.020

AS 46.03.030

AS 46.03.070

AS 46.03.080

AS 46.03.100

AS 46.03.110

AS 46.03.710

Comparison of Provisions in the old and new Mixing Zone Regulations and in HB 328(FSH)

Prepared by the office of Rep. Seaton

OLD MIXING ZONE REGULATIONS	NEW MIXING ZONE REGULATIONS	HB 328	DIFFERENCES
SPAWNING AREA PROHIBITION **18 AAC 70.255. Mixing zones: In-zone quality and size specifications** (h) For streams, rivers, or other flowing fresh waters subject to (e)(3) of this section, a mixing zone will not be authorized in an area of (1) anadromous fish spawning; or (2) resident fish spawning redds for Arctic grayling, northern pike, rainbow trout, lake trout, brook trout, cutthroat trout, whitefish, sheefish, Arctic char (Dolly Varden), burbot, and landlocked coho, king, and sockeye salmon.	**SPAWNING AREA PROHIBITION** **18 AAC 70.240** (e) In lakes, streams, rivers, or other flowing fresh waters, a mixing zone will not be authorized in a spawning area or allowed to adversely affect the present and future capability of an area to support spawning, incubation, or rearing of any of the five species of Pacific salmon.	**SPAWNING AREA PROHIBITION** The department may not authorize a mixing zone for lakes, streams, rivers, or other flowing fresh water in an area of (1) anadromous fish spawning; or (2) resident fish redds for (A) Arctic char; (B) Arctic grayling; (C) brook trout; (D) burbot; (E) cutthroat trout; (F) Dolly Varden; (G) lake trout; (H) landlocked coho, king, and sockeye salmon; (I) northern pike; (J) rainbow trout; (K) sheefish; or (L) whitefish.	**The language of HB 328 is taken from the old regulatory language. HB 328 also adds "lakes" to the spawning area mixing zone prohibition.** **In both the old regulation and HB 328 there is a flat prohibition on mixing zones applying to all anadromous fish spawning areas, and in the egg redds or nests of numerous different freshwater resident species.** In contrast, the newly adopted ADEC Mixing Zone regulations contain a prohibition only on mixing zones in the spawning areas of any of the five species of Pacific salmon. Mixing zones may be authorized in a spawning area for resident freshwater and non-salmon anadromous species. Mixing zones may also be authorized in areas that may support spawning, incubation, or rearing of any of the five species of Pacific salmon, as long as the pollutant will not adversely affect the present and future capability of the area to support these activities.

AAC Comparison

OLD MIXING ZONE REGULATIONS	NEW MIXING ZONE REGULATIONS	HB 328	DIFFERENCES
SPATIAL AND TEMPORAL SPAWNING AREAS No reference found	**SPATIAL AND TEMPORAL SPAWNING AREAS** (j) For purposes of this section, the department will defer to the Department of Natural Resources, Office of Habitat Management and Permitting or the Department of Fish and Game to determine spawning areas, both spatially and temporally.	**SPATIAL AND TEMPORAL SPAWNING AREAS** (c) In this section (1) "area" means the physical location where spawning occurs	**HB 328 specifies that, for the purpose of the bill, a spawning area is strictly a physical location and is not to be interpreted temporally. This does not limit the permitting of activities (aside from discharging into a mixing zone) in spawning areas when it is determined that spawning and incubation is not occurring.** The old Mixing Zone regulations do not make reference to spatial and temporal spawning areas. Neither of the two previously proposed mixing zone regulations made reference to spawning areas as spatial and temporal entities. The new ADEC Mixing Zone regulations contain this language, implying that mixing zones will be allowed in stream areas used for spawning during some portion of the year. "A mixing zone could be allowed when spawning salmon, eggs, or larvae are not present, state officials said. For example, a placer miner could "operate for a very small window of time" in some salmon spawning streams in Alaska, said Lynn Kent, director of the Environmental Conservation Department's Division of Water."*

*"Mixing Zone Change Fuzzy for Fishermen" Elizabeth Bluemink, Juneau Empire, January 15, 2006

OLD MIXING ZONE REGULATIONS **EXCEPTIONS TO THE SPAWNING AREA PROHIBITION**	NEW MIXING ZONE REGULATIONS **EXCEPTIONS TO THE SPAWNING AREA PROHIBITION**	HB 328 **EXCEPTIONS TO THE SPAWNING AREA PROHIBITION**	DIFFERENCES
No exceptions found	(i) The provisions of (e),(f) and (g) of this section do not apply to the renewal of a mixing zone authorization where spawning was not occurring at the time of the previous authorization, but successful spawning, incubation and rearing has occurred within the mixing zone subsequent to the previous authorization of that mixing zone. (f) In lakes, streams, or other flowing fresh waters, except as provided in (g) of this section, a mixing zone will not be authorized in a spawning area for Arctic Grayling; northern pike; lake trout; brook trout; sheefish; burbot; landlocked coho salmon, king salmon, or sockeye salmon; or anadromous or resident rainbow trout, Arctic char, Dolly Varden, whitefish or cutthroat trout. (g) The Department may authorize a mixing zone in a spawning area of a lake, stream, river or other flowing fresh water for the species listed in subsection (f) if, after consultation with the Department of Natural Resources, Office of	(b) The prohibition in (a) of this section does not apply to the renewal of a municipal wastewater facility's mixing zone authorization during the useful life of the wastewater facility for an area where spawning was not ongoing at the time of the initial authorization and the mixing zone became a spawning area after the date of the initial authorization. (c) (2) "lakes, streams, rivers, or other flowing fresh water" includes lakes, streams, rivers, or other flowing fresh water that have been altered by remediation or construction activities; the term does not include an artificially constructed facility for water, wastewater, holding, or channeling, unless the artificial facility is constructed for the purpose of facilitating fish spawning.	**HB 328 allows for mixing zones in man-made ditches and holding ponds by prohibiting reclassification of these areas as freshwater spawning areas if they are subsequently colonized by spawning fish.** **HB 328 also allows municipal wastewater discharges to be re-authorized for the useful life of a facility if spawning occurs in the mixing zone after initial authorization.** The new ADEC Mixing Zone regulations contain a clause that allows any mixing zone in flowing fresh water to be re-permitted if spawning, incubation, or rearing occurs within the active mixing zone. The new ADEC Mixing Zone regulations allow mixing zones in the spawning areas of Arctic Grayling; northern pike; lake trout; brook trout; sheefish; burbot; landlocked coho salmon, king salmon, or sockeye salmon; or anadromous or resident rainbow trout, Arctic char, Dolly Varden,

	Habitat Management and Permitting, or the Department of Fish and Game if with a legislatively designated special area under AS 16.20, the department finds the applicant has (1) demonstrated that the discharge does not contain pollutants at concentrations that exceed the criteria for growth and propagation of fish, shellfish, and other aquatic life, and wildlife established in 18 AAC 70.020(b) and that the discharge will not adversely affect the capability of the area to support future spawning, incubation, and rearing activities; (2) submitted a mitigation plan approved by the Department of Fish and Game under 5 AAC 95.900 if within a legislatively designated special area under AS 16.20; or (3) submitted a mitigation plan approved by the Department of Natural Resources, Office of Habitat Management and Permitting, and incorporating as part of the discharge authorization, using the methods established in 11 AAC 195.010.		whitefish or cutthroat trout if the permit applicant can either prove that the discharge into the mixing zone will not exceed the water quality criteria for growth and propagation of fish, shellfish and other aquatic life and wildlife OR if the permit applicant has submitted an approved mitigation plan. Section (g) (3) of the new ADEC Mixing Zone regulations refers to the submission of a mitigation plan that uses methods established in 11 AAC 195.010, the section of DNR regulation where the Anadromous Stream Catalog is adopted by reference. Mitigation language in the Anadromous Stream Catalog is currently under revision.

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Anchorage Daily News

Mixing zones, wild salmon don't mix

By BRIAN KRAFT

(Published: August 31, 2005)

The state of Alaska has a reputation for being a pristine wilderness with an abundance of fertile habitat and waterways that produce tremendous amounts of game and fish. This reputation could soon be put to the test. Our state government is preparing to allow large industrial projects to utilize these very habitats as "mixing zones."

A mixing zone as defined on the Alaska Department of Natural Resources Web site is "a permitted area in which discharge substances mix with, and are diluted by receiving waters. Some water quality criteria may be exceeded in a mixing zone." Current regulations in Alaska do not allow for mixing zones of any kind in salmon spawning rivers or flowing waters. This is because our past government officials have recognized the importance of having pure, healthy habitat for our salmon and what these salmon mean to our state -- subsistence, commercial and sport. The proposed changes would now allow industries to pollute our rivers where salmon spawn.

According to DNR Web sites, the Department of Environmental Conservation envisions three criteria where a mixing zone would be permitted. First, a mixing zone may be permitted for specific pollutants that do not harm fish. Second, the discharge of pollutants may be timed to avoid the spawning season. And the third criterion is that the project design may include habitat improvements such that the positive effects offset the negative effects, resulting in no net change.

As an Alaska resident, these criteria concern me. Why would we want deliberately to pollute any of our rivers? This just does not make sense. We have seen the results of polluted waterways throughout the Pacific Northwest.

The second criterion is alarming in that the spawning areas for our salmon do not become a nutrient-rich environment for a short window of time during the spawn. These areas are a year-round source of nutrients for the salmon at the most critical stages of their life cycle. Far too often, we as a society have tried to mess with Mother Nature only to be reminded time and time again that we are human, that we make mistakes.

This leads me into the third criterion of establishing artificial or compensation-type systems to make up for the destruction of the wild salmon. This goes directly against what Bristol Bay is all about -- wild salmon. Not farmed or hatchery fish -- but wild salmon. We should be doing everything in our power to protect and ensure that the last great wild salmon runs in the world and their crucial spawning beds are not jeopardized. According to the Environmental Protection Agency's Web site, "Mixing zones should not be permitted where they may endanger critical area (breeding grounds, recreational areas, areas with sensitive biota)."

Mixing zones help one industry in particular, and that is the mining industry. The reason is simple. It is much cheaper to discharge pollutants into a waterway than to contain and treat them.

A mixing zone near the Koktuli River and Upper Talarik Creek is not a good idea for Alaska salmon. I do not know of an area that is more critical than spawning beds for our salmon. A mixing zone in this area coupled with a large open-pit mine that exposes sulfides and heavy metals and a large tailings pond will only bring on the potential for damage to our fish. I do not think that we should accept the undeniable risks that are coupled with these proposals.

Remember, we are all human. and no matter how great we think we are, we still make mistakes. Let's not make a mistake in Bristol Bay.

Brian Kraft is director of Bristol Bay Alliance and Southwest Alaska project director for Trout Unlimited. He is also general manager of Alaska Sportsman's Lodge in the Bristol Bay region.

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Protect our streams

Alaska shouldn't risk mixing zones in fish streams at any time or place

(Published: January 20, 2006)

Gov. Frank Murkowski and his troops touted his recent announcement about mixing zones as a great, environmentally friendly decision for Alaska salmon. Mixing zones are areas where higher pollution is allowed on the theory that it will harmlessly dilute elsewhere in the water.

The governor patted himself on the back for deciding to "retain the current regulatory prohibition on mixing zones in salmon spawning areas." His aides noted that the new rules even extend the current ban to salmon spawning zones within lakes, which are not currently protected.

That move marked a sharp retreat from the governor's two-year campaign to weaken mixing-zone rules as they apply to salmon.

Does he deserve a lot of credit for backing off a bad idea?

Well, it is somewhat out of character. It's a rare case where he trimmed his sails in response to well-founded public opposition to a misguided initiative.

But the rules he's keeping are not nearly as good as they might sound. Mixing zones are banned only in salmon spawning areas, and only when spawning salmon or eggs or hatchlings are actually there. The rest of the stream or river is open to potential mixing zones the rest of the time.

While he was bragging about the salmon protections, Gov. Murkowski weakened the mixing-zone rules for other fish. The old rules banned them in areas where fish reproduce; the governor lifted that ban.

The governor's people say the new rules include plenty of restrictions that make sure any newly authorized mixing zone won't actually harm salmon or other fish. In theory, that sounds good. In practice, it all depends on how the standards are applied.

Does the mining company or industrial operation or land owner have to prove the added pollution won't cause harm? Or does the agency have to prove that the proposal will in fact damage the environment?

Either way, proving the claim in advance is impossible to do with certainty. What is known for certain is that the mixing-zone applicant says a government rule is standing in the way of jobs, investment, economic progress and the rightful operation of the free market.

Result? Agencies could allow some new, higher level of pollution.

They may or may not adequately monitor what happens as the added pollution goes into the environment. Experts may or may not agree on whether the data show a problem. Nature is a complex system. Scientists are seldom sure they have enough data to understand what's really going on. A single effect, like a drop in migratory fish populations, seldom stems from a single

cause. If agencies allow the pollution, and discover it does cause harm, it's too late.

Alaska, the one state in the country still with healthy runs of wild salmon, has too much at stake. Allowing mixing zones in salmon streams at any time is a risky gamble with the future of an industry that's already under economic siege.

That's why state Rep. Paul Seaton, a Republican fisherman from Homer, introduced a bill banning mixing zones in fish spawning areas. Unfortunately, his bill probably doesn't go far enough. It leaves room for hairsplitting about whether a mixing zone is OK as long as fish or eggs or hatchlings are not there right at that moment. That loophole lets polluters flush pollutants downstream, into the path of migrating salmon or other fish. Dilution is not the solution to pollution.

The Legislature will hold the first committee hearing on Rep. Seaton's bill today. Lawmakers should give Alaska salmon and other fish the protection they deserve and keep the extra pollution from mixing zones out of all Alaska fish streams.

BOTTOM LINE: Gov. Murkowski won't keep mixing zones out of Alaska's fish streams. The Legislature should.

Honesty on the Web

Most every business seems to have its own Web site nowadays, flashing all the benefits of its products or services, promising customers the best, the fastest and the least expensive goods or service in town.

Is it all true? What about customer complaints? You don't see much of that on business Web sites. The news is particularly one-sided, which is what you would expect from a company's own advertising. There's nothing wrong with a business using its Web site to promote itself -- that's how advertising works.

But, as in all things in life, there are exceptions. One particular pizza parlor Web site for ordering deliveries in the Anchorage area includes a feature for customers to write their own reviews. No corporate public relations campaign, just a Web click away for customer feedback.

I was curious as to what other customers thought of the service, so I looked. Maybe I would learn something extra special about the vegetarian pizza (the healthy me) or get a new insight into the bacon double cheeseburger pizza (the unhealthy me).

Give the pizza people credit for uncensored honesty. The two customer reviews on the site both trashed the service. The first, posted a few weeks ago, complained of slow delivery (two hours and waiting). The second, put up on the Web just last week, complained of a shortage of cheese and pepperoni. "Had my wife (6 mos. preg.) not been so hungry for this craving, I would have given it back," the reviewer wrote.

Regardless of the disgruntled pizza shoppers, I placed my order and got it on time and exactly as advertised. I'll probably go back, not just to eat the pizza but because I appreciated the unedited opinions on the Web site.

-- Larry Persily

CITY OF VALDEZ, ALASKA

RESOLUTION 06-12

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF VALDEZ, ALASKA SUPPORTING HOUSE BILL 328 PROHIBITING MIXING ZONES IN FRESHWATER SPAWNING WATERS TO INCLUDE LANGUAGE REGARDING ARTIFICIALLY CONSTRUCTED WASTEWATER FACILITIES

WHEREAS, the City of Valdez operates the Valdez Sewer Treatment Plant; and

WHEREAS, the existing Valdez Sewer Treatment Plant and outfall line have been in place since the mid 1980's; and

WHEREAS, Alaska Statute 46.03 prohibits mixing zones in spawning waters; and

WHEREAS, House Bill 328 has been introduced amending the Alaska Statutes to indicate that freshwater does not include an artificially constructed facility for water, wastewater, holding, or channeling, unless the artificial facility is constructed for the purpose of facilitating fish spawning; and

WHEREAS, the Valdez Sewer Treatment Plant outfall was constructed for wastewater discharge purposes.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL FOR THE CITY OF VALDEZ, ALASKA that:

The City Council of the City of Valdez Alaska supports House Bill 328 prohibiting mixing zones in freshwater spawning waters including language regarding artificially constructed wastewater facilities.

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF VALDEZ, ALASKA this 17th Day of January, 2006.

CITY OF VALDEZ, ALASKA

Bert L. Cottle Mayor

ATTEST:

-4-

eri L. Pierce, CMC/AAE, City Clerk

Support

"Alaska at its Best!"

CITY OF PALMER

231 West Evergreen Avenue
Palmer, Alaska 99645
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www.cityofpalmer.org

January 26, 2006

Representative Carl Gatto
State Capital, Room 411
Juneau, AK 99801-1182

RE: CS HB 328

Dear Representative Gatto:

The City of Palmer supports the addition of language in the committee substitute for HB 328 regarding mixing zones in freshwater spawning areas.

The addition of section (b) addresses a concern involving the Palmer municipal wastewater treatment facility mixing zone. Subsection (b) reads:

> (b) The prohibition in (a) of this section does not apply to the renewal of a municipal wastewater facility's mixing zone authorization during the useful life of the wastewater facility for an area where spawning was not ongoing at the time of the initial authorization and the mixing zone became a spawning area after the date of the initial authorization.

This language removes Palmer's concern that the legislation as initially proposed might prevent the renewal of Palmer's wastewater discharge permit.

Thank you for your attention to this issue. If you require additional information, please contact me at 761-1304.

Sincerely,

Thomas Healy
City Manager

IGIUGIG TRIBAL VILLAGE COUNCIL
A.K.A. Igiugig Village Council
P.O. Box 4008
Igiugig, AK 99613
Phone: (907) 533-3211 or Fax: (907) 533-3217 www.igiugig.com e-mail: igiugic@starband.net

January 30, 2006

Representative Seaton
Fax # 907.465.3472

Dear Representative Seaton:

Please be advised that Igiugig Tribal Village Council (ITVC) and Igiugig Native Corporation (INC) strongly support HB328 and SB225 on mixing zones. Our community represented by ITVC and INC believe that the proposed legislation is the only mechanism that will insure the safety and quality of water sources in our region. Legislation will clearly dictate allowable uses of mixing zones and eliminate "interpretations" by managers and manipulation by politicians. Passage of this legislation will also send a clear message to the State and country that Alaska values its pristine water conditions and is taking strong measures to ensure sustainable water quality and renewable resources for future generations.

Igiugig Tribal Village Council (ITVC) and Igiugig Native Corporation (INC) strongly support passage of HB328 and companion bill SB225 on mixing zones. Please contact us for any further information that may be required on this issue.

Sincerely,

Lydia Olympic
ITVC President

Mike Andrew, Sr.
INC Vice President

CITY OF HOMER
HOMER, ALASKA

Mayor

RESOLUTION 05-123

A RESOLUTION OF THE CITY COUNCIL OF HOMER, ALASKA OPPOSING THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION'S PROPOSAL TO AMEND 18 AAC 70.240 TO ALLOW INCREASED POLLUTION – THROUGH USE OF MIXING ZONES IN ALASKA SALMON STREAMS.

WHEREAS, The Alaska Department of Environment Conservation recently proposed new rules to allow "mixing zones" in Alaska fish streams; and

WHEREAS, Mixing zones allow pollution at levels that violate standards designed to protect fish and fish consumers; and

WHEREAS, Alaska's wild salmon are renowned worldwide for being clean, fresh and healthy; and

WHEREAS, Alaska salmon fisheries support countless families and communities throughout the Homer area, and form part of the cultural fabric that makes Alaska unique; and

WHEREAS, Salmon health, salmon habitat and salmon marketing will suffer under a broad new rule allowing increased pollution into Alaska's salmon streams; and

WHEREAS, The state of Alaska has limited technical and financial resources to assess the consequences of increased pollution into Alaska's salmon streams; and

WHEREAS, Alaskans resoundingly opposed a similar proposal from the Murkowski Administration last year, and vital local and state government resources are being spent to undermine fish stream and salmon marketing protections.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Homer hereby opposes the Alaska Department of Environmental Conservation's proposal to amend 18 AAC 70.240 to allow increased pollution through the use of mixing zones in Alaska salmon streams.

CITY OF HOMER

James C. Hornaday

JAMES C. HORNADAY, MAYOR

ATTEST:

Mary E. Calhoun

MARY E. CALHOUN, CMC, CITY CLERK

Fiscal Note: NA

Seldovia Village Tribe

January 12, 2006

Dear Honorable Representative Seaton,

Seldovia Village Tribe, a federally recognized Alaska Tribe supports the legislation -

HOUSE BILL NO. 328

introduced by yourself, along with Representative Kurt Olson (R-Kenai), Representative Carl Gatto (R-Palmer) and Representative Gabrielle LeDoux (R-Kodiak) that would place in statute the prohibition on pollution mixing zones in Alaska freshwater spawning waters.

We agree that House Bill No. 328 is needed to protect the habitat of Alaska's world famous salmon and trout and to protect Alaska salmon marketing efforts, and the subsistence people and cultures that rely on them.

Thank You,

SELDOVIA VILLAGE TRIBE

Michael Opheim
Environmental Coordinator

P.O. Drawer L • Seldovia, Alaska 99663 • (907) 234-7898 • Fax: (907) 234-7865 • E-mail: svt@svt.org

Southeast Alaska Regional Dive Fisheries Association

Mission Statement: To develop, expand, and enhance new and existing dive fisheries in Southeast Alaska.

Julie Decker, Executive Director
Box 2138, Wrangell, AK 99929
Ph: 907-874-31.0; Fax: 907-874-4270
info@sardfa.org
www.sardfa.org

Representative Bill Thomas, Co-Chair
Representative Gabrielle LeDoux, Co-Chair
House Fisheries Committee

January 26, 2006

RE: Support for HB 328

Dear Representatives Thomas and LeDoux,

The Southeast Alaska Regional Dive Fisheries Association (SARDFA) is a strong supporter of regional economic development and also recognizes the importance of clean waters for the health of Alaska's fishing resources. However, SARDFA does not believe that economic development of Alaska's natural resources and having a healthy, clean environment are mutually exclusive. SARDFA believe CS HB 328 strikes a balance between the resource development and a clean environment.

There is also some discussion amongst our group whether the latest version of DEC's regulations regarding mixing zones may also strike this balance. This is not clear to us yet, but we will be pursuing a clear interpretation of it.

Thank you for your time and consideration.

Sincerely,

Members of:
Southeast Conference
United Fishermen of Alaska
Pacific Coast Shellfish Growers' Assoc.
Interstate Shellfish Sanitation Conference

Julie Decker, Executive Director

Cc: Representative Paul Seaton
Mark Vinsel, Executive Director, UFA
SARDFA Board of Directors

Alaska Trollers Association

130 Seward St., No. 211
Juneau, Alaska 99801
(907) 586-9400
(907) 586-4473 Fax

January 13, 2006

Representative Bill Thomas
Representative Gabrielle LeDoux
Co-Chairs, House Fish Committee
Alaska State House of Representatives
State Capitol
Juneau, Alaska 99801-1182

Dear Representatives Thomas and LeDoux:

I write on behalf of the Alaska Trollers Association (ATA) with regard to HB 328, which seeks to put in place a statutory prohibition on mixing zones in spawning streams. ATA supports prohibition of mixing zones, in both spawning and rearing areas, but at this time needs more information before encouraging a statute over regulations.

For your information and background, I will attach the comments ATA submitted on DEC's proposed mixing zone regulations. A key concern to ATA is defining ADFG's roll in mixing zone decisions. It just makes sense that the agency with the highest level responsibility for maintaining sustainable populations of fish and wildlife should be also bear key responsibility and authority for securing the habitat necessary to support them. We don't have to look too far south to see what happens when fishery scientists and managers are removed from decisions governing the use of land and water.

Yesterday, DEC published regulations pertaining to mixing zones. I did have a chance to read the regulations and believe there are some good features. That said, because there has been no specific examples given as to why new regulations are needed, it's hard to envision how they will be implemented. Due to preparations for the Southeast Board of Fisheries meeting, which begins next week in Ketchikan, I have been unable to closely study the new regulations and how they mesh with other law. So for now, I offer these initial questions:

1. Is the language as written strong enough to prevent mixing zones in all spawning and rearing areas, except under the most extreme circumstances?

2. ADFG appears to have some chance of being given deference with respect to identifying spawning areas, but they are not the lead agency for this purpose, nor are they given deference for denying mixing zones in either spawning or rearing habitat – ADFG will merely be one of two agencies that may be consulted. Is that correct?

3. Why is ADFG only allowed to approve mitigation plans designed for "legislatively designated special areas"? And, under what circumstances would we allow mixing zones in such places?

4. Will the regulations protect fish that live in the outfall of a landlocked lake? For instance, if a lake has a waterfall flowing into a stream?

5. Mention is made in the regulations about permit reauthorization in an area where spawning didn't occur previous to securing a mixing zone, but has developed since. Does this item resolve the problem in Valdez? And, does ADFG also intend to re-catalogue that specific area?

There are likely many more questions that will be posed and discussed during this weeks hearing. I appreciate the time you are devoting to clarifying the bill and possibly moving it forward. I'm sorry to miss the hearing and hope that there will be follow up at a time that SE fishing groups are better able to participate.

Please feel free to contact me via email or cell if I can help or if you have additional information you think would assist ATA as it considers a position on HB 328. We will take up this legislation during our spring board meeting, which will run concurrent with the Board of Fisheries meeting.

Best regards,

Dale Kelley

Dale Kelley
Executive Director

Ian Laing

From: on behalf of Rep. Paul Seaton
Subject: FW: Mixing Zone Legislation Update

From: Marv Smith [mailto:marvsmith.lpboro@starband.net]
Sent: Wednesday, January 25, 2006 8:44 AM
To: Louie Flora
Subject: Re: Mixing Zone Legislation Update

Louie:

The Borough Assembly and Planning Commission passed a resolution dated November 9th opposing the Mixing Zone regulations that DEC passed. Would you like for me to send you a copy of that passed resolution to support HB328? Let me know!

Thanks,
Marv

Ian Laing

From: Maridon Boario
Sent: Wednesday, January 25, 2006 11:01 AM
To: Louie Flora
Subject: FW: Support HB 328

Louie
Here is the e-mail Woodie received from YRDFA.

Thanks
Maridon

From: Becca Robbins [mailto:becca@yukonsalmon.org]
Sent: Thursday, January 19, 2006 3:49 PM
To: Rep. Woodie Salmon
Subject: Support HB 328

Dear Representative Salmon:

I am writing on behalf of the Yukon River Drainage Fisheries Association (YRDFA) to urge you to support HB 328. YRDFA represents subsistence and commercial fishers on the Yukon River, some of whom are your constituents. YRDFA opposed DEC's proposed mixing zone regulations in both 2004 and 2005. We do not feel that DEC's new regulations provide adequate protection to salmon and non-salmon species. We support HB 328 to protect fish from mixing zone pollution.

Mixing zones pose threats to anadromous and freshwater fish populations. As you know, salmon in particular plays an important cultural and economic role for those who live on the Yukon River. For many residents the commercial salmon harvest provides the only means of income for those who live in the remote villages of the Yukon River. Salmon and other freshwater fish provide a primary source of food for residents along the Yukon River, including food for dogs utilized in subsistence activities. Mixing zones, by allowing levels of pollution otherwise prohibited under water quality standards, pose a threat to anadromous and freshwater fish and Yukon River fishers who depend on these fish for income and subsistence

Mixing zones also threaten commercial salmon markets. Alaska salmon is valuable in the market precisely because of the clean, healthy waters in which our salmon swim. YRDFA and Yukon River fishers have invested significant amounts of time and money in marketing campaigns focused on the wild, healthy status of Alaska's salmon waters. Allowing mixing zones in salmon spawning areas even when salmon are not spawning will severely harm this image, counter these efforts and threaten the marketability of Alaska salmon products.

While the regulations as adopted maintain some degree of protection for salmon, they leave much to be desired. They give DEC far too much discretion in identifying salmon spawning areas - under these new regulations, a mixing zone could be allowed in a salmon spawning area when spawning fish are not present. This loophole ignores the importance of spawning grounds not only for fish spawning, but for fish rearing as well. The regulations also give DEC the ability to defer to Department of Natural Resources Biologists' opinion in determining spawning areas and ignore the Alaska Department of Fish

& Game's determinations. The new regulations continue to place far too much of the responsibility for snowing that a mixing zone will not have adverse affects for fish in the hands of the permit applicant. Finally, the proposed regulations offer even less protection for non-salmon species, which many Yukon River subsistence fishers rely on before and after the salmon are running and in years of low salmon returns for sustenance for themselves and their sled dogs. For non-salmon species, under the new regulations DEC can authorize a mixing zone in a spawning area if the applicant simply submits a mitigation plan. The grandfather clause, which allows DEC to renew a mixing zone authorization in a salmon spawning are if salmon were not present at the initial time of permitting, threatens to counter habitat restoration and dam removal efforts throughout the state. Under this rule, if habitat is restored and fish are able to return to their spawning grounds, newly restored fish populations would then have to contend with a mixing zone in their spawning grounds. This rule has the backwards effect of punishing newly restored fish populations and habitat restoration efforts.

HB 328 would once again prohibit mixing zones in spawning areas for salmon and non-salmon species. This would ensure that these species are adequately protected and that Alaskans will not have to continue to spend their valuable time working to maintain these protections.

On behalf of the Yukon River Drainage Fisheries Association and subsistence and commercial fishers on the Yukon River I urge you to support HB 328 and protect a resource vital to your constituents' existence and well-being.

Sincerely,

Rebecca A. Robbins
Policy Coordinator

Becca Robbins
Policy Coordinator
Yukon River Drainage Fisheries Association
725 Christensen Dr., Ste 3-B
Anchorage, AK 99501
907.272.3141x106
Toll Free: 877.99YUKON(98566)
www.yukonsalmon.org

Louie Flora

From: Emilie Otis [emmy@xyz.net]
Sent: Thursday, January 19, 2006 10:06 PM
To: Louie Flora
Subject: Written Comments to HB 328 and SB 225

To whom it may concern:

As I will be at work and unable to testify to the Alaska House Fisheries Committee on HB 328 Friday morning, I am submitting the following written comments, which I hope you will consider. I also hope you will consider accepting public comments on this important legislation in the future.

I fully support Rep. Paul Seaton's HB 328. It's heartening to know that we have a forward-thinking legislater who realizes that pristine waters and healthy fishery resources are the cornerstones of Alaska's sustainable fishing and tourism industries, and that without these renewable resources, our state will have nothing to rely on after our non-renewable resources are gone.

The only way to assure the continuation of Alaska's enviable situation of maintaining strong, healthy fish stocks, is to maintain stringent water quality and habitat protection regulations. Every state that has decided to weaken their water qualitiy regulations (e.g., allowing mixing zones in fish spawning, incubation, and rearing areas) to make it easier for extractive industries to conduct business, have paid the price. Many of these states now have health advisories warning against consumption of their fish. Others face constant litigation against their failures to protect the public's resource and they struggle with funding for expensive mitigation projects that rarely provide full restoration of lost resources. It is inconceivable to me that Alaska is considering following in their footsteps and risking the long-term health of it's most valuable renewable resource by weakening the water quality regulations that have done such an outstanding job of protecting fisheries so far.

The Alaska Department of Environmental Conservation's (ADEC) new regulations regarding mixing zones do NOT ensure adequate protection to our state's valuable fishery resources. Instead, the new regulations introduce loopholes that would lead to mixing zones in salmon, trout, and char spawning, incubation, and rearing areas. Unfortunately, the new regulations do NOT require comprehensive baseline studies prior to permitting mixing zones so that effects from the mixing zone can be readily compared to pre-permitted conditions. Nor do the new regulations require unbiased follow-up monitoring of permited mixing zones to assure compliance with the requirement that they do not "adversely affect the present and future capacity of an area to support spawning, incubation, and rearing of the five species of Pacific salmon". Without these requirements in regulation, and adequate funding for staff to conduct monitoring and enforcement activities, there is no way to assure compliance with the new regulations.

Furthermore, DEC's new regulations do NOT require that professional fishery biologists from the Department of Fish and Game be involved in mixing zone permitting decisions that affect the state's fishery resources, except in rare cases where special, legislatively designated areas are involved (e.g., State Refuges, Critical Habitat Areas, etc.). Instead, DEC's regs require

only that the Department of Natural Resources (who's mission is development, not conservation) be consulted on permitting matters and mitigation plans. They also leave Fish and Game out of monitoring activities and instead leave it up to the permitee (i.e., polluter) to determine whether or not their mixing zone is negatively affecting the future capacity of the area to support spawning, incubation, and rearing.

Rep. Seaton's HB 328 nips these problems in the bud by establishing an outright ban on mixing zones in the spawning areas of Alaska's five Pacific salmon species, as well as other important resident species (e.g., trout, char, burbot, sheefish, etc). While Rep. Seaton's bill provides strong protection for our state's salmon spawning areas, it also provides a sensible solution to the rare situations where salmon colonize and begin spawning in artificially constructed wastewater channels (e.g., Valdez Sewage Treatment Center), thereby solving one of the main reasons DEC cited for drafting new regulations in the first place.

Our elected representatives are supposed to conduct state business in a manner that is in the **long-term** best interest of all Alaskans. I expect you to do just that, by supporting Rep. Seaton's forward-thinking bill to provide the protection our state's most valuable resource needs to assure it's continued health for generations of Alaskans to come. Please don't be the legislature that future generations of Alaskans will look back on with disdain for opening the door to pollution of our salmon producing waters. Do the right thing, and pass HB 328.

Thank you for this opportunity to comment.

Sincerely,

Edward O. Otis
PO Box 1402
Homer, AK 99603

Juneau Douglas Fish and Game Advisory Committee
Kathy Hansen, Chair
9369 North Douglas Hwy
Juneau, AK 99801
907-586-6652

January 13, 2006

House Fish Committee
Alaska State Legislature
State Capitol (MS3100)
Juneau, AK 99801-1182

RE: HB #328 - Support

Dear Representative LeDoux, & Representative Thomas, Co-chairs,

The Juneau Douglas Fish and Game Advisory Committee met on January 12, 2006 on Board of Fish proposals. At the end of the meeting the Advisory committee passed a motion in support of HB #328 and SB #225 regarding mixing zones in spawning areas. We sent a resolution to DEC during the comment period on the proposed regulations opposing the changes and have attached that resolution to this letter of support for protecting salmon and fishery resources by prohibiting mixing zones in spawning and rearing areas.

Sincerely,

Kathy Hansen, Chair

CC: Rep. Seaton & Senator Stevens

Resolution of the Juneau-Douglas Fish & Game Advisory Committee

A Resolution Regarding the Alaska Department of Environmental Conservation's Proposed Regulations Relating to Water Quality Standards – Mixing Zones.

WHEREAS, the Alaska Department of Environmental Conservation (ADEC) has proposed new regulations that retain the existing general prohibition on mixing zones in fish spawning areas, but allow for exemptions from the prohibition; and

WHEREAS, a mixing zone area occurs where wastewater discharge mixes with a water body; and

WHEREAS, mixing zones may create pollution levels that fail to meet the goals of the Clean Water Act; and

WHEREAS, mixing zones allow pollution at levels that violate water quality standards designed to protect fish and fish consumers; and

WHEREAS, mixing zones are allowed under state regulations as the exception rather than the rule; and

WHEREAS, the current state water quality regulations, which became effective in November 1997, contain a prohibition on mixing zones in anadromous (migrating) or resident fish spawning areas; and

WHEREAS, there was extensive public comment in 2004 in opposition to a previous draft of ADEC regulations which would have lifted the state's prohibition on mixing zones in spawning streams; and

WHEREAS, this new 2005 proposal on mixing zones is open for public comment until December 19th; and

WHEREAS ADEC has held only one public hearing in Anchorage on December 5 on these controversial proposed mixing zone regulations; and

WHEREAS, Alaska's wild salmon are renowned worldwide for being clean, fresh, and healthy, and Alaska salmon require clean water and healthy habitats to thrive and reproduce; and

WHEREAS, Alaska salmon fisheries support countless families and communities throughout the state and form part of the cultural fabric which makes Alaska unique; and

WHEREAS, wild salmon and other freshwater marine life support numerous jobs and subsistence resources for the residents City and Borough of Juneau; and

WHEREAS, many Alaska salmon marketing efforts hinge on consumer preference for fish raised in pure mountain streams and harvested in pristine waters isolated from human impact; and

WHEREAS, allowing industrial mixing zones in salmon lakes and streams may impair the efforts of commercial, sports and charter fishing business to promote Alaska wild salmon as healthy, wild, and organic; and

WHEREAS, farmed salmon have created significant social and economic dislocation for Alaska's fishing families; and

WHEREAS, the ADEC has not identified any issues that can't be dealt with under the current mixing zone regulations, or which warrant a wholesale shift in this policy; and

WHEREAS, under the 2005 proposed regulations, ADEC may authorize a mixing zone in a spawning area if an applicant merely has an approved mitigation plan; and

WHEREAS, this approved mitigation plan may be as simple as substituting one stream for another; and

WHEREAS, the Juneau Douglas Fish and Game Advisory Committee represents all fishing user groups, conservation perspectives and the general public; and

WHEREAS, the JDAC is concerned that that ADEC's 2005 proposed mixing zone regulations, combined with ADEC's policy statements on this subject, will result in an increase in pollution in spawning streams; and

WHEREAS, the JDAC believes that salmon health, salmon habitat and salmon marketing may suffer under ADEC's 2005 proposal.

NOW THEREFORE, BE IT RESOLVED BY THE JUNEAU DOUGLAS FISH AND GAME ADVISORY COMMITTEE:

Section 1. That the JDAC hereby expresses its opposition to the Alaska Department of Environmental Conservation's proposed 2005 water quality-mixing zone regulations because implementation of the regulations would allow for increased pollution in fish spawning areas;

Section 2. That the JDAC requests that the Alaska Department of Environmental Conservation extend the public comment period until January 31, 2006.

Copies of this resolution shall be provided to Governor Frank Murkowski; Kurt Fredriksson, Commissioner of the Alaska Department of Environmental Conservation; Senator Kim Elton; Representatives Beth Kerttula and Bruce Weyhrauch.

Adopted this 12th day of December 2005

Kathryn L. H. Chair

Kathy Hansen, Chair, JDAC

Louie Flora

From: Rep. Paul Seaton
Sent: Sunday, January 22, 2006 12:10 PM
To: Louie Flora
Subject: FW: Letter of Support prohibiting pollution mixing zones

Ian Laing
Rep. Paul Seaton Staff
Capitol Building, Rm. 12
Juneau, AK 99801
907-465-2689

-----Original Message-----
From: marilyn@chickaloon.org [mailto:marilyn@chickaloon.org]
Sent: Sunday, January 22, 2006 9:28 AM
To: Rep. Paul Seaton
Cc: jennifer@chickaloon.org
Subject: Letter of Support prohibiting pollution mixing zones

January 21, 2006

Representative Paul Seaton
Alaska Legislature
Juneau, Alaska

Dear Representative Seaton:

Please accept this e-mail as a letter of support for prohibition on pollution mixing zones. The Chickaloon Village Traditional Council has written and signed a resolution stating the Tribe's opposition to changed regulations allowing pollution mixing zones in spawning areas. The Council has requested I write or e-mail you regarding our opposition to the pollution mixing zones in spawning areas.

This prohibition of pollution mixing zones in spawning areas is particularly important for our wild salmon. Letting mixing zones into these areas will effectively eliminate our wild salmon runs because the salmon are an indicator species of clean water - the salmon runs would die out for lack of clean water - and thus much of fishing industry will die out, also. And, at this time, the demand for wild salmon in Europe is increasing dramatically according to the international news media!

Please use this e-mail to help assure success in prohibiting mixing zones in spawning areas. Mixing zones do not eliminate pollution, they only dilute it.

Sincerely,

Marilyn Staggs
Executive Secretary for
Chickaloon Village Traditional Council
Telephone: (907) 745-0707
Fax: (907) 745-7154

(If you would like a copy of our Resolution opposing pollution mixing zones, please call or fax us. Thank you.)

---

mail2web - Check your email from the web at http://mail2web.com/ .

Rep. Paul Seaton

From: michael bavers [mbavers@xyz.net]
Sent: Thursday, January 26, 2006 12:45 P
To: Rep. Paul Seaton
Subject: Mixing Zone legislation

I would like to go on record as opposing any mixing zones in fresh water at any time.

Barring that happening, I support the proposed legislation that of House Bill 328.

Kachemak Bay Conservation Society

3734 Ben Walters Lane, Suite 202
Homer, AK 99603
Phone: (907)235-2062 • Fax: (907)235-4069 • kbcs@xyz.net

January 26, 2006

Dear Representative Seaton,

The Kachemak Bay Conservation Society's mission is to protect the environment of the Kachemak Bay region and encourage sustainable use and stewardship of local natural resources through advocacy, education/information, and collaboration. Current state law prohibits mixing zones in salmon spawning areas, and we still see absolutely no reason to relax this law.

We are in support of HB 328. The Conservation Society would like to suggest an amendment to further strengthen HB 328. We feel the Bill should require that if a permit is requested for an uncatalogued water body, an assessment of that water body should be made before a permit is granted to see if it has anadromous fish or any of the other resident fish listed in the Bill.

Local and statewide fisheries are a vital and sustainable part of Alaska's economy. Allowing mixing zones threatens efforts by the fishing community to promote fresh, wild salmon through a marketing campaign emphasizing the clean, healthy, organic qualities of Alaskan salmon. Mixing zones are nothing more than pollution zones because they would allow higher pollution levels, a move that will damage Alaska's reputation as a state with unpolluted waterways. This outmoded and discredited method of handling waste should not be allowed.

Alaska is fortunate to still be able to claim rivers and streams free of health warnings about toxic fish. While other states are scrambling to clean up their streams, Alaska's current administration is considering implementation of a monumental mistake—a relaxation of our water quality standards! Many of our streams and rivers are not part of a regular sampling program to test for toxic pollution, nor will they be in the future. A very low level of hydrocarbon pollution, as low as one part per billion, can harm fish eggs and smolt. Alaskans consume large quantities of salmon. Toxins in fish can bioaccumulate in human fat cells, contributing to health concerns, particularly for pregnant women and children.

Alaskans are clear on this topic—they do not support mixing zones! KBCS opposes mixing zones and urges the State to maintain its high water quality standards in the interest of protecting our fisheries and the health of Alaskans.

Sincerely,

Dylan Weiser
President

Katie Shows

From: Jane Alberts
Sent: Friday, January 27, 2006 10:47 AM
To: Doug Letch; Ian Laing; Katie Shows; Louie Flora
Subject: Kenai Peninsula Online - Alaska Newspaper -

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Web posted Friday, January 27, 2006

Seaton should be applauded for bill to protect salmon

Prior to the industrial revolution, the streams and rivers of two continents, from Portugal and California in the south to arctic Europe and America, were the pristine nurseries of countless millions of salmon. As the forests were logged and factories replaced them, salmon in southwestern Europe began to disappear from their natal streams. Spawning streams retreated northward in Europe until salmon nearly vanished from that continent.

The same process began on the Atlantic coast of North America, and again, salmon were reduced to remnant populations. Still later, the stocks of Pacific salmon began to diminish in California, and with the decline of their freshwater habitat, their numbers began to diminish even in their once iconic strongholds the Columbia River, the Fraser, the Stikine, the Karluk. Now, Alaska is positioned at a unique place in this tragic decline of one of the biosphere's most valuable resources: we Alaskans control and can protect a large amount of the remaining undamaged salmon spawning habitat on the planet.

Thanks to Rep. Paul Seaton, HB 328 will marshal the rule of law rather than the whim of regulation to enforce that protection and limit pollution in salmon spawning areas. Rep. Seaton and HB 328 require the support of all Alaskans to oppose special interests and ensure that our salmon do not vanish as did their beleaguered kin on two continents.

Rob Lund

Louie Flora

From: Rep. Paul Seaton
Sent: Tuesday, January 31, 2006 11:07 AM
To: louis_flora@legis.state.ak.us
Subject: FW: House Bill 328

From: Sara petty [mailto:pettyinak@hotmail.com]
Sent: Tuesday, January 31, 2006 9:32 AM
To: Rep. Paul Seaton
Subject: House Bill 328

Dear Representative Seaton,

I recently read in the paper that you are supporting HB 328 which is to enforce regulations on pollution and protect the Salmon spwaning streams. I wanted to say thank you, as a fellow Alaskan, i am young now, but i worry that in time when i do have children i will have nothing left to pass to them. Alaska is a beautiful place, and i intend to keep it that way. This is a badly needed bill and i will support it 100 %, if there is anything i can do that would help, please let me know.

Sara Petty
Anchorage

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Ian Laing

From: on behalf of Rep. Paul Seaton
Subject: FW: Thanks for the Mixing Zone Legislation Update

From: Kaden [mailto:kaden@prodigy.net.mx]
Sent: Wednesday, January 25, 2006 7:10 AM
To: Louie Flora
Subject: Thanks for the Mixing Zone Legislation Update

Hello Louie:

I appreciate you keeping me posted on the mixing zone legislation. My wife and I spend our winters away from Alaska in Mexico now that we are both retired. However, because we are still Alaska residents, spend seven months in Gustavus, and still operate a tourism business there, we are definitely interested in this issue. Our representative is Bill Thomas and our senator is Al Kookesh. Do either of them need to hear from us on this issue? We will be happy to write or call. Let me know.

Sincerely,
Hayden Kaden

Ian Laing

From: on behalf of Rep. Paul Seaton
Subject: FW: Mixing Zone Legislation Update
Attachments: Prohibition of mixing zones.doc

From: Nancy [mailto:bear@alaska.net]
Sent: Tuesday, January 24, 2006 11:53 PM
To: Louie Flora
Subject: Re: Mixing Zone Legislation Update

Thank-you for this very clear chart and information.
Three concerns
1. Can the word "may" be replaced with "will" ; and
2. focus should be expanded to include not only spawning and redds but also incubation and rearing for instance: (please see attachment)
3. Possibly add smelt and Angayukaksurak charr

Thank-you for your consideration
Nancy Hillstrand
Coal Point Seafoods
bear@alaska.net
907-235-9772

P.S. Are they taking public comment on Friday 27?

Sec. 46.03.065 Prohibition of mixing zones in spawning waters. (a) Except As provided in (b) of this section, the department **will** not authorize a mixing zone for lakes, streams, rivers, or other flowing fresh water in an area **that supports spawning, incubation, or rearing** of

(1) anadromous fish; or

(2) the resident fish

(A) Arctic **and Angayukaksurak** charr;

(B) Arctic grayling;

(C) brook trout;

(D) burbot;

(E) cutthroat trout;

(F) Dolly Varden;

(G) lake trout;

(H) landlocked coho, king, and sockeye salmon;

(I) northern pike;

(J) rainbow trout;

(K) sheefish;

(L) **smelt;** or

(M) whitefish.

(c) In this section,
(1) "area" means the physical location where spawning, **incubation, and rearing** occurs:

Ian Laing

From: Marion Nelson [mmkn@ptialaska.net]
Sent: Thursday, January 26, 2006 2:09 PM
To: Rep. Paul Seaton
Subject: No mixing zones on the K Peninsula.

No mixing zones on the K Peninsula.

Marion K. Nelson
P.O. Box 1535
Kenai AK 99611
Office Phone (907) 283-4632
Fax (907) 283-4643
Cell 398-8669
E-mail: mmkn@ptialaska.net

Ian Laing

From: Jeff and Kathy Mitchell [mitchell@seward.net]
Sent: Tuesday, January 24, 2006 8:21 PM
To: Louie Flora
Subject: Hold the line Paul

Hi. I just want to commend representative Seaton for supporting and enlarguing the protection of spawning areas of all species. As I understood from the newspaper, he would be supporting legislation to protect trout as well as salmon. I totally agree with not allowing mixing zones in any water that contains fish that can be consumed. Coming from WI., I understand how the entire fishery can become contaminated if mixing zones are allowed and undefined/unknown pollutantants are introduced into the ecosystem. I wish that it was safe to eat fish from evereywhere in the US and it's our job to make sure no other ecosystems get contaminated.
Jeff Mitchell 907-288-5006
35905 Seward Highway
Seward,AK 99664

Ian Laing

From: on behalf of Rep. Paul Seaton
Subject: FW: HB 328

Sent: Friday, January 20, 2006 2:03 PM
To: Katie Shows
Subject: HB 328

Protect Alaska Salmon!

I was disappointed to learn the House Fisheries Committee will not be taking public testimony on HB 328 on January 20.

This important legislation will ban mixing zone pollution in areas where Alaska wild salmon and other fish spawn.

The Murkowski Adminstration has ignored the calls of thousands of Alaskans to protect our fish streams. ADEC's recently adopted mixing zone rule is riddled with legal loopholes that will allow pollution dumping in areas used by salmon and other fish to spawn.

Clean and healthy Alaska salmon are important to combat farmed salmon on world markets, and sport, commercial and subsistence fishermen depend on fresh, healthy fish. Wholesome Alaska salmon suport countless families and communities across the state.

Please register my strong support for HB 328, and I hope you will take public testimony on this important bill in the near future.

David, Julie & Adi Jo Davis
PO Box 114
Homer, AK 99603

Ian Laing

From: MJacobs13@aol.com

Sent: Monday, January 30, 2006 8:07 PM

To: Rep. Paul Seaton

Subject: Mixing Zones

Dear Representative,
Just wanted to take a minute and let you know that my husband and I both support a **permanent** and **total** ban on mixing zones on **all bodies of water** where **any and all** fish spawn (not just salmon) **everywhere** in our magnificent state. Our pristine waterways and the precious fish they contain and nurture are too precious to waste. Once polluted, a waterway is never the same again. It is important that there is one state in the United States where pristine waters and pure fish can be found.
Thank you,
Marcia Jacobs
Bill Cook
Soldotna

Louie Flora

From: Rep. Paul Seaton
Sent: Tuesday, January 31, 2006 11:08 AM
To: louis_flora@legis.state.ak.us
Subject: FW: HB 328

From: Nina Faust [mailto:fausbail@xyz.net]
Sent: Tuesday, January 31, 2006 9:27 AM
To: Rep. Paul Seaton
Subject: HB 328

P.O. Box 2994
Homer, AK 99603

January 12, 2006

House Resources
State Capitol, Room 102
Juneau, Alaska 99801

Dear Paul:

We support HOUSE BILL NO. 328, "An Act prohibiting mixing zones in freshwater spawning waters." A legislative fix is needed to prevent looser State regulations that would allow pollution in our streams and rivers. No matter how the State has tried to present its new regulations on mixing zones, it still comes back to the bottom line, which is that the new rules relax water quality standards in Alaska. The State appears to be scrambling to loosen controls on water quality to benefit pending big, new mines and timber operations. Alaska is the only state in the U.S. that can boast about its amazingly clean streams and lakes, but this will not last if the state allows relaxed mixing zone standards. We are adamantly opposed to doing this!

The Department of Environmental Conservation presented testimony to the House Special Committee on Fisheries on January 27, 2006. If the Legislature listens to DEC, Alaska water quality will likely go the way of so many streams, rivers, and lakes of the Lower 48 and elsewhere in the world. They will begin the gradual decline that will destroy our fisheries just as has happened most everywhere else. Already the State has granted roughly 32 questionable permits in salmon or other fish bearing waterbodies. These permits should be upgraded to require effluent to meet current state water quality standards or better.

Mixing Zones in streams supporting anadromous and other freshwater fisheries must be protected. Dumping pollution in Alaskan waters during times when fish are not spawning is not a solution. Over time, pollution accumulates in these waters. Somewhere it settles out, or fish slowly ingest the pollution. Without highly sophisticated testing programs, we will never know where the pollution goes, where it settles, or how it is slowly affecting the plants and animals in the water. Like elsewhere, it is a slow process of poisoning that someday shows up in fish in various ways. Why even allow this? The technology is available to make the effluent at the end of the pipe meet water quality standards. We

believe this is what Alaskans want!

Our fisheries are the envy of the nation and comprise a vital and sustainable part of Alaska's economy. Allowing mixing zones threatens commercial, subsistence, and sport fisheries, all-important components of many Alaskan communities. How can the State promote fresh, wild salmon through a marketing campaign emphasizing the clean, healthy, organic qualities of Alaskan salmon if we relax mixing zone regulations? The State can try to dress it up anyway it wants but it is still an outmoded and discredited method of handling waste and should not be allowed.

The Legislature must act to set high, permanent water quality standards. Leaving these standards open to changes of convenience to accommodate cheaper development of other natural resources is not reasonable. The State would be providing a cheap, convenient way for industry to dispose of its wastes to develop a non-renewable resource at the expense of clean water and rich fisheries, which are diminishing riches in an increasingly polluted world.

Alaskans have been very clear on this topic—they do not support mixing zones! We still oppose mixing zones and urge the State to keep high water quality standards to protect our fisheries and the health of Alaskans. Please pass House Bill 328 without watering it down!

Sincerely,

Nina Faust and Edgar Bailey

Rep. Paul Seaton

From: Robbie Stell [robbiestell@gci.net]
Sent: Monday, January 09, 2006 9:26 PM
To: Rep. Paul Seaton
Subject: HB 328

Representative Seaton: I have read your bill and support passage of this important legislation. Put my count into the support side for this bill.
Roberta Stell
Juneau, Alaska

Gustavus, Alaska
Jan. 9, 2006

Representative Paul Seaton
State Capitol, Room 102
Juneau, AK 99801

Dear Senator Seaton:

I fully support your bill to prohibit mixing zones in fish spawning waters. I am one of the many people who commented (twice) on the Dept. of Environmental Conservation proposals to allow mixing zones. Like the overwhelming majority, I oppose allowing mixing zones in spawning streams and lakes. It has been disheartening to see the Administration forge ahead with this proposal against the clear disapproval of Alaska residents. In addition to raising concerns for fish habitat and for the marketing of Alaska's fish, this situation suggests that the citizen participation in a democracy has become irrelevant. Thank you, Rep. Seaton, for rescuing democratic representative government in this instance!

Salmon streams in Alaska ought to be as protected and cherished as anything we have. They are the source of immense productivity, not just of salmon, but also of the surrounding ecosystems, terrestrial, coastal and marine.

A reduction in water quality standards for spawning streams could threaten the sustainability certification of Alaska salmon. It can result in loss of the market advantage of wild Alaska salmon and cause a deep reduction in price. It has been a struggle to educate consumers on the health advantages and environmental soundness of eating wild salmon instead of farmed fish. These efforts are paying off, rescuing the fishing industry from a terrible price situation. It is amazing that the Administration would consider tossing this market recovery aside.

The safeguards claimed for the DEC proposal would require monitoring far-flung streams beyond anything the state is prepared to do. The mining industry, for example, is notorious for spotty compliance with environmental regulations. When the A.J. Mine was preparing to reopen, despite all the scrutiny on this mine in the center of Juneau, it released illegal effluent into a stream that flows right through town, released it secretly only at night! This deceit was discovered not by state regulators, but by local citizens.

In theory, under the DEC proposal, mixing of pollutants in spawning streams would be allowed only when there are no fish spawning in the streams. It's pretty hard to find that little window when there are no eggs, alevains or spawners. An old-time Southeast Alaska fisherman - Jack O'Donnell - told me a funny true story about some logging operators and Forest Service representatives meeting with Petersburg fishermen. Tired of hearing fishermen complain about the mess that logging made of spawning streams (this was before buffer strips), the timber men came to talk about a new piece of heavy equipment that promised to clean it all up: the Riffle Sifter. They showed a film of the Riffle Sifter tracking up a stream, processing the gravel and spewing the unwanted mud and debris out on the stream banks. After the film, some fishermen asked "When do you plan to use this - in what season?" The presenters said "Oh, that's where your expertise comes in. You tell us when is the best time." So the fishermen began to explain the life cycle of salmon. The presenters left and nothing was ever heard again about the Riffle Sifter. May the same fate befall the DEC mixing zone proposal.

Yours truly,

Judy Brakel
Box 94, Gustavus, Alaska 99826 e-mail at grigori@gustavus.ak.us

United Southeast Alaska Gillnetters
P.O. Box 23378, Ketchikan, AK 99901 Phone & Fax (907) 247-2471 Email: usa_gillnetters@att.net

January 11, 2006

The Honorable Paul Seaton
House of Representatives
State Capitol, Room 102
Juneau, AK 99801 Sent Via Fax to: 907 465-3472

Dear Representative Seaton,

The United Southeast Alaska Gillnetters (USAG) is an association of about 150 small business owners who catch salmon by drift gillnetting in Southeast Alaska and market salmon throughout the United States. Many of our members also participate in other fisheries such as crab, shrimp, dive and longline. We have steadfastly opposed the Department of Environmental Conservation's (DEC) efforts to change the current ban on mixing zones in salmon spawning and rearing streams. We strongly support HB 328 which will prohibit mixing zones in freshwater spawning waters. We believe that if the current ban was lifted, regardless of the restraints placed in new regulations controlling future mixing zones, the use of these zones will become a license to pollute the fresh water systems of Alaska. The best example of this is in DEC's own survey of the status of mixing zones in other states. Of those responding, 21 of 23 allowed mixing zones of some kind. Every one of the 21 that had responded that they permitted mixing zones had issued fish consumption warnings to their citizens for fish caught in their local waters. Of the 2 that did not permit mixing zones, neither had issued such warnings. From this experience it is clear that mixing zones are a license to pollute and they harm fish populations and can result in harm to humans. If mixing zones were permitted in Alaska, they could cause grave harm to Alaska's efforts to market our salmon to the rest of the world and attract tourists to the "pristine environment" of our great land. Attached to this letter is a copy of our earlier letters to DEC expressing our opposition to lifting the ban on mixing zones and more detailed reasons for that opposition.

USAG wishes to thank you, Representative Seaton and the other legislators who have joined with you to introduce this legislation. The economic health and future of our state depends on our maintaining a healthy environment and our reputation for resource protection. Two of Alaska's largest industries, commercial fishing and tourism, depend in part on us maintaining our commitment to protect our environment and to use our resources wisely.

Yours truly

Kenneth Duckett
Executive Director

Adam Bauer
4734 Sabrina Rd
Homer, AK 99603
(907) 235 6994
(907) 235 9779 FAX
abauer@bauerhaus.ws

Representative Paul Seaton
State Capitol, Room 102
Juneau, Alaska 99801

Dear Representative Paul Seaton,

I fully support your bill - HOUSE BILL NO. 328 "An Act prohibiting mixing zones in freshwater spawning waters."

Thank you for taking action to protect Alaska's Natural Resources and the quality of our environment for or fisheries and our future.

Adam Bauer

Rep. Paul Seaton

From: alaskakayakschool [info@alaskakayakschool.com]
Sent: Thursday, January 12, 2006 10:20 AM
To: Rep. Paul Seaton
Subject: Mixing Zone Legislation: HB 328

Dear Paul -

I am a Homer resident, owner and operator of the AlaskaKayakSchool.com here in Homer. I was involved in the first mixing zone hearing under the EPA's public participation process of the Clean Water Act, in 1973: Weyerhauser's Srpingfield, Oregon, pulp mill. They had been granted half the river!!! as a mixing zone. We fixed that all right. Times seem not to change.

Honorable Governor Murkoswki and his staff are pretty misguided to dismantle mixing zone regulations "IN SALMON SPAWNING AREAS" no less.

Please OPPOSE any effort to reduce protection for salmon streams. I support the efforts of HB 328 to counter the governor and his staff's misguided policy. Lack of protection for Salmon streams from industrial effluent would seem to be in violation of "sustained yield" in the State of Alaska's Constitution.

We should be affording more protection for Salmon and their habitats, not less. As we all know, Salmon eggs and fry are very sensitive to the negative effects of deteriorating water quality, and require clean, cold and well aerated water to spawn, hatch and grow. This is a no-brainer.

I offer my sincere thanks for your efforts to pass HB 328.

Best,

Tom Pogson

--
Alaska Kayak School
P.O. Box 3547
Homer, Alaska 99603
(907) 235-2090
www.alaskakayakschool.com

Rep. Paul Seaton

From: Doug Fine [fine@well.com]
Sent: Thursday, January 12, 2006 10:01 AM
To: Rep. Paul Seaton
Subject: In Support on House Bll #328

Dear Rep. Seaton and all Legislators and the Governor:

I support House Bill # 328, An Act Prohibiting Mixing Zones in Freshwater Spawning Areas. Alaska salmon literally keeps me and many of those I love alive. This is what it's all about in Alaska ad what makes Alaska different from other places. We should be treasuring the salmon runs, treating them carefully and managing them for what they are: worth more than gold, literally and in other senses, like nutritionally and culturally. Please support this bill and do not weaken it. Mixing zones are a bad idea and this bill is a good idea.

Thank you.

Best,

Doug Fine

--
"Half the Story Has Never Been Told": Bob Marley

"Not Really An Alaskan Mountain Man": http://www.dougfine.com

Recent National Public Radio Work: www.npr.org, search under "Doug Fine Alaska" for Alaska work and "Doug Fine New Mexico" for work elsewhere.

Rep. Paul Seaton

From: Ellen Wolf [ellenmwolf@yahoo.com]
Sent: Thursday, January 12, 2006 9:21 AM
To: Rep. Paul Seaton
Subject: House Bill 328

January 12, 2006
Dear Representative Seaton:

Please share my strong support for House Bill 328, prohibiting mixing zones in freshwater spawning areas, with your colleagues in the legislature.

This kind of legislation is essential to protect the spawning waters of our state's wild salmon population. Alaska's wild salmon are a valuable economic commodity in terms of both commercial and sport fishing. As salmon farms degrade wild salmon populations in Canada and other parts of the U.S., Alaska's wild salmon become even more precious. Furthermore, and perhaps more importantly, salmon and other fish are an essential part of a healthy ecosystem, providing food for bears, eagles, marine mammals and others.

Thank you for sponsoring this foreward-thinking bill.

Sincerely,
Ellen Wolf
P.O. Box 371
Talkeetna, AK 99676

Yahoo! Photos – Showcase holiday pictures in hardcover
Photo Books. You design it and we'll bind it!

Rep. Paul Seaton

From: Duane Howe [duhowe@alaska.net]
Sent: Thursday, January 12, 2006 9:01 AM
To: Rep. Paul Seaton
Subject: HB 328

Dear Representative Seaton,

I commend you for pre-filing HB 328 to codify current mixing zone regulations for salmon streams into state law. I have written letters twice to DEC opposing their proposals to allow pollution into salmon streams and am in complete support of HB 328 to add the prohibition of polluting these streams into statute. Please add this note into the record in support of your proposal.

Duane Howe
41640 Gladys Ct
Homer, AK 99603
235-9477

Rep. Paul Seaton

From: clardy [clardy@acsalaska.net]
Sent: Thursday, January 12, 2006 8:32 AM
To: Rep. Paul Seaton
Subject: mixing zones.

I support any effort to stop the increased pollution of our salmon streams.
susan clardy

Rep. Paul Seaton

Subject: FW: Mixing zones

-----Original Message-----
From: Will Files [mailto:will@wfiles.us]
Sent: Thursday, January 12, 2006 8:30 AM
To: Rep. Paul Seaton; Katie Shows
Subject: Mixing zones

Hi Paul and Katie,
Happy New Year to all of you there in the Juneau office.
If I recall some of our conversations, Paul is not in favor of "mixing zones". I would like to lend support to that position.
Let's not take any chances at all on our precious waters and valuable fish resources, particularly when we are playing with such dangerous things as mercury and arsenic and whatever nasty things come from mining, including a lot of sediment which can change the nature of the ecosystem dramatically.
Thanks for your efforts to protect our resources.
We support HB 328.

Will and Martha Ellen
59835 Tern Court
Homer

Rep. Paul Seaton

From: Nina Faust [fausbail@xyz.net]
Sent: Thursday, January 12, 2006 8:07 AM
To: Rep. Paul Seaton
Subject: HB 328

P.O. Box 2994
Homer, AK 99603

January 12, 2006

Representative Paul Seaton
State Capitol, Room 102
Juneau, Alaska 99801

Dear Paul:

We support HOUSE BILL NO. 328, "An Act prohibiting mixing zones in freshwater spawning waters." A legislative fix is needed to prevent looser State regulations that would allow pollution in our streams and rivers. No matter how the state has tried to present its new regulations on mixing zones, it still comes back to the bottom line, which is that the new rules relax water quality standards in Alaska. The state appears to be scrambling to loosen controls on water quality to benefit pending big, new mines and timber operations. Alaska is the only state in the U.S. that can boast about its amazingly clean streams and lakes, but this will not last if the state allows relaxed mixing zone standards. We are adamantly opposed to doing this!

Our fisheries are the envy of the nation and comprise a vital and sustainable part of Alaska's economy. Allowing mixing zones threatens commercial, subsistence, and sport fisheries, all-important components of many Alaskan communities. How can the state promote fresh, wild salmon through a marketing campaign emphasizing the clean, healthy, organic qualities of Alaskan salmon if we relax mixing zone regulations? Mixing zones are just pollution zones that allow higher pollution levels. The state can try to dress it up anyway it wants but it is still an outmoded and discredited method of handling waste and should not be allowed.

Alaskans have been very clear on this topic—they do not support mixing zones! We still oppose mixing zones and urge the State to keep high water quality standards to protect our fisheries and the health of Alaskans. Please pass House Bill 328!

Sincerely,

Nina Faust and Edgar Bailey

Rep. Paul Seaton

Subject: FW: Legislation Prohibiting Mixing Zones in freshwater Spawning Areas

---

From: John Lyle [mailto:kayak@gci.net]
Sent: Wednesday, January 11, 2006 8:19 PM
To: Louie Flora
Subject: Re: Legislation Prohibiting Mixing Zones in freshwater Spawning Areas

To whom it may concern: Please add my voice to those who support enacting a statute prohibiting the practice of mixing zones, especialy in freshwater spawing areas. As I have said in written testimony on the subject over the past several years, this practice is damaging and needs to be made illegal. Thank you. Sincerely, John D. Lyle Box 83715 Fairbanks, Alaska 99708.

Rep. Paul Seaton

From: Alfa Fish [alfafish@ptialaska.net]

Sent: Wednesday, January 11, 2006 2:14 PM

To: Rep. Paul Seaton

Dear Paul-

I recently learned of the legislation on which you are working to place in law the prohibition on mixing zones. Please know that your efforts are supported by our organization.

Sincerely,

Linda Behnken, Director
Alaska Longline Fishermen's Association

Rep. Paul Seaton

From: David Swingley [swingdad_2000@yahoo.com]
Sent: Wednesday, January 11, 2006 10:56 AM
To: Rep. Paul Seaton
Subject: freshwater mixing zones

I feel the people of Alaska have overwhelmingly spoken out against freshwater mixing zones. The potential to do irreparable harm freshwater spawning areas and downstream habitat is obvious. The is a giveway to business, mining, and logging interests with deep pockets by the Murkowski administration. Stop the assault on the clean water act and ban ALL freshwater
mixing zones. Thank you. David and
Rachel Swingley Eagle River, Ak.

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around http://mail.yahoo.com

Rep. Paul Seaton

From: Richard Hahn [rdhahn@eagle.ptialaska.net]

Sent: Tuesday, January 10, 2006 2:32 PM

To: Rep. Paul Seaton; Rep. Kurt Olson; Sen. Gary Stevens

Subject: Mixing Zones

Dear Mssrs. Olson, Seaton, and Stevens, I cannot tell you how appreciative I am, along with a myriad other Alaskan commercial and sports fishers, for your collective initiative to ban pollution mixing zones in salmon spawning streams! I have written many letters to DEC staff, the commissioners of DEC, DNR, and DF&G, and to various Alaska newspapers objecting to DEC's proposal. The "yes sir!" administration of Murkowski simply ignores public comment and do Murky's bidding--pick a subject! I only get one 225 word letter in the Anchorage Daily News each month so, if someone will tell me what the corresponding House Bill number is to Senator Stevens' Bill 255, I will make your action known to as many as read the major Alaska newspapers. This is great news for Alaska streams, habitat, the anadromous fish, and all who fish for salmon in Alaska, as well as the people who consume them.

Having said all that, I must tell you that your bills do not alleviate my concerns for the proposed Pebble Gold Mine, and others like it, which threaten much more than just the fish in the Bristol Bay watershed. No matter what the mine developers may say, it is highly unlikely the cyanide, heavy metal and aqueous sulfuric acid contamination of the environs and ground waters, as a result of such a mining operation, can be contained. If there is an accidental or intentional release of these materials to any aquifer, stream or lake, it cannot be cleaned up--ever! This would not be like an oil spill. I have an eleven(11) page NY Times article, which details horrific incidents from modern gold mining around the world, which I will send you on request. I have personally visited Kellogg, Idaho and Queenstown, Tasmania, both of which look like "moonscapes". Their rivers have been sterile for many years and their surroundings grow no plants. This is just one of the many risks "development at any cost" Murkowski brings to Alaska. He does not require any accountability, bonding, monetary or otherwise, of any developer. They have no responsibility for any mess they may create during the time they operate, and none are self-policing. The profit margin is their only care. Pardon my soapbox.

Thanx again for your action on mixing zones. If you are successful, a next very positive step for Alaska would be to make all developers accountable--up front! Large, depending on the proposed development, liability bonds and precisely worded contracts come to mind. Sincerely,

Richard Hahn
P.O. Box 2754
Soldotna, Alaska, 99669
907-262-8575
rdhahn@eagle.ptialaska.net

Rep. Paul Seaton

Subject: FW: Legislation Prohibiting Mixing Zones in freshwater Spawning Areas

-----Original Message-----
From: Alaska Passages [mailto:info@alaskapassages.com]
Sent: Tuesday, January 10, 2006 1:21 PM
To: Louie Flora
Subject: Re: Legislation Prohibiting Mixing Zones in freshwater Spawning Areas

I am writing in support of House Bill 328 which is an act prohibiting mixing zones in freshwater spawning areas. I support this legislation as a way to maintain water quality in Alaska waters. Discharging wastewater and pollutants into spawning habitat is destructive to fish populations and habitat. There is no time of year when fish in these areas would be safe from the discharge of pollutants. Fish spawn in the summer months, but the resulting egg and fry remain in the gravel of the spawning area for the rest of the year.

Alaska has invested time and money protecting its salmon stocks and also promoting "Wild Caught salmon from Pristine Alaska waters". This kind of marketing has helped the salmon industry tremendously. We need to maintain the high water quality standards to protect our reputation for our wild caught salmon.

Thanks to Representatives Seaton, Gatto, LeDoux, and Olson for introducing this legislation and for their efforts to safeguard Alaska's salmon resource and maintain our high water quality standards.

Julie Hursey
Petersburg, Alaska

Rep. Paul Seaton

From: Sally McGuire [chilkootmcguire@yahoo.com]
Sent: Tuesday, January 10, 2006 12:31 PM
To: Rep. Paul Seaton
Subject: freshwater mixing zones

Dear Rep. Seaton,

Thank you very much for introducing the bill to ban mixing zones in freshwater spawning habitat. I live in Haines, Alaska, and care very much about this issue. Also, many members of my family work in the fishing industry and are also affected. Our fisheries need to stay healthy and unpolluted, both for our own sakes as Alaskans, and in order to continue marketing them as fresh, wild, and unpolluted. It has certainly become very clear that this law is very important to prevent the recent attempts to put the wishes of a few industries over the rights of many Alaskans. Thank you very much. Sally McGuire

Rep. Paul Seaton

From: Marc Lamoreaux [Lemarc@pobox.mtaonline.net]
Sent: Tuesday, January 10, 2006 10:57 AM
To: Rep. Paul Seaton
Subject: Support for HB 328

January 9, 2006

Dear Honorable Representative Seaton,

Native Village of Eklutna, a federally recognized Alaska Tribe enthusiastically supports the legislation -

HOUSE BILL NO. 328

introduced by yourself, along with Representative Kurt Olson (R-Kenai), Representative Carl Gatto (R-Palmer) and Representative Gabrielle LeDoux (R-Kodiak) that would place in statute the prohibition on pollution mixing zones in Alaska freshwater spawning waters.

We agree that this bill is needed to protect the habitat of Alaska's world famous salmon and trout and to protect Alaska salmon marketing efforts, and the subsistence people and cultures that rely on them.

Thank You,

Marc Lamoreaux
Land and Environment Director
Native Village of Eklutna

Rep. Paul Seaton

From: Kathy Wartinbee [kbwart@alaska.net]
Sent: Monday, January 09, 2006 8:11 PM
To: Rep. Paul Seaton
Subject: Mixing zone legislation
Follow Up Flag: Follow up
Flag Status: Red

Representative Seaton:

I am writing this letter to indicate my whole-hearted support for your bill that will prohibit mixing zones in waters with anadromous fish spawning in them. I thank you for taking on this important issue in the legislature.

We must do what ever it takes to preserve the pristine streams and waters of all Alaska. Considering that the state's oil and minerals will eventually be depleated, if we protect the aquatic habitats of the state, fishing and tourism will always be here. However, if we allow our streams to be impacted, no one will want to come and look at where we used to have good fishing nor will consumers be interested in buying fish that used to be untainted.

Again, we must protect our water resources and the industries they support. Your bill is a great step in the right direction.

Sincerely,

David C. Wartinbee PhD, JD
Stream Ecologist
Biology Professor
(UAA - Kenai Peninsula College)

P.O. Box 157
Soldotna, Alaska 99669
907 260-1935

Rep. Paul Seaton

From: Charles Michael Herndon [mherndon@pobox.alaska.net]
Sent: Monday, January 09, 2006 7:29 PM
To: Rep. Paul Seaton
Subject: Strong support for House Bill 328
Follow Up Flag: Follow up
Flag Status: Red

I strongly support passage of House Bill 328, "An Act prohibiting mixing zones in freshwater spawning waters". This bill is necessary to prevent the state Department of Environmental Conservation from lifting the prohibition on pollution mixing zones in freshwater spawning areas.

Charles M. Herndon
10421 Lone Tree Dr.
Anchorage, AK 99507

Rep. Paul Seaton

From: Gerald R. Brookman [brookman@alaska.net]
Sent: Monday, January 09, 2006 3:46 PM
To: Rep. Paul Seaton
Subject: HB 328

Dear Representative Seaton:

First, I want to thank you for introducing HB 328. Second, I'd like to state that I strongly support its passage.

I would appreciate it very much if you could keep me informed, via e-mail, of this bill's committee referrals, and amendments that may be made to it as it goes through the legislative process, etc. Thank you

Gerald R. Brookman (Jerry Brookman)
715 Muir Avenue
Kenai, Alaska 99611-8816
e-mail: brookman@alaska.net

Rep. Paul Seaton

From: claire leclair [northsister@acsalaska.net]
Sent: Monday, January 09, 2006 2:29 PM
To: Rep. Paul Seaton
Subject: HB 328 Legislation prohibiting mixing zones in freshwater spawning areas

Representative Seaton-

Thank you for taking the initiative to find co-sponsors for and introduce legislation prohibiting mixing zones in freshwater spawning areas. I hope this legislation passes easily and quickly, thus allowing our state's fisheries resources to continue to sustain our bodies and our economy well into the future.

Sincerely,

Claire Holland LeClair
Anchorage, Alaska

Rep. Paul Seaton

From: Leif K. Mjos [lmjos@care2.com]
Sent: Monday, January 09, 2006 2:29 PM
To: Louie Flora
Subject: Re: Legislation Prohibiting Mixing Zones In freshwater Spawning Areas

Dear Mr. Seaton,

In general, I am in support of this new legislation regarding mixing zones. However, I have one concern after reading an initial press release.

My concern is over the language used in regards to man-made streams/ditches. If this bill is intended to protect the resource and maintain the viability of the fishing industry, I think that fish populations should be treated as populations, regardless of their chosen route of passage to spawning grounds. If there are fish passing through man-made streams on their way to further natural spawning grounds, they are still members of the same population that is fished by commercial fishermen. If this bill is trying to ensure that fishermen can guarantee consumers healthy, clean fish, then it shouldn't matter how the fish are reaching their spawning grounds, because the fishermen won't know the difference between a fish that swam through the natural stream or one that passed through a man-made stream. If you want the fish to be clean and natural, then they should ALL be clean and natural.

If I am misunderstanding the language in this bill, then I stand corrected. Otherwise, this seems like a huge loophole that will be manipulated by industry and municipalities long after this bill is passed. And that does nothing for the fishermen and their livelihoods, to mention nothing of the resource itself.

I look forward to hearing your response,

Leif Mjos
1725 E 24
Anch., AK 99508

So I end the day as I started it, trying to fathom the abundance of living things. - Richard Nelson

Trophy hunters can write off canned hunts and big game safaris at taxpayers' expense - help end this cruelty loophole: http://go.care2.com/66836

http://www.Care2.com Free e-mail. 100MB storage. Helps nonprofits.

Rep. Paul Seaton

From: KmKm/Crystal Images [ci@akmk.com]
Sent: Monday, January 09, 2006 2:16 PM
To: Rep. Paul Seaton
Subject: HB 328

Hi. I am writing in support of HB 328 to prohibit the use of mixing zones in state spawning waters as defined here. Regards, Kathleen Menke, Haines

00 HOUSE BILL NO.
328
01 "An Act prohibiting mixing zones in freshwater spawning
waters."
02 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF
ALASKA:
03 * **Section 1.** AS 46.03 is amended by adding a new section to
read:
04 **Sec. 46.03.065. Prohibition of mixing zones in spawning waters.** (a)
The
05 department may not authorize a mixing zone for lakes, streams, rivers, or
other
06 flowing fresh water in an area
of
07 (1) anadromous fish spawning;
or
08 (2) resident fish redds
for
09 (A) Arctic
char;
10 (B) Arctic
grayling;
11 (C) brook
trout;
12 (D)
burbot;
13 (E) cutthroat
trout;
14 (F) Dolly
Varden;
15 (G) lake
trout;
01 (H) landlocked coho, king, and sockeye
salmon;
02 (I) northern
pike;
03 (J) rainbow
trout;
04 (K) sheefish;
or
05 (L)
whitefish.
06 (b) In this
section,
07 (1) "lakes, streams, rivers, or other flowing fresh water"
includes lakes,

streams, rivers, or other flowing fresh water that have been altered by remediation or construction activities; the term does not include an artificially constructed facility for water, wastewater, holding, or channeling, unless the artificial facility is constructed for the purpose of facilitating fish spawning.

(2) "mixing zone" means an area in a water body surrounding or downstream of a discharge where the effluent plume is diluted by the receiving water, within which water quality standards specified by the department under AS 46.03.050 - 46.03.120 may be exceeded.

--

Kathleen M.K. Menke
Crystal Images Photography and Publishing
http://www.akmk.com

Rep. Paul Seaton

From: Marjorie & Dan Dunaway [mwdnt@nushtel.com]
Sent: Monday, January 09, 2006 1:32 PM
To: Rep. Paul Seaton
Cc: Sen. Lyman Hoffman; Rep. Carl Moses
Subject: regarding BILL ID: HB 328
Attachments: AFS_Mixing_Zone_Letter_of_Concern.pdf

Dear Representatives Seaton, LeDoux, Gatto, and Olson, and the Alaska House of Representatives as whole:

I am very glad to see the proposal HOUSE BILL NO. 328 "An Act prohibiting mixing zones in freshwater spawning waters." It is tiresome to see the current administration continually attempting to diminish the excellent protections we have for Alaskan waters and the fish that inhabit them. I am VERY pleased that this bill addresses the deficiencies of current law that overlook the critical lake spawning areas used by sockeye salmon and other important species.

One suggestion would be to include some accommodation to situations where fish colonize a previously never used area, such as a man made ditch. I'm not sure exactly what the proper wording should be or how to address it. There should be some language however that doesn't allow a ditch or pond to be created just for the purpose of circumventing this proposed or existing laws.

I also think that the current regulations allowing 10% of a lake surface area to be mixing zone could be much too large in some of the larger lakes. I don't know what an appropriate level should be, but I cannot believe that it would be acceptable to have 10% of the surface area of L. Iliamna, Becharof, Skilak, Tustemena or similar to be a mixing zone. There should be some absolute upper limit.

Would this bill address intertidal spawning areas? Pink and chum salmon are known to spawning in waters that might not be considered completely "flowing fresh water" yet are very important species to subsistence, commercial and sport fisheries. I think it would be worth considering these waters as well.

For additional guidance regarding mixing zone regulations, I encourage you to review in careful detail, the contents of the "Letter of Concern" submitted by the Alaska Chapter of the American Fisheries Society. I have attached it here for your review.

Additionally, I encourage you to consider in this bill or separately, a "Bad Actor" clause for chronic offenders of these laws. Penalties should be very stringent to assure chronic offenses are discouraged and stopped in a timely manner.

Thank you for your consideration and opportunity to comment.

Dan Dunaway
PO Box 1490
Dillingham, Alaska 99576

907-842-2636

Fisheries Biologist
Retired from approx 24 yrs with ADFG
Life long Alaskan

Rep. Paul Seaton

From: Richard E. Kanner [richard.kanner@hsc.utah.edu]
Sent: Monday, January 09, 2006 10:20 AM
To: Rep. Paul Seaton
Subject: Bill to legislate current regulations to prevent pollution in mixing zones.

Dear Re. Seaton:
Thank you for your work in preventing the mining industry from polluting areas where fish spawn in the State of Alaska. Although I am not a resident of Alaska I do visit your state approximately every other or third year and have good friends living there. I strongly support the legislation you have proposed in this matter.
Sincerely,
Richard E. Kanner, M.D.
--
Richard E. Kanner, MD
University of Utah Health Sciences Center
26 North 1900 East
701 Wintrobe Building
Salt Lake City, Utah 84132-4701
Tel: (801)581-7806
Fax: (801)585-3355
Beeper: (801)339-5592
Email: richard.kanner@hsc.utah.edu, kanner@med.utah.edu

Rep. Paul Seaton

From: Demian A. Schane [dschane@gmail.com]
Sent: Monday, January 09, 2006 9:45 AM
To: Rep. Paul Seaton
Subject: Support for legislation prohibiting mixing zones in salmon streams

I write to support Representative Seaton's efforts and legislation to prevent the State from authorizing mixing zones in streams that support salmon and their fry. I cannot understand the reasons the Murkowski Administration has proferred for modifying the existing regulations.

Keep up the good work.

Demian Schane
350 Irwin St. #510
Juneau, AK 99801

Rep. Paul Seaton

From: Linda Johnson [ljohn@ptialaska.net]
Sent: Monday, January 09, 2006 9:37 AM
To: Rep. Paul Seaton
Subject: Mixing zones bill - thank you!

Dear Mr. Seaton:

Thank you so much for introducing the bill to ban the pollution of spawning streams in Alaska.

The changes that DEC made – that pollution could not occur when fish are spawning – does not help, as I am sure you realize. There are numerous streams in the Juneau area that people can easily visit (there is a great trail in the Lemon Creek area, for example) which could be used to show any doubters that fish are in these streams year – round and polluting them at any time would be detrimental.

Thank you again!

Linda Johnson

Juneau, AK

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No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.1.371 / Virus Database: 267.14.16/225 - Release Date: 1/9/2006

Rep. Paul Seaton

From: grenebrid@aol.com
Sent: Monday, January 09, 2006 9:20 AM
To: Rep. Paul Seaton
Subject: *****SPAM***** Mixing Zone Legislation

Dear Representative Seaton,

I fully support the Legislation (HB 328) for prohibitting pollution mixing zones in spawning habitat. Thank you, and to the other supporting Representatives for introducing this bill.

Mrs. Katherine McLaughlin
Chenga Bay, Alaska 99574

Community Rivers Planning Coalition

"Communicating, Collaborating, Cooperating - For Our Future"

PO Box 1375
Anchor Point, AK 99556
(907) 235-2434
CRPC@pobox.xyz.net
www.communityrivers.org

February 2, 2006

House Resources Committee
Alaska State House of Representatives
Juneau, Alaska

Re: Support for HB 328

The idea of allowing mixing zones in our Alaskan anadromous streams is ludicrous. The amount of money and effort that has gone into our fishing and tourism industries being able to market our "pristine" waters of Alaska is reaps great rewards and is producing positive returns to the State's economy and her coastal communities.

It seems unthinkable that the State of Alaska would even entertain a 150 year step back in waste treatment technology.

All one has to do is look to Europe and their loss of salmon resources, the eastern United States and their lost salmon runs, and the ongoing deterioration of the west coast fisheries habitat to see that Alaska is the last place in the world to support such a wealth and abundance of salmon and trout resources, and we should be doing all we can to protect them.

Our organization encourages your full support for HB 328. Our community survery of 2001 had a number of questions regarding our rivers and fish resources: 82% of the respondents favored allowing rivers and creeks to follow their natural course, and 89% favored protecting healthy wild fish populations. Your help in this regard is appreciated.

Sincerely,

Lee Martin, President
COMMUNITY RIVERS PLANNING COALITION

Caroline Crenna
604 O'Cain St.
Sitka, AK 99835
(907) 747-8390

VIA FAX
Representative Paul Seaton
State Capitol, Room 102
Juneau, AK 99835
(907) 465-3472

January 13, 2006

Re: HB 328
Dear Sir:

I am a commercial salmon troll permit holder. Thank you for introducing HB 328 to provide an alternative to DEC's proposal to allow mixing zones in fresh water where salmon and other fish spawn. As you may be aware, after several years of weak demand and low prices for Alaska troll-caught salmon, the market has improved dramatically. More and more consumers are starting to recognize the importance of pure food which is untainted by antibiotics, pollutants and other chemicals. Alaska has a big advantage in this environment with its lakes, streams and rivers where fish can grow up healthy, due in large part to the high level of protection afforded by current state regulation.

I think it would be a big mistake to diminish that level of protection by allowing pollution mixing zones in fresh water where salmon and other fish spawn. If the difference between farmed fish and wild fish is perceived as insignificant, the consumer will likely return to the lower priced farmed fish which is readily available year round. I just heard on the radio that DEC has decided to rescind its rule-making proposal to allow such mixing zones. Yeah for us, and congratulations to you, Representative Olson, Representative Gatto, and Representative LeDoux. If things change, please let me know.

Sincerely,

Caroline Crenna

Caroline Crenna

Emily Stancliff

From: Nina Faust [fausbail@xyz.net]
Sent: Tuesday, January 31, 2006 9:25 AM
To: Rep. Jay Ramras
Subject: HB 328

P.O. Box 2994
Homer, AK 99603

January 12, 2006

House Resources
State Capitol, Room 102
Juneau, Alaska 99801

Dear Representative Ramras:

We support HOUSE BILL NO. 328, "An Act prohibiting mixing zones in freshwater spawning waters." A legislative fix is needed to prevent looser State regulations that would allow pollution in our streams and rivers. No matter how the State has tried to present its new regulations on mixing zones, it still comes back to the bottom line, which is that the new rules relax water quality standards in Alaska. The State appears to be scrambling to loosen controls on water quality to benefit pending big, new mines and timber operations. Alaska is the only state in the U.S. that can boast about its amazingly clean streams and lakes, but this will not last if the state allows relaxed mixing zone standards. We are adamantly opposed to doing this!

The Department of Environmental Conservation presented testimony to the House Special Committee on Fisheries on January 27, 2006. If the Legislature listens to DEC, Alaska water quality will likely go the way of so many streams, rivers, and lakes of the Lower 48 and elsewhere in the world. They will begin the gradual decline that will destroy our fisheries just as has happened most everywhere else. Already the State has granted roughly 32 questionable permits in salmon or other fish bearing waterbodies. These permits should be upgraded to require effluent to meet current state water quality standards or better.

Mixing Zones in streams supporting anadromous and other freshwater fisheries must be protected. Dumping pollution in Alaskan waters during times when fish are not spawning is not a solution. Over time, pollution accumulates in these waters. Somewhere it settles out, or fish slowly ingest the pollution. Without highly sophisticated testing programs, we will never know where the pollution goes, where it settles, or how it is slowly affecting the plants and animals in the water. Like elsewhere, it is a slow process of poisoning that someday shows up in fish in various ways. Why even allow this? The technology is available to make the effluent at the end of the pipe meet water quality standards. We believe this is what Alaskans want!

Our fisheries are the envy of the nation and comprise a vital and sustainable part of Alaska's economy. Allowing mixing zones threatens commercial, subsistence, and sport fisheries, all-important components of many Alaskan communities. How can the State promote fresh, wild salmon through a marketing campaign emphasizing the clean, healthy, organic qualities of Alaskan salmon if we relax mixing zone regulations? The State can try to dress it up anyway it wants but it is still an outmoded and discredited method of handling waste and should not be allowed.

The Legislature must act to set high, permanent water quality standards. Leaving these standards open to changes of convenience to accommodate cheaper development of other natural resources is not reasonable. The State would be providing a cheap, convenient way for industry to dispose of its wastes to develop a non-renewable resource at the expense of clean water and rich fisheries, which are diminishing riches in an increasingly polluted world.

Alaskans have been very clear on this topic—they do not support mixing zones! We still oppose mixing zones and urge the State to keep high water quality standards to protect our fisheries and the health of Alaskans. Please pass House Bill 328 without watering it down!

Sincerely,

Nina Faust and Edgar Bailey

IGIUGIG TRIBAL VILLAGE COUNCIL
A.K.A. Igiugig Village Council
P.O. Box 4008
Igiugig, AK 99613
Phone: (907) 533-3211 or Fax: (907) 533-3217 www.igiugig.com e-mail: igiugig@starband.net

January 30, 2006

Co-Chairs Resource Committee
Representative Jay Ramras
Fax # 907.465.3004

Dear Representative Ramras:

Please be advised that Igiugig Tribal Village Council (ITVC) and Igiugig Native Corporation (INC) strongly support HB328 and SB226 on mixing zones. Our community represented by ITVC and INC believe that the proposed legislation is the only mechanism that will insure the safety and quality of water sources in our region. Legislation will clearly dictate allowable uses of mixing zones and eliminate "interpretations" by managers and manipulation by politicians. Passage of this legislation will also send a clear message to the State and country that Alaska values its pristine water conditions and is taking strong measures to ensure sustainable water quality and renewable resources for future generations.

Igiugig Tribal Village Council (ITVC) and Igiugig Native Corporation (INC) strongly support passage of HB328 and companion bill SB226 on mixing zones. Please contact us for any further information that may be required on this issue.

Sincerely,

Lydia Olympic
ITVC President

Mike Andrew, Sr.
INC Vice President

Community Rivers Planning Coalition

"Communicating, Collaborating, Cooperating - For Our Future"

PO Box 1375
Anchor Point, AK 99556
(907) 235-2434
CRPC@pobox.xyz.net
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February 2, 2006

House Resources Committee
Alaska State House of Representatives
Juneau, Alaska

Re: Support for HB 328

The idea of allowing mixing zones in our Alaskan anadromous streams is ludicrous. The amount of money and effort that has gone into our fishing and tourism industries being able to market our "pristine" waters of Alaska is reaps great rewards and is producing positive returns to the State's economy and her coastal communities.

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Our organization encourages your full support for HB 328. Our community survery of 2001 had a number of questions regarding our rivers and fish resources: 82% of the respondents favored allowing rivers and creeks to follow their natural course, and 89% favored protecting healthy wild fish populations. Your help in this regard is appreciated.

Sincerely,

Lee Martin, President
COMMUNITY RIVERS PLANNING COALITION

Members

Alaska State Chamber of Commerce

Alaska Native Groups

Environmental Groups

Recreational Groups

Aquaculture Associations

Fishing Organizations

City of Kodiak

City of Kenai

City of Seldovia

City of Homer

Kodiak Island Borough

Kenai Peninsula Borough

Municipality of Anchorage

February 7, 2006

Representative Jay Ramras, Co-Chair
Alaska House Resources Committee
Alaska State Capital, Room 104
Juneau, Alaska 99801-1182

Re: Support for House Bill 328, "An Act Prohibiting Mixing Zones in Freshwater Spawning Waters"

Dear Representative Ramras:

Cook Inlet Regional Citizens' Advisory Council (CIRCAC) submits this letter in support of House Bill 328, "An Act Prohibiting Mixing Zones in Freshwater Spawning Waters" (HB 328), which was referred to the House Resources Committee on January 30, 2006.

CIRCAC is a nonprofit corporation organized exclusively for the oversight, monitoring, assessing and evaluation of oil spill prevention, safety and response plans, terminal and oil tanker operations, and environmental impacts of oil tanker and oil terminal operations in Cook Inlet under the provisions of Section 5002 of the Oil Pollution Act of 1990. Our mission is to represent the citizens of Cook Inlet in promoting environmentally safe marine transportation and oil facility operations in Cook Inlet. CIRCAC consists of 13 member communities as well as Alaska Native groups, commercial fishing and aquaculture, tourism, recreational and environmental interest groups that have a significant stake in the environment and resources at risk from oil production and transportation in the region.

On behalf of our member entities, CIRCAC participated in the public review and comment period during the Alaska Department of Environmental Conservation (ADEC) rulemaking to revise the state mixing zone regulations at 18 AAC § 70.240. We submitted written comments twice, in September 2004 and again in November 2005. In both sets of comments, we expressed strong opposition to ADEC's proposal to weaken existing state regulations governing mixing zones. The 2004 proposed changes, which would have removed the statewide ban on mixing zones in anadromous or resident fish or shellfish spawning or rearing areas, was in our estimation bad environmental policy. The 2005 proposed regulations contained some improvements, but maintained the loophole to allow mixing zone permits to be granted in anadromous fish spawning habitat. The adopted regulations published by ADEC on January 12, 2006 amount to a

reduction in overall pollution prevention when compared to the previously existing regulations at 18 AAC § 70.240 - 18 AAC § 70.270.

CIRCAC has a long history of working with stakeholder groups, state and federal agencies, spill responders, and oil companies to protect our precious natural resources from industrial pollutants. We have participated in efforts to improve oil spill prevention measures, enhance response capabilities, and develop site-specific Geographic Response Strategies (GRS) to prevent spilled oil from contaminating sensitive coastal environments, especially fish spawning habitat. We are concerned that the newly adopted regulations will undo this good work by allowing the intentional discharge of industrial effluents into streams, lakes, and other water bodies where salmon and other anadromous fish spawn.

The issue of anadromous fish spawning was CIRCAC's central concern throughout the ADEC mixing zone rulemaking process. The final, adopted regulations did not address CIRCAC's primary recommendation, which was for ADEC to maintain the previously existing ban on mixing zones in anadromous fish spawning areas without exception. HB 328 provides an opportunity to memorialize in Alaska Statute the ban on mixing zones in anadromous fish spawning areas, which would accomplish CIRCAC's primary objective to protect fish spawning habitat from industrial effluent pollution.

CIRCAC has commented on numerous state and federal rulemakings, and we understand that there is always some measure of compromise involved in developing regulations. However, the overwhelmingly negative response to the new regulations indicates that they are out of step with the water quality standards expected by federal regulators and stakeholders alike. CIRCAC's member entities consider the environmental quality of our anadromous fish spawning habitat to be of critical importance. Protecting spawning streams from pollution is an issue that merits statutory consideration. CIRCAC supports HB 328 because it would provide certain protection to anadromous fish spawning in Cook Inlet's freshwater streams, lakes, and rivers.

We hope that the House Resources Committee will expedite the passage of this important legislation to ensure that the highest water quality standards apply to Alaska's anadromous fish freshwater spawning areas.

If you have any questions, please feel free to contact me at (907) 283-7222.

Sincerely,

Michael Munger
Executive Director

*Cook Inlet Regional Citizens Advisory Council * 910 Highland Avenue, Kenai, AK 99611-8033*

*Phone: (907) 283-7222 * Fax (907) 283-6102*

cc: Rep. Paul Seaton
Rep. Carl Gatto
Rep. Gabrielle LeDoux
Rep. Beth Kurttula
Rep. Les Gara

*Cook Inlet Regional Citizens Advisory Council * 910 Highland Avenue, Kenai, AK 99611-8033*

*Phone: (907) 283-7222 * Fax (907) 283-6102*

United Southeast Alaska Gillnetters
P.O. Box 23378, Ketchikan, AK 99901 Phone & Fax (907) 247-2471 Email: usa_gillnetters@att.net

March 28, 2006

The Honorable Ralph Samuels, Co-Chair
House Resources Committee — Sent Via Fax to: 907 465-3810

The Honorable Jay Ramras, Co-Chair
House resources Committee — Sent Via Fax to 907 465-2070

Dear Representatives Samuels and Ramras,

The United Southeast Alaska Gillnetters would like to take this opportunity to reaffirm our support for HB 328 which will place in legislation protection for the habitat on which our salmon resource depends. This is the fifth letter we have written to DEC and members of the Legislature dealing with mixing zones. It does not seem productive to reiterate all of the issues that have been covered by past correspondence. The massive amount of public comment that DEC received on their proposed weakened regulations was nearly 100% opposed to allowing mixing zones of any nature in our salmon streams and most also oppose these zones in the tributary systems feeding into our salmon streams. The message to DEC and the State was clear. Alaskans want clean, healthy streams for their salmon and trout and do not want industry using these fresh water systems for any form of waste disposal.

The opposition to this legislation comes from parties who have no vested interest in the protection of our fresh water aquatic systems which this legislation provides. They have no interest in maintaining the same standard of purity that our fresh water systems currently enjoy. On the contrary, their interest lies in the use of these systems in a way that would reduce the quality of the receiving water and potentially endanger salmon and trout by permitting the disposal of industry waste in Alaska's streams. This should not be permitted and HB 328 will go a long way toward providing the protection our streams and fishery resources need. Let's not fail to learn from the mistakes that many states in the Lower 48 have made by allowing streams and fisheries resources to be compromised for the sake of short-term economic development. Our fisheries have produced jobs and income for Alaska for 100 years and will do so indefinitely if we continue to take care of the environment on which those resources depend.

The final regulations adopted by DEC are far better than the original drafts for which they sought public input. They do not however, provide the protection that the fresh water systems in Alaska have historically enjoyed and do not afford the protection provided by HB 328. We hope the House Resources Committee will support HB 328. Thank you for considering our comments.

Yours truly,

Kenneth Duckett
Executive Director

cc: Representative Elkins Sent Via Fax to: 907 465-3793

ALASKA MINERS ASSOCIATION, INC.

3305 Arctic Blvd., #105, Anchorage, Alaska 99503 • (907) 563-9229 • FAX: (907) 563-9225 • www.alaskaminers.org

January 19, 2006

Honorable Bill Thomas
Honorable Gabrielle LeDoux
House Fisheries Committee
Capitol Building
Juneau, AK 99801

RE: House Bill 328, Prohibiting Mixing Zones in Freshwater Spawning Waters

Dear Representatives Thomas and LeDoux,

The Alaska Miners Association opposes House Bill 328 which would prohibit the use of mixing zones in freshwater spawning waters. Mixing zones are an important tool for the State to use when managing water discharges, be it from municipalities, fish processing plants, or other industrial activities, including mining.

Since passage of the federal Clean Water Act (in about 1972), water quality standards have been extremely restrictive. This fact was recognized and mixing zones were therefore allowed under state law where the scientific evidence would justify use of mixing zones for defined portions of streams, rivers or lakes. The promise to mining and all potential dischargers has been that, yes the standards are very restrictive, but mixing zones would be available.

Alaska has just promulgated new mixing zone regulations. These regulations contain an absolute prohibition which will not allow mixing zones in salmon spawning areas. These regulations also provide numerous controls to ensure that mixing zones will not adversely impact other fisheries and other spawning areas. Not all mining operations will need to utilize these regulations but for some operations they will be absolutely essential. These regulations provide protection for fisheries and only when the science can support use of a mixing zone will one be allowed.

Thank you for the opportunity to comment on this important issue.

Sincerely,

Steven C. Borell, P.E.
Executive Director

cc: Representative Paul Seaton

Opposition

Louie Flora

From: POMS@legis.state.ak.us
Sent: Tuesday, January 31, 2006 12:49 PM
To: Louie Flora
Subject: New Pom:HB 328 Ban Mixing Zones In Spawning Areas

James Fellman
Po Box 2884

Soldotna 99669-2884,

The public process has been ongoning for 10 years and you want to just throw in a bill eliminating mixing zones, despite the fact that F&G does not oppose them. We will have to relocate the Soldotna sewage treatment plant. This bill&#39s sole purpose is to hamper industry.

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF WATER
OFFICE OF THE DIRECTOR

FRANK H. MURKOWSKI, GOVERNOR

555 Cordova Street
Anchorage, AK 99501-2617
PHONE: (907) 269-7599
FAX: (907) 334-2415
http://www.dec.state.ak.us

January 26, 2006

The Honorable Gabrielle LeDoux
Co-Chair, House Fisheries Committee
House of Representatives
Alaska State Capitol, Room 124
Juneau, Alaska 99801-1182

The Honorable William Thomas, Jr.
Co-Chair, House Fisheries Committee
House of Representatives
Alaska State Capitol, Room 124
Juneau, Alaska 99801-1182

Dear Representatives LeDoux and Thomas:

The Department of Environmental Conservation appreciates the opportunity to provide its position and comments on the CS for HB 328. Enclosed is my written testimony for your consideration. Should you have additional questions or prefer further detail, please let me know.

Sincerely,

Lynn J. Tomich Kent

Lynn J. Tomich Kent
Director

Enclosure: DEC CSHB 328 Testimony

cc: The Honorable Representative Harris
The Honorable Representative Elkins
The Honorable Representative Wilson
The Honorable Representative Kapsner
The Honorable Representative Salmon

Department of Environmental Conservation
CSHB 328 Testimony
House Special Committee on Fisheries
January 27, 2006

The Department of Environmental Conservation appreciates the opportunity to provide its position and comments on the CS for HB 328.

The Department is opposed to CSHB 328 for the following reasons:

1. **CSHB 328 is not necessary to protect anadromous salmon from either a scientific or a perception basis.**

   The Department of Environmental Conservation's regulations prohibit mixing zones in anadromous salmon spawning areas. CSHB 328 would put in statute the same protections for the five species of anadromous salmon that have been part of DEC's regulations since 1975.

   While these protections are not necessary from a scientific perspective, they go beyond science to address the need to protect salmon marketing and the public perception that Alaska's salmon are clean and healthy.

2. **There is no justification for extending the mixing zone prohibition to protect the salmon marketing effort to protect "non-salmon" fish species.**

   CSHB 328 would prevent DEC from authorizing a mixing zone in a non-salmon fish spawning area (Sec. 46.03.063(b)(2)) even in cases where science can show the mixing zone will have no adverse effect on spawning. There is no justification for extending the mixing zone prohibition which is intended to protect salmon marketing efforts to non-salmon fish species. Alaska needs to encourage and support responsible community growth and development of its natural resources.

   DEC's regulations allow exceptions to the prohibition of a mixing zone in "non-salmon" spawning areas when site specific conditions show that the fish species will be protected or any adverse impacts will be mitigated as determined by habitat and fisheries biologists with the Departments of Fish and Game, and Natural Resources.

   Alaska's communities and businesses should be allowed to use mixing zones if fish are protected. There is no justification for restricting responsible community growth and resource development that can comply with the state's requirements for the growth and propagation of fish.

3. **CSHB 328 would prohibit mixing zones in spawning areas for lampreys and smelts.**

   DEC would be prevented from authorizing a mixing zone in all anadromous fish spawning areas. Lampreys and smelts are fish species included in the definition of anadromous fish. Unlike the importance of salmon to Alaska's social and economic wellbeing, DEC does not believe non-salmon fish species justify an absolute prohibition on mixing zones that can comply with the scientifically based water quality standards for growth and propagation of fish.

4. **CSHB 328 would prohibit mixing zones that have become a fish spawning area unless the discharge was from a municipal wastewater facility.**

   It is possible for mixing zones to become spawning areas even though spawning was not occurring when the mixing zone was first authorized. DFG has discovered fish spawning in a mixing zone previously authorized for a drinking water utility, and in some cases for domestic wastewater facilities. Successful fish spawning in a mixing zone is evidence that the water quality in the mixing zone is not harmful to fish. Allowing mixing zones in areas that have become successful spawning areas should be allowed for any facility type, not just municipal wastewater facilities. Businesses and communities should not lose their mixing zones just because they are doing such a good job treating their wastewater that fish start spawning in them.

5. **CSHB 328 includes a definition of "area" that is counter to both past and current practices by the Departments of Fish and Game and Natural Resources when determining spawning areas on both a spatial and temporal basis.**

   The relative sensitivity of Alaska's fish resources is seasonal. Impacts from responsible community and resource development can be avoided by limiting uses and activities to times of the year when the fish resources are not there or other seasonal conditions eliminate adverse impacts to the fish resources. Alaska's resource agencies have traditionally employed "seasonal restrictions" to control development impacts to the environment.

   There are 32 currently permitted facilities with discharges that do not have an adverse effect on fish, in part due to timing restrictions imposed on their discharge via permit conditions. CSHB 328 would require the Department to cancel those permits and limit future permitting in similar situations without any net environmental benefit to the fish.

6. **CSHB 328 relies upon a new undefined term, "useful life" when referring to renewal of a mixing zone authorization for a municipal wastewater facility.**

   As many facilities age, they are upgraded to varying degrees from minor modifications to almost complete reconstruction. DEC knows of no standard or criteria for determining a facility's "useful life."

The "useful life" of a facility is also irrelevant to the properties and effects of a mixing zone or the methods necessary to protect fish.

7. **CSHB 328 is inconsistent with the current statute for protection of fish and game (AS 41.14.870), interference with salmon spawning streams and waters (AS 16.10.010), or submission of plans and specifications (AS 16.20.060).**

   Alaska's legislature has enacted a protective legal framework for all waters important to fish with additional protections for rivers, lakes and streams that are important for salmon spawning, rearing, or migration. State approval must be received from DEC, DNR, or DFG prior to the construction in, or use of waters important to fish spawning, rearing or migration.

   CSHB 328 prohibits all mixing zones in all anadromous fish and other specifically listed fish spawning areas. However, CSHB 328 does not amend or repeal the provisions in other state law that permit the use of fish spawning areas if there are no adverse impacts from that use. CSHB 328 conflicts with current legislative policy not specifically amended or repealed by CSHB 328.

8. **DEC is responsible for, and must be accountable for, setting and enforcing standards for environmental protection.**

   DEC has a duty under state statute to set and enforce standards for the prevention of pollution and protection of Alaska's environment (AS 44.46.020). The legislature has also directed DEC to "determine what qualities and properties of water indicate a polluted condition actually or potentially deleterious, harmful, detrimental, or injurious to . . . aquatic life or their growth and propagation" (AS 46.03.070).

   It is appropriate that the legislature hold DEC accountable for carrying out the duties and responsibilities spelled out in statute. However, we do not believe it is appropriate for the legislature to assume responsibility for carrying out the duties and responsibilities assigned to the executive branch by statute.

Emily Stancliff

From: Henrik Wessel [HWessel@gvea.COM]
Sent: Wednesday, February 01, 2006 12:47 PM
To: Rep. Jay Ramras
Cc: Rep. Mike Kelly; Steve H. Haagenson; Dave R. Hoffman; Kate K. Lamal; rschikora@gvea.net; Tom E. Irwin
Subject: HB 328 will shut down Healy Power Plant

Dear Representative Jay Ramras,
I am writing you in relation to HB 328 which I understand will outlaw thermal mixing zones. If that happens, Golden Valley Electric Association will no longer be able to operate it's Healy Power Plant Unit#1 which was rated #1 in the nation for 2004 for coal fired power plants capacity factor. Healy Unit#1 is our most economical power and helps our electric rates stay reasonable for our interior residents.
The thermal mixing zone we have in Healy is monitored closely and we report monthly to EPA. It has no environmental impact to the surrounding area. There is no reason to outlaw this.
If you have any questions, please do not hesitate to call me at (907)451-5627. Thank you,

Sincerely,

Henrik Wessel
Environmental Officer
Golden Valley Electric Association
(907)451-5627 (phone)
(907)451-5633 (fax)

Emily Stancliff

From: dvtweet [dvtweet@alaska.com]
Sent: Wednesday, February 01, 2006 1:47 PM
To: Rep. Jay Ramras
Subject: Mixing Zones

Rep Ramrsa

I heard that there is a bill in the resources committee to eliminate mizing zones. As a small placer miner mizing zones are very important to up. They are based of scientific critera and solid practical studies. In our case, there is no heavy or toxic metals released. There is only slighly turbid water and very little of that. There is no harm to the receiving water. I hope this bill does not pass out of your committee.

Thanks You
Dougas Tweet

RESOURCE DEVELOPMENT COUNCIL

Growing Alaska Through Responsible Resource Development

Founded 1975
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Thaddeus J. Owens
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Congressman Don Young
Governor Frank Murkowski

January 26, 2006

Representative Bill Thomas and Repr[illegible]ntative Gabrielle LeDoux
Co-Chairs, House Fisheries Committee
Alaska State Legislature
State Capitol
Juneau, AK 99801-1182

Re: House Bill 328 — Ban Mixing Zones in Spawning Areas

Dear Representatives Thomas and LeDoux:

On behalf of the Resource Development Council for Alaska, Inc. (RDC), I am writing to express our opposition to House Bill 328.

RDC is a private, non-profit business association comprised of individuals and leading companies from Alaska's oil and gas, mining, forest products, fisheries and tourism industries. The association's membership also includes construction companies, local communities, Native corporations, organized labor and a wide range of industry-support firms. RDC works to grow Alaska's economy through the responsible development of the state's natural resources.

As a matter of policy, RDC favors regulatory flexibility over prohibitions whenever possible. The intent of this position is not to weaken or diminish Alaska's rigorous environmental protection standards, but rather to give communities and industry operators the chance to develop creative solutions to permitting challenges. Going forward, technological advances, seasonal restrictions and other developing best practices may create opportunities for environmentally-sound development to occur in places it may not have in the past.

RDC appreciates the work the Department of Environmental Conservation (DEC) has done to develop the current regulations for mixing zones. DEC's process began in 2004 and the department's original proposal underwent two major redrafts before it was adopted as final earlier this year. DEC has worked diligently with the public, the Department of Fish and Game and the Department of Natural Resources to develop a sound regulatory framework for mixing zones in Alaska.

It is important to note the current regulations in no way undermine the ultimate responsibility Alaska's resource agencies have to protect rivers, lakes and streams important to anadromous and resident fish. In fact, under the current regulations, mixing zones in spawning areas will always be the exception rather than the rule in Alaska. However, the resource agencies are responsible for managing multiple uses of Alaska's water. In

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Phone: 907/276-0700 Fax: 907/276-3887 Email: Resources@akrdc.org Website: www.akrdc.org

addition to protecting aquatic life, the agencies must take into account domestic, commercial, industrial and recreational uses.

HB328 takes an overly conservative approach to mixing zones. The bill's prohibition precludes the state resource agencies from working with communities and industrial users to develop creative solutions to permitting challenges. When compared with the current regulations, the potential costs of HB328 outweigh its potential benefits.

Some have tried to characterize this issue as a conflict pitting Alaska's fishing industry against communities and other industries. RDC does not believe this to be the case at all. Too often in Alaska the public and policy makers are encouraged to view the relationship between conservation and development as a zero-sum game — what's good for one stakeholder must be equally detrimental to another.

Given favorable circumstances and proper management and oversight, mixing zones and healthy fish stocks can coexist. Alaska's resource agencies have the regulatory framework, technical expertise and resources in place to make sound determinations on a case-by-case basis. The current regulations will protect Alaska's fisheries without unduly burdening other legitimate uses of the state's water. RDC encourages the House Fisheries Committee not to move HB328 forward.

Thank you for considering RDC's position on this important issue.

Sincerely,

RESOURCE DEVELOPMENT COUNCIL
For Alaska, Inc.

Tadd Owens

Tadd Owens
Executive Director

Council of Alaska Producers

P.O. Box 22653 Juneau, Alaska 99802

January 27, 2006

Honorable Bill Thomas
Honorable Gabrielle LeDoux
House Fisheries Committee
Capitol Building
Juneau, AK 99801

RE: House Bill 328 Prohibiting Mixing Zones in Freshwater Spawning Areas

Dear Representatives Thomas and LeDoux:

The Council of Alaska Producers (CAP) is a consortium of member mining organizations involved in the responsible development of natural resources in the State of Alaska. We represent a group of companies that are currently operating mines, that are exploring for minerals, or that are associated with the development of mining operations that utilize or intend to utilize chemical extraction of ores as their primary mineral processing method.

The CAP represents its membership in assisting in the development of state and federal legislation and regulation pertaining to responsible mineral development in Alaska. The CAP strives to provide a medium of constructive cooperation among its members, public agencies, and other groups associated with the development of mineral resources in Alaska.

The CAP is opposed to HB 328 which would prohibit mixing zones in freshwater spawning areas. Mixing zones are an important tool for the state to use when managing water discharges whether the discharge is from municipalities, fish processing plants, or other industrial activities, including mining.

HB 328 is not necessary to protect anadromous salmon from either a scientific or a perception basis. Alaska (DEC) has just promulgated new mixing zone regulations. The department's regulations prohibit mixing zones in anadromous salmon spawning areas. HB 328 would put in statute the same protections for the five species of anadromous salmon that have been part of DEC's regulations since 1975.

HB 328 would also prohibit mixing zones that have become a fish spawning area unless the discharge was from a municipal wastewater facility. Mixing zones have become

spawning areas even though spawning was not occurring when the mixing zone was first authorized, which suggests the water quality in the mixing zone is not harmful to fish. Mixing zones in areas that have become successful spawning areas should be allowed for any facility type, not just municipal wastewater facilities. With HB 328, existing businesses and communities could lose their ability to discharge if the mixing zone is not a municipal wastewater facility.

The Alaska Department of Conservation DEC is responsible for setting and enforcing standards for environmental protection. The legislature's responsibility should be to hold the department accountable for their responsibilities under appropriate statute, not assume their responsibilities.

The CAP urges you not to pass HB 328 out of committee. Thank you for the opportunity to comment on this important issue.

Sincerely,

Rich A. Heig

Rich A. Heig
Vice President
Council of Alaska Producers

ALASKA MINERS ASSOCIATION, INC.

3305 Arctic Blvd., #105, Anchorage, Alaska 99503 • (907) 563-9229 • FAX (907) 563-9225 • www.alaskaminers.org

January 19, 2006

1

Honorable Bill Thomas
Honorable Gabrielle LeDoux
House Fisheries Committee
Capitol Building
Juneau, AK 99801

RE: House Bill 328, Prohibiting Mixing Zones in Freshwater Spawning Waters

Dear Representatives Thomas and LeDoux,

The Alaska Miners Association opposes House Bill 328 which would prohibit the use of mixing zones in freshwater spawning waters. Mixing zones are an important tool for the State to use when managing water discharges, be it from municipalities, fish processing plants, or other industrial activities, including mining.

Since passage of the federal Clean Water Act (in about 1972), water quality standards have been extremely restrictive. This fact was recognized and mixing zones were therefore allowed and are state law where the scientific evidence would justify use of mixing zones for defined portions of streams, rivers or lakes. The promise to mining and all potential dischargers has been that, yes the standards are very restrictive, but mixing zones would be available.

Alaska has just promulgated new mixing zone regulations. These regulations contain an absolute prohibition which will not allow mixing zones in salmon spawning areas. These regulations also provide numerous controls to ensure that mixing zones will not adversely impact other fisheries and other spawning areas. Not all mixing operations will need to utilize these regulations but for some operations they will be absolutely essential. These regulations provide protection for fisheries and only when the science can support use of a mixing zone will one be allowed.

Thank you for the opportunity to comment on this important issue.

Sincerely,

Steven C. Borell, PE
Executive Director

cc: Representative Paul Seaton

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

OFFICE OF THE MAYOR
Telephone: (907) 586-5240, Facsimile: (907) 586-5385
Mayor@ci.juneau.ak.us

February 28, 2006

The Honorable Ralph Samuels, Co-Chair
House Resources Committee
State Capitol, Room 126
Juneau, Alaska 99801-1182

The Honorable Jay Ramras, Co-Chair
House Resources Committee
State Capitol, Room 104
Juneau, Alaska 99801-1182

Subject: CS HB 328 (FSH)

Dear Representatives Samuels and Ramras:

In December 2005, the City and Borough of Juneau adopted Resolution 2338 opposing the Department of Environmental Conservation's (DEC) proposed 2005 mixing zone regulations. The Assembly expressed concern that these proposed regulations, which included several exemptions to the prohibition on mixing zones in fish spawning areas, would have resulted in an increase in wastewater discharge pollution in salmon streams. Threats to the health of salmon and other fish are unacceptable to the many Alaskans who depend on the well-being of Alaska's unsurpassed fish populations. DEC's newest regulations (adopted January 12, 2006) contain several provisions that compromise the health of salmon and other fish, most noticeably the authorization for the Department of Natural Resources to "temporally", as well as spatially, define spawning areas.

HB 328, introduced by Representative Paul Seaton, and as amended in the House Special Committee on Fisheries, offers rational legislation to protect the salmon-based economy of Southeast Alaska. The bill clearly defines a spawning area as a physical area, which closes the "temporal" loophole that allows mixing zones in spawning areas. It also protects the spawning of non-salmon fish (which are also important in Southeast Alaska) from the exemptions in the new regulations. If passed, HB 328 would help provide the protection for fish that Alaskans deserve, as well as preserve the unmatched wild salmon reputation Alaska holds around the world.

Sincerely,

Bruce Botelho
Mayor

cc: Representative Paul Seaton

Louie Flora

From: Busbys/Chicken Gold Camp [chickengold@starband.net]
Sent: Sunday, March 12, 2006 9:59 AM
To: Louie Flora
Cc: sborell@alaska.net
Subject: HB328

Hi Louie,

Please let Rep Seaton know that I oppose the elimination of mixing zones in salmon stre ms. There seems to be a misconception that salmon only thrive in pristine waters. Science on the other hand, suggests that salmon are the 'rototillers' of fresh water streams, affecting whole ecosystems: http://uwnews.org/uweek/uweekarticle.asp?articleID=23014. And science also suggests that mixing zones can provide all of the needed protection to support multiple industries in a watersshed.

Thanks.
Mike Busby
Hom er

Alaska Conservation Voters

810 N St, Ste 203, Anchorage Alaska 99501 / Ph. 907.258.6171 / Fax 907.258.6177
PO Box 22151, Juneau Alaska 99802 / Ph. 907.463.3366 / Fax 907.463.3312 / www.acvoters.org

March 29, 2006

The Honorable Jay Ramras
Co-Chair, House Resources Committee
House of Representatives
Alaska State Capitol, Room 124
Juneau, Alaska 99801-1182

The Honorable Ralph Samuels
Co-Chair, House Resources Committee
House of Representatives
Alaska State Capitol, Room 124
Juneau, Alaska 99801-1182

Dear Representatives Ramras and Samuels,

On behalf of the Alaska Conservation Voters, a statewide agency that works to protect Alaska's environment through public education and advocacy, I would like to commend Representatives Seaton, Olson, Gatto, LeDoux, Kerttula and Gara for their efforts to advance HB328 and close the loopholes in current mixing zone regulations.

Between February 7 and 9, a statewide poll of 301 randomly selected registered voters was conducted to determine individuals' stances on mixing zones. The poll was funded by the Alaska Conservation Voters and was conducted by an independent research agency, Hays Research Group. From the results, it was determined that 83.1% of respondents were opposed to allowing mixing zones in salmon spawning areas. The second question in the poll focused on whether or not allowing mixing zones would have an impact on the effectiveness of the Wild Alaska Salmon marketing campaign, with a resulting 64.8% of respondents indicating that they believe there would be an impact. The attached sheet summarizes the results of the poll and provides statistical information on percentage distributions and the margin of error.

The Alaska Conservation Voters would like to thank you for your consideration and support of HB328.

Sincerely,

Kate Troll

Kate Troll
Executive Director

cc: The Honorable Representative Elkins
The Honorable Representative Gatto
The Honorable Representative LeDoux
The Honorable Representative Olson
The Honorable Representative Seaton
The Honorable Representative Crawford
The Honorable Representative Kapsner

HB 328 [Ban Mixing Zones in Spawning Areas]

• *Poll Results* •

810 N St, Ste 203, Anchorage Alaska 99501 / Ph. 907.258.6171 / Fax 907.258.6177
PO Box 22151, Juneau Alaska 99802 / Ph. 907.463.3366 / Fax 907.463.3312 / www.acvoters.org

As part of a statewide poll funded by Alaska Conservation Voters and conducted by an independent agency (Hays Research Group) between February 7 and 9, two questions were asked regarding individuals' stances on the issue of mixing zones. Exactly 301 randomly selected registered voters were surveyed statewide. The margin of error for the sample is +/- 6% with a 95% confidence level; in other words, we can be 95% sure that if every resident of Alaska was actually surveyed, the results would vary by no more than 6% in either direction.

Question 1-- Mixing zones are areas in water bodies where toxic waste discharge is allowed to exceed pollution limits when diluted with uncontaminated water. Under current regulations mixing zones are banned in salmon spawning areas, but the Administration would like to relax the regulations - do you oppose or support allowing the use of mixing zones in salmon spawning areas?

	Total Answers (out of 301)	% of Total Answers
Support	39	13.0%
Oppose	250	83.1%
Don't Know/Refused	12	4.0%

Question 2-- Considerable state and federal resources have been spent developing a Wild Alaska Salmon marketing campaign, do you think allowing Mixing Zones in salmon streams and rivers will impact the effect of this marketing campaign?

	Total Answers (out of 301)	% of Total Answers
Yes	195	64.8%
No	67	22.3%
Don't Know/Refused	39	13.0%

Alaska Conservation Voters works to protect Alaska's environment through public education and advocacy. As the political arm of Alaska's conservation movement, ACV works during the legislative session to educate legislators and the public on conservation issues and to organize concerned Alaskans at the grassroots level. Alaska Conservation Voters has been working since 1997 to protect our quality of life by electing conservation candidates, fighting anti-conservation legislation and promoting pro-environment laws.

Alaskans building a better future.

YUKON RIVER DRAINAGE FISHERIES ASSOCIATION

725 CHRISTENSEN DRIVE, SUITE 3-B • ANCHORAGE, ALASKA 99501
TELEPHONE: 907-272-3141 • 1-877-99YUKON(9-8566)
FAX: 907-272-3142 • EMAIL:INFO@YUONSALMON.ORG
WWW.YUKONSALMON.ORG

April 3, 2006

Representative Jay Ramras
State Capitol, Room 104
Juneau, AK 99801

Re: Public Testimony to the House Resources Committee on HB 328

Dear Representative Ramras:

I am writing on behalf of the Yukon River Drainage Fisheries Association (YRDFA) to provide public testimony on HB 328 to the House Resources Committee. YRDFA represents subsistence and commercial fishers on the Yukon River. YRDFA opposed DEC's proposed mixing zone regulations in both 2004 and 2005. We do not feel that DEC's new regulations provide adequate protection to salmon and non-salmon species. We support HB 328 to protect fish from mixing zone pollution.

Mixing zones pose threats to anadromous and freshwater fish populations. Salmon in particular plays an important cultural and economic role for those who live on the Yukon River. For many residents the commercial salmon harvest provides the only means of income for those who live in the remote villages of the Yukon River. Salmon and other freshwater fish provide a primary source of food for residents along the Yukon River, including food for dogs utilized in subsistence activities. Mixing zones, by allowing levels of pollution otherwise prohibited under water quality standards, pose a threat to anadromous and freshwater fish and Yukon River fishers who depend on these fish for income and subsistence

Mixing zones also threaten commercial salmon markets. Alaska salmon is valuable in the market precisely because of the clean, healthy waters in which our salmon swim. YRDFA and Yukon River fishers have invested significant amounts of time and money in marketing campaigns focused on the wild, healthy status of Alaska's salmon waters. Allowing mixing zones in salmon spawning areas even when salmon are not spawning will severely harm this image, counter these efforts and threaten the marketability of Alaska salmon products.

While the regulations as adopted maintain some degree of protection for salmon, they leave much to be desired. They give DEC far too much discretion in identifying salmon spawning areas - under these new regulations, a mixing zone could be allowed in a salmon spawning area when spawning fish are not present. This loophole ignores the importance of spawning grounds not only for fish spawning, but for fish rearing as well. The regulations also give DEC the ability to defer to Department of Natural Resources Biologists' opinion in determining spawning areas and ignore the Alaska Department of Fish & Game's determinations.

The new regulations continue to place far too much of the responsibility for showing that a mixing zone will not have adverse affects for fish in the hands of the permit applicant. Finally, the proposed regulations offer even less protection for non-salmon species, which many Yukon River subsistence fishers rely on before and after the salmon are running and in years of low salmon returns for sustenance for themselves and their sled dogs. For non-salmon species, under the new regulations DEC can authorize a mixing zone in a spawning area if the applicant simply submits a mitigation plan. The grandfather clause, which allows DEC to renew a mixing zone authorization in a salmon spawning area if salmon were not present at the initial time of permitting, threatens to counter habitat restoration and dam removal efforts throughout the state. Under this rule, if habitat is restored and fish are able to return to their spawning grounds, newly restored fish populations would then have to contend with a mixing zone in their spawning grounds.

HB 328 would once again prohibit mixing zones in spawning areas for salmon and non-salmon species. This would ensure that these species are adequately protected and that Alaskans will not have to continue to spend their valuable time working to maintain these protections.

On behalf of YRDFA and subsistence and commercial fishers on the Yukon River I urge the House Resources Committee to support HB 328.

Sincerely,

Becca Robbins
Policy Coordinator

OCEANA

175 SOUTH FRANKLIN STREET, SUITE 418 JUNEAU, ALASKA 99801 907.586.4050 WWW.OCEANA.ORG

April 4, 2006

The Honorable Jay Ramras
Co-Chairman House Resources Committee
State Capitol, Room 104
Juneau, AK 99801-1182

The Honorable Ralph Samuels
Co-Chairman House Resources Committee
State Capitol, Room 126
Juneau, AK 99801-1182

Dear Chairman Ramras and Chairman Samuels,

We support House Bill (HB 328), the Ban Mixing Zones in Spawning Waters bill, that would provide protection for the fish in our rivers, streams, lakes and oceans. We encourage you to take up and pass this bill out of the House Resources Committee. If enacted, it will reinstate the overwhelmingly supported and long-standing prohibition on pollution mixing zones in freshwater spawning areas, protecting the health and reputation of our wild Alaska salmon and freshwater fish. In addition, we suggest making two amendments to the bill that will further protect our fish.

The initial prohibition on mixing zones in freshwater spawning habitat made economic and biological sense. Wild Alaska salmon demand the best prices in part because of their unsurpassed quality that comes from our healthy and clean streams, rivers, and oceans. In return, healthy salmon runs help sustain Alaska's watersheds and maintain our ocean ecosystems. Salmon and other freshwater fish are integral to Alaska's booming tourism sector, bringing recreational anglers from around the world to the state. The initial prohibition on mixing zones helped ensure salmon and other renewable fish resources were protected from undue harm, guaranteeing these important economic, cultural, subsistence, and recreational resources will remain as vibrant in years to come as they are today.

While an improvement from the Administration's 2005 proposal, the new mixing zone regulations put into effect by the Administration in January was still a step in the wrong direction. The new regulations allow pollution mixing zones in freshwater spawning areas. For Pacific salmon spawning areas the mixing zones are limited to times of the year when spawning salmon, eggs, and larvae are not present. For other sport fish the prohibition on pollution mixing zones is ended. The new regulations will hurt Alaska by damaging the biological integrity of our watersheds and oceans, and it will hurt Alaskans by opening the door for pollution to mix with the fish we catch, eat and sell.

PRINTED WITH SOY INK

HB 328 is a bipartisan bill that will restore the prohibition of pollution mixing zones in freshwater spawning areas. It also solves municipality and industry concerns by keeping man-made ditches and holding tanks from being classified as freshwater spawning areas if spawning fish start using them. While we are strongly supportive of this legislation, we support and encourage you to make two amendments to the bill:

1. A new provision requiring fences in man made ditches with pollution mixing zones to keep our wild salmon and freshwater fish from entering and spawning in polluted water.
2. Expansion of the prohibition of pollution mixing zones to include juvenile fish nursery areas.

These provisions will further protect Alaskans by greatly limiting the possibility the fish we catch, eat and sell will enter polluted waters. At the same time, the addition of these provisions will have a negligible impact on businesses and municipalities.

It is irresponsible to turn back protections for our salmon and freshwater fish spawning beds that play a crucial role in our productive environment and to our economy. Alaska's families depend on healthy watersheds and ocean ecosystems. Marketing of our salmon and recreational and subsistence fishing opportunities depend on pristine watersheds. Though there may be short-term benefits to some specific entity, person or industry to allow mixing zones, the long-term cost to Alaskans is simply too high. Please help bring this shortsighted policy to an end by passing HB 328 out of the Resources Committee with the two provisions we recommend and a favorable report for passage by the full House.

Sincerely,

Jim Ayers

Jim Ayers,
Vice President

CC Representative Seaton
Representative Olson
Representative Gatto
Representative Ledoux
Representative Kerttula
Representative Gara

April 3, 2006

The Honorable Representative Ramras
The Honorable Representative Samuels
Members of the House Resources Committee
Alaska State Legislature
Juneau, Alaska

Dear Representative Ramras and Representative Samuels:

I am submitting this testimony in support of House Bill 328 which retains the strict prohibition against mixing zones in salmon and resident fish spawning streams. Since I am unable to attend the April 3 hearing, I have asked Kate Troll to read my testimony into the record.

Since my arrival in Alaska in 1955, my professional life has been devoted to the protection of Alaska's fish and game resources. I spent 30 years working for the Department of Fish and Game (ADF&G) and served as the ADF&G Commissioner during Governor Hickel's administration. I have been an active member of the Territorial Sportsmen and the Outdoor Council and sat on their boards.

After a life time of working to provide our fish with healthy habitat and water quality, it is truly disconcerting to witness the backsliding of our historically strong fisheries management and protective regulations and witness Alaska's world renowned fisheries placed at risk.

At statehood, Alaska "took on" the management of the state's fisheries. At the time, salmon runs were badly abused. Alaska's strong constitutional mandate, the implementation of tight management programs and the essentially intact habitat - all contributed to the return of healthy runs. Some systems took longer than others to recover; some of the last ones to recover were those whose habitat had been compromised.

In those early years of statehood and continuing into future decades, Alaska's fisheries managers clearly understood the critical role that habitat and water quality play in the maintenance of healthy fish runs. **It was clear to them that the answer to pollution was not dilution.** All around us, we were witnessing the coastwide loss of habitat. The Great Lakes are a looming example of how dilution is not the answer to pollution. People couldn't eat the fish, they couldn't swim in the lakes. Rather, the Great Lakes have left a legacy of pollution and a clean-up bill for our generation and probably for several generations to come.

It is disheartening that, in Alaska, we seem hell bent on doing the same thing by creating these mixing zones that place our fisheries resources at risk. True, the demise of this little creek and that little creek is not going to make much difference but, as the state grows, we will see the pollution of these little systems causing a cumulative effect on habitat loss and total production.

Since 1995, state regulations have explicitly prohibited mixing zones in freshwater areas where fish spawn. This regulation was specifically adopted to protect Alaska's fisheries and support Alaska's constitutional mandate to protect and conserve fish and game

resources in a sustainable manner. It has been a hallmark of Alaska's strong commitment to our fisheries resources and it distinguishes Alaska's resource management from those of other states.

Unfortunately, the Department of Environmental Conservation's newly adopted regulations seriously weaken this strict prohibition by permitting the Department of Natural Resources (DNR) and, in some limited cases, the ADF&G to "determine spawning areas both temporally and spatially."

It is baffling to me that Alaska's resource managers should now consider allowing mixing zones in spawning areas when we know the history of what has happened along the entire Pacific Coast with this kind of misuse of water resources. Why get on this slippery slope when we have a system that has worked?

During all my years with the Department of Fish and Game, this would never have been allowed to occur. True, there have been exceptions made under very controlled conditions and that's acceptable; there's nothing wrong with some exceptions along the way. However, mixing zones were to be the **exception and not the rule.**

It is especially short-sighted and dangerous to relax the state restrictions, when the Habitat Division has been moved from ADF&G to DNR. With this move, the habitat authority and permit responsibility no longer reside with the ADF&G. There is no loyalty to fish per se in the DNR. The loyalty to that resource is with Fish and Game; and the fish and those commercial, sports and subsistence users who rely on healthy fisheries resources lost big time when that move occurred.

I have always been a supporter of the regulatory process. I was proud of the strict prohibition on mixing zones in spawning areas which were adopted in regulation during my tenure with the Administration. However, the newly adopted DEC regulations clearly fly in the face of fisheries' and habitat protection and do not reflect Alaska's constitutional mandate. This is why I urge the Alaska legislature to pass House Bill 328.

Thank you for your time and consideration.

Sincerely,

Carl L Rosier

Carl Rosier, ADF&G Commissioner (retired)
8298 Garnet Street
Juneau, Alaska

UNITED FISHERMEN OF ALASKA

211 Fourth Street, Suite 110
Juneau, Alaska 99801-1172
(907) 586-2820
(907) 463-2545 Fax
E-Mail: ufa@ufa-fish.org
www.ufa-fish.org

March 24, 2006

The Honorable Frank H. Murkowski
Governor, State of Alaska
Post Office Box 110001
Juneau Alaska 99811-0001

Dear Governor Murkowski,

United Fishermen of Alaska has been actively involved in the process to update Mixing Zones regulations in the triennial review of water quality standards, and we appreciate the response from your administration in addressing our concerns. Due to the potential impacts and because there is both a proposed legislative statutory remedy as well as an implemented regulatory structure, the UFA Board of Directors spent significant time at its recent meeting addressing its position on mixing zones.

In comparing the newly adopted regulations with the potential statutory language under CSHB 328, we acknowledge that writing a prohibition of mixing zones into statute brings the desired degree of emphasis on the protection of salmon that we seek. We also recognize that this action carries with it the need for legislative action for any changes or refinement of definition that may be necessary in the future. The triennial review process that all water quality regulations undergo will still be necessary, and can provide a high degree of protection yet still allow for other uses that after review, would be deemed to not cause harm to salmon or salmon habitat.

In the recently implemented regulation there is not the same high standards directly given to resident fish populations; they are only covered conditionally as a by product of the prohibitions for waters with salmon presence, and such other regulatory language as applicable.

Realizing that both CSHB 328 and the newly implemented regulatory language on mixing zones, with the concurrent Memorandum of Understanding between DNR and ADF&G are in many ways parallel and have the same objective as it relates to the health and well being of the salmon stocks of the State of Alaska, it would be unreasonable to oppose either course. However it is necessary to support one of the two as the protections are basic to the long term viability of the resource and our industry.

Considering your strong words of support for the resource and the improved regulatory language change which you facilitated, UFA is comfortable with the current regulatory language. We look forward to continued participation in the water quality standards triennial review process, and will work with ADFG, DEC, DNR, and for the long term sustainability of our industry and the marine resources of the State of Alaska.

Sincerely,

Bruce H. Wallace

Bruce Wallace
Enviromental Chair

Mark Vinsel
Executive Director

STATE OF ALASKA

FRANK H. MURKOWSKI, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF WATER
DIRECTOR'S OFFICE

555 Cordova Street
Anchorage, AK 99501-2617
PHONE: (907) 269-7599
FAX: (907) 334-2415
http://www.state.ak.us/dec/

April 10, 2006

The Honorable Paul Seaton
House of Representatives
Alaska State Capitol, Room 102
Juneau, AK 99801-1182

RE: Request for mixing zone information

Dear Representative Seaton:

On April 6 Louie Flora of your office requested additional information related to spawning fish and mixing zones. His questions are below and the Department of Environmental Conservation (DEC) has provided answers with assistance from the Departments of Natural Resources (DNR) and Fish and Game (F&G) on those questions dealing with fish, spawning, and habitat.

1. **The old Mixing Zone regulations at 18 AAC 70.255(h) stated that mixing zones will not be authorized in an area of anadromous fish spawning or resident fish spawning redds. While we understand that the practice has been to authorize mixing zones on a temporal as well as spatial basis, for the purposes of this question we would like to stick just to the spatial. Can you please clarify the DEC, DNR and ADF&G interpretation of what an "area of anadromous fish spawning" and a "resident fish redd" is spatially?**

OHMP (formerly ADF&G-Habitat) considers an area "anadromous fish spawning" if anadromous fish species are known to utilize the stream segment for spawning. Since run strength varies by year and this in turn influences how much of traditional spawning habitat is used from year to year, multiple years of record are considered. Information sources include personal knowledge, ADF&G local area biologist information, other state or federal resource agency information, the anadromous waters catalog, and local knowledge. The working knowledge for anadromous fish spawning areas isn't perfect but most locations and stream reaches are known.

"Resident fish redds" are determined in a similar fashion except that they include both stream segments with actual redds for depositional spawners and known areas used by broadcast spawners. Information sources are similar to those for anadromous species. Agency working knowledge for resident fish spawning areas is less extensive than for anadromous species but it is augmented by best professional judgment based on the known habitat types and areas different species prefer for spawning.

In both instances, if the agencies lack necessary information, a permittee may be required to gather data on spawning. Also, OHMP's determinations are subject to revision should new information indicate that an area supports spawning (see 18 AAC 70.240(m) and DEC determines that an approved mixing zone is causing a significant adverse environmental effect.

2. **There has been concern expressed that under the flat prohibition a broadcast spawning species could in effect shut down entire watersheds to the permitting of wastewater discharges. Generally what is the length of a "broadcast" when a broadcast spawner spawns, and do they spawn in a specific type of river habitat?**

The length of a "broadcast" is dependent on the water velocity present at the time of spawning. As the name implies, broadcast spawners do not construct a nest or "redd" but rather passively discharge their eggs (which are then mixed with sperm in the water column). The fertilized eggs then drift to the stream bottom where they either adhere to rocks and vegetation or lodge between the gravels. Different species use a variety of habitats. For example, northern pike prefer to spawn in grassy margins of lakeshores, slow moving streams or sloughs. Arctic grayling will utilize a variety of habitats for spawning but tend to prefer slow water margins of streams or rivers and adjacent ponds or wetland complexes that warm up quicker in the spring.

3. **Has a river system where grayling or other broadcast spawning species inhabit been placed off limits to discharges and can you provide us with a number of instances when a mixing zone permit was denied in an area because of broadcast spawning?**

No river systems have been "placed off limits to discharges" because broadcast spawning species reside in the system. DEC has authorized mixing zones in river systems that are inhabited by broadcast spawners, but has placed timing restrictions on the discharges to avoid times when spawning fish, eggs, and alevins are present, based on a determination made by DNR or F&G (depending upon which agency has jurisdiction over a particular water body).

DEC can not track those potential dischargers that change their project once they learn that they would not be eligible for a mixing zone based on a prohibition on mixing zones due to spawning. Nor has DEC consistently tracked in the past, permits that were denied because the discharge could not avoid spawning (from either a temporal or a spatial basis). However, listed below are a few examples of mixing zone authorizations that were denied.

Nyac Placer Mine	Tuluksak River	Anadromous and Resident	No MZ granted. DNR/Habitat said no time when wastewater can be discharged. Applicant must meet WQS at end of pipe.
Nyac Placer Mine	Bear Creek	Anadromous and Resident	No MZ granted. DNR/Habitat said no time when wastewater can be discharged. Applicant must meet WQS at end of pipe.
Nyac Placer Mine	California Creek	Anadromous and Resident	No MZ granted. DNR/Habitat said no time when wastewater can be discharged. Applicant must meet WQS at end of pipe.
Moose Creek Apartments	Moose Creek	Anadromous and Resident	No MZ granted. Built a septic tank/leach field system and eliminated the wastewater treatment plant.
Golden Heart Utilities Drinking Water facility – filter backwash	Chena River	Resident	Existing continuous discharge to a grayling spawning area. Facility could not comply with discharge timing restrictions to avoid spawning. The discharge has been eliminated at significant initial and ongoing expense.

4. **Are all the placer mine discharges currently permitted for seasonal discharges into spawning streams for turbidity alone? In testimony before the House Resources Committee on April 5th a statement was made that "the bill eliminates any opportunity for a mixing zone for any other water quality criteria. Turbidity is one of many constituents that must be addressed before a mixing zone can be issued. Turbidity has been determined to be an indicator or surrogate such that if turbidity limits are met, the criteria for the other constituents will also be met" Is this a correct statement? Does DEC currently measure water quality criteria limits for metals based on the criteria for turbidity? It is our understanding that 5 Nephelometric Turbidity Units above background is the most stringent criteria to be met at the edge of a turbidity mixing zone. In the case of Toxic and Other Deleterious Organic and Inorganic Substances (18 AAC 70.020 (b) (11)) has it been the common practice to assume that 5 NTUs provides an adequate surrogate measurement when issuing a mixing zone permit?**

A copy of the current general permit for mechanical placer mining is attached. Placer mines authorized to operate under this general permit have effluent limitations for turbidity, settleable solids (sediment), and arsenic (see page 11). Water quality monitoring requirements under the permit include those three parameters and flow rates. The permit allows for a modified turbidity limit based upon a mixing zone authorized by DEC.

Placer mining is a physical process to extract metals and therefore, the metals are left in a particulate form. The decision to base the mixing zones for placer mine discharges on turbidity was based on a significant body of water quality data associated with the placer mining industry. The data indicate a relationship between turbidity and metals -- the water quality criteria for metals are met at or before the edge of the mixing zone where turbidity criteria are also

met. Water quality criteria for metals might be exceeded in these mixing zones, but the permit does not require monitoring for specific metals (except for arsenic in certain situations). This current permitting approach and mixing zone calculation (for turbidity) includes a requirement to use a more conservative low flow calculation (normally used for toxic substances), rather than the less conservative flow that would be used for conventional or non-toxic substances such as turbidity.

In most other types of discharges (e.g. mining with chemical metals extraction, municipal wastewater treatment), turbidity would not be a good indicator for metals because most of the metals are dissolved in the water and would not show up as turbidity. Most permits for these other dischargers require metals to be measured directly and do not use turbidity.

Sincerely,

Lynn J. Tomich Kent

Lynn J. Tomich Kent
Director

Enclosure: NPDES General Permit for Mechanical Placer Mining in Alaska

cc: Representative Ramras, Co-Chair, House Resources Committee
Representative Samuels, Co-Chair, House Resources Committee

Alaska State Legislature

Please enter into the record my testimony to the _____House Resources Committee_____

on _____HB328_____, dated 40506_____

I am in total support of this bill and sincerely hope the house will pass this and the senate also. Our wild stock Alaskan salmon is one of the world's most precious resources and is being threatened on all sides by oil and gas development, sport fishing interests and now NOAA with their proposal for fish farms outside the 200 mile limit of our shorelines.

This legislature has the opportunity to take a firm stand on guarding our waters and enhancing their protection via legislation like this. All pollution ends up somewhere in the world's waters and wreaks havoc with the very food that will sustain many populations worldwide. I encourage our legislators to pass this very important legislation.

Sincerely,

Darlene Coyle

Box 193

Kasilof, Alaska 99610

P.O. Box 2460
Homer AK 99603
235-8215

~~January 26, 200~~ 4/4/06

~~House Fisheries Committee Members~~ House Resources

~~Dear~~

I strongly support HB 328. It is time to legislatively protect our waters from regulatory rewrites. Most Alaskans value our state's clean water and fisheries and don't want the regulations watered down.

I support HB 328's definition of "spawning area" as the physical location where spawning occurs. Pollution should not be allowed in spawning streams at any time. In my book, pollution should not be placed in Alaskan waters for any reason.

I do see the merits in the compromise allowing renewal of a municipal wastewater facility's mixing zone authorization during the useful life of the facility if spawning occurs in the mixing zone after it was initially authorized. However, I do have concerns about it and want to be sure that there is adequate oversight of these waivers.

I also want to be sure that this bill protects salmon and other fish in steams that are not in the "Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes." Please consider including a section that would require an assessment of a water body for anadromous fish as well as other resident fish listed in the bill before a permit is is granted. Requiring assessments of uncatalogued water bodies before permitting will assure the protection of important local fisheries.

Please pass HB 328 as soon as possible to protect our fisheries and water resources.

Sincerely,

Roberta Highland

Roberta Highland

I have reservations re: any amendments Grandfathering the 3 placer mines

faxed

Office of the President
Edward K. Thomas
Central Council Tlingit & Haida Indian Tribes of Alaska
320 W. Willoughby Avenue, Juneau AK 99801

April 3, 2006

Representative Jay Ramras
Alaska State Capitol
Interdepartmental Mail Stop: 3100
Juneau, AK 99801-1182

Re: Letter of Support on HB 328

Dear Representative Jay Ramras:

The Central Council Tlingit and Haida Indian Tribes of Alaska (CCTHITA) is a federally recognized Indian Tribe that serves 20 villages and communities that are spread over 43,000 square miles within the Alaska Panhandle. The Tlingit and Haida membership is among the largest; most isolated, and most geographically dispersed Native or Tribal populations nationwide.

The Central Council Tlingit & Haida Indian Tribes of Alaska supports House Bill number 328 entitled, "An Act prohibiting mixing zones in freshwater spawning waters." Southeast Alaska has been the home to our people from time immemorial and it continues to provide us with our subsistence foods. Subsistence resources such as salmon are of incalculable cultural and economic value to Southeast Alaska's Native people. When mixing zones pollute Alaska's salmon and other fish bearing streams and spawning areas it will directly affect the Tlingit, Haida, and Tsimshian way of life as we have always heavily relied on fish as a main source of food and nourishment. It has always been imbedded in our culture to respect the salmon that we are privileged to have. It has been taught to us by our elders that if we lose this respect we will lose our fish and they won't come back.

CCTHITA feels that HB 328 is a step in the right direction for the protection of our subsistence foods. CCTHITA strongly supports HB 328 as it directly affects our people.

Thank you for the opportunity to comment. If you have any questions, please contact Mitchell Brooks at (907) 463-7185 or mbrooks@ccthita.org.

Sincerely,

Edward K. Thomas
President

TEL (907) 586-1432 ethomas@ccthita.org FAX (907) 586-8970

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) FOR MECHANICAL PLACER MINING IN ALASKA

General Permit No.: **AK[illegible]-37-0000**

In compliance with the provisions of the Clean Water Act (CWA), 33 U.S.C. 1251 *et seq.*, as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act":

Owners and operators of Mechanical Placer Mines except those sites excluded from coverage in Part I. of this NPDES permit, are authorized to discharge only in accordance with effluent limitations, monitoring requirements, and other provisions set forth herein.

A COPY OF THIS GENERAL PERMIT MUST BE KEPT AT THE SITE OF THE PLACER MINE AT ALL TIMES.

[Facility Name]

[Receiving Water]

This permit will become effective on October 4, 2005.

This permit and the authorization to discharge this permit shall expire at midnight on October 4, 2010.

Signed this 24th day of August, 2005.

/s/ Robert R. Robichaud for
Michael F. Gearheard
Director
Office of Water & Watersheds

Table of Contents

I. PERMIT COVERAGE

A. Coverage

1. Authorization to discharge requires written notification from EPA that coverage has been granted and that a specific permit number has been assigned to the operation.

2. Existing Facilities (those mechanical operations facilities having coverage under the 2000 Alaska placer miner general permit): Owners or operators of facilities with coverage under the 2000 General Permit are eligible for coverage under this permit. See Permit Part I.F. for notification requirements.

4. New Facilities: New mechanical operations facilities that are determined to be new sources under the CWA will be required to have an Environmental Assessment (EA) completed pursuant to the National Environmental Policy Act (NEPA). A finding of no significant impact (FNSI) by EPA is necessary prior to receiving coverage under this permit. A FNSI will become effective only after the public has had notice of, and an opportunity to comment on, the FNSI including either the accompanying EA or a summary of it, and the EPA has fully considered all public comments submitted, pursuant to 40 CFR § 6.400(d). If there may be a significant impact, the facility will require an Environmental Impact Statement (EIS). An EIS will be issued only after public notice and an opportunity for public comments on a draft EIS pursuant to 40 CFR § 6.403(a) and § 1503.1(a).

5. Expanding Facilities: Mechanical operations facilities that contemplate expanding shall submit a new NOI that describes the new discharge. The current permit may be terminated and a new permit, reflecting the changes, issued in its place if the facility meets all the necessary requirements of coverage.

B. Authorized Placer Mining Operations

1. Facilities that mine and process gold placer ores using gravity separation methods to recover the gold metal contained in the ore.

2. Open-cut gold placer mines except those open-cut mines that mine less than 1,500 cubic yards of placer ore per mining season.

3. Mechanical dredge gold placer mines except those dredges that remove less than 50,000 cubic yards of placer ore per mining season or dredge in open waters.

4. Hydraulicking facilities that are considered "no discharge" facilities.

C. Additional Requirements

1. Many streams and stream reaches in Alaska have been designated as part of the federal wild and scenic rivers system or as Conservation System Units (CSUs) by the federal government. Permittees should contact the district offices of the federal agencies that administer the designated area for additional restrictions that may apply to operating within the area. See Permit Part I.F.6. for addresses.

2. Many streams in Alaska where placer mining occurs have been designated by the Alaska Department of Natural Resources/Office of Habitat Management and Permitting (OHMP) as anadromous fish streams. Placer mining activities in these streams require an OHMP Fish Habitat Permit that may include additional restrictions. The "Atlas to the Catalog of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fish" lists the streams in the State that require prior OHMP authorization. In addition, placer mining activities in resident fish streams require an OHMP Fish Habitat Permit if the proposed activity will block or impede the efficient passage of fish. Permittees operating in anadromous or resident fish streams should contact OHMP to determine permitting requirements and additional restrictions that may apply.

D. Prohibitions

1. Discharges from the following beneficiation processes are not authorized under this permit: mercury amalgamation, cyanidation, froth floatation, heap and vat leaching.

2. Hydraulicking facilities, as defined in Part VI.I., that discharge on an intermittent or continuous basis are not authorized under this permit.

3. This general permit does not apply to facilities that are proposed to be located in National Park System Units (i.e., Parks and Preserves), National Monuments, National Sanctuaries, National Wildlife Refuges, National Conservation Areas, National Wilderness Areas, National Critical Habitat Areas, or waters adjacent to areas designated as wild under the Wild & Scenic Rivers Act.

4. This permit does not apply to wetlands designated in the 1995 Anchorage Wetlands Management Plan.

E. Requiring an Individual Permit

1. The Regional Administrator may require any person authorized by this permit to apply for and obtain an individual NPDES permit when:

   a. The single discharge or the cumulative number of discharges is/are a significant contributor of pollution;

b. The discharger is not in compliance with the terms and conditions of the general permit;

c. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;

d. Effluent limitations guidelines are subsequently promulgated for the point sources covered by the general permit;

e. A Water Quality Management Plan containing requirements applicable to such point sources is approved;

f. A Total Maximum Daily Load (TMDL) and corresponding wasteload allocation has been completed for a waterbody or a segment of a waterbody;

g. Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary.

2. The Regional Administrator may deny coverage under this permit in the following circumstances:

a. a land management agency with jurisdiction over affected portions of the receiving water, bed, or uplands submits a request that general permit coverage be denied to EPA within thirty (30) days of the agency's receipt of an NOI; and,

b. the land management agency's request includes proposed additional or revised permit terms that the requesting agency believes -- based upon evidence attached to or cited in the request -- are necessary to protect the natural values of the affected location; and,

c. the land management agency's request concerns a person who either;

(1) seeks to discharge into U.S. waters located in National Recreation Areas, National Historic or Natural Landmarks, congressionally designated Land Use Designation (LUD) II which are to be managed in a roadless state, or in State Refuges, Sanctuaries, or Critical Habitat Areas; or,

(2) is in significant noncompliance with the terms and conditions of the most recent applicable NPDES permit; or,

(3) intends to discharge into waters designated as impaired under the

Clean Water Act.

Any person denied coverage under this part must apply for and obtain coverage under either: (1) an individual permit; or (2) another applicable watershed-specific general permit. Upon receipt of any such application, EPA will determine whether the permit terms requested by the land management agency should be included in the applicable permit.

3. The Regional Administrator will notify the operator in writing by certified mail that a permit application is required. If an operator fails to submit an individual NPDES permit application by the date required in the notification, coverage under this general permit is automatically terminated at the end of the day specified for application submittal.

4. Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application (Form 1 and Form 2C or 2D) with reasons supporting the request to the Regional Administrator at the address in paragraph I.F.4.

5. When an individual NPDES permit is issued to an owner or operator otherwise covered by this permit, the applicability of this permit to the facility is automatically terminated on the effective date of the individual permit.

6. When an individual NPDES permit is denied to an owner or operator otherwise covered by this permit, the Permittee is automatically reinstated under this permit on the date of such denial, unless otherwise specified by the Regional Administrator.

7. A source excluded from a general permit solely because it already has an individual permit may request that the individual permit be revoked and that it be covered by the general permit. Upon revocation of the individual permit, the general permit shall apply to the source.

F. Notification Requirements

1. Owners or operators of facilities eligible for this permit shall submit an NOI to be covered by this permit. The information required for a complete NOI is in Appendix A of this permit. Notification must be made:

   a. by January 1 of the year of discharge to allow time for completion of the NEPA evaluation from a new facility or facility established since 1988 which would be subject to New Source Performance Standards (NSPS) that has not previously been covered by a permit. Notifications received after January 1 will likely not be processed until the next year; or

   b. 60 days prior to discharge from a new or recommencing facility not subject

to NSPS; or

c. 60 days prior to the expiration of an existing individual permit.

2. Any facility authorized under the 2000 general permit that files an NOI prior to the expiration date will be automatically authorized under this general permit.

3. An Annual Placer Mine Application (APMA) will be accepted as an NOI if all the required information is included and the APMA is signed as required in paragraph 4, below.

4. The NOI shall be signed by the owner or other signatory authority in accordance with Permit Part V.F. (Signatory Requirements), and a copy shall be retained on site in accordance with Permit Part III.F. (Retention of Records). The address for NOI submission to EPA is:

USEPA - Alaska Operations Office
Placer Mining NOI
222 W. 7th Avenue, Box #19
Anchorage, Alaska 99513

5. A copy of the NOI must also be sent to the Alaska Department of Environmental Conservation (ADEC). The address is:

Alaska Department of Environmental Conservation
610 University Avenue
Fairbanks, Alaska 99709

6. Permittees who do not use the APMA procedure for filing their NOI with Alaska Department of Natural Resources shall send a copy of the NOI to the Federal, State, or local agency that manages or owns the land in which the mine is located or proposed to be located. The addresses are:

Anchorage Area	Fairbanks Area	Glennallen Area
U.S. Department of Interior **BLM** 222 West 7th Avenue, #13 Anchorage, AK 99513-7599	U.S. Department of Interior **BLM** 1150 University Avenue Fairbanks, AK 99709	U.S. Department of Interior **BLM** P.O. Box 147 Glennallen, AK 99588
U.S. Department of Interior **Fish and Wildlife Service** 1011 E Tudor Rd. Anchorage, AK 99503	U.S. Department of Interior **Fish and Wildlife Service** 101 12th Avenue, Box 19 Fairbanks, AK 99701	U.S. Department of Interior **National Park Service** Wrangell St. Elias P.O. Box 439 Copper Center, AK 99573

Anchorage Area (cont)	Fairbanks Area (cont)	Tok Area
U.S. Department of Interior **National Park Service** 605 West 4th Avenue, Suite 104 Anchorage, AK 99501	U.S. Department of Interior **National Park Service** 250 Cushman, Suite 1A Fairbanks, AK 99701	U.S. Department of Interior **BLM** P.O. Box 309 Tok, AK 99780

Nome Area	Juneau Area
U.S. Department of Interior **Bureau of Land Management** P.O. Box 925 Nome, AK 99762	U.S. Department of Interior **Fish and Wildlife Service** 3000 Vintage Blvd, Suite 201 Juneau, AK 99801
U.S. Department of Interior **National Park Service** P.O. Box 220 Nome, AK 99762	U.S. Department of Interior **National Park Service** P.O. Box 21089 Juneau, AK 99802-1089

7. A copy of the general permit will be sent to the Permittee when it is determined that the facility can be authorized under this general permit. If it is determined that a facility cannot be authorized to discharge under this permit, the applicant will be informed of this in writing.

G. Permit Expiration

This permit will expire five years from the effective date. For facilities submitting a new NOI 90 days prior to expiration of this general permit, the conditions of the expired permit continue in force until the effective date of a new permit.

II. EFFLUENT LIMITATION AND MONITORING REQUIREMENTS

A. Discharge Limitations and Monitoring Requirements - No Discharge Facilities

1. Beginning with the effective date of this permit, the permittee shall not discharge wastewater to receiving waters except:

   (a) overflow from facilities designed, constructed and maintained to contain the maximum volume of untreated process wastewater which would be discharged, stored, contained and used or recycled by the beneficiation process into the treatment system during a 4-hour operating period without an increase in volume from precipitation or infiltration, plus

   (b) the maximum volume of water (drainage waters) which would result from a 5-year, 6-hour precipitation event.

   In computing the maximum volume of wastewater which would result from a 5-year, 6-hour precipitation event, the facility must include the volume which

would result from all areas contributing runoff to the individual treatment facility.

2. The facility shall take all reasonable steps to minimize the overflow or excess discharge.

3. If a discharge occurs, the operator shall comply with the notification requirements of Permit Parts III.G. and III.H. If a discharge occurs during dry weather, the facility will be considered a discharging facility covered by the requirements in Permit Part II.B., below.

4. Discharges resulting from a precipitation event when the facility is designed as described above shall be monitored as listed below:

Effluent Characteristic	Monitoring Location	Monitoring Frequency	Sample Type
Settleable Solids, ml/L	effluent	once per day each day of discharge	Grab
Turbidity, NTU	effluent	once per discharge event*	Grab
	upstream	once per discharge event*	Grab
Arsenic, µg/L	effluent	once per discharge event**	Grab
Flow, gpm	effluent	***	Instantaneous

* See Part II.C.2. for details.
** See Part II.C.3. for details.
*** See Part II. C.5. for details.

B. Discharge Limitations and Monitoring Requirements - Discharging Facilities

Beginning with the effective date of this permit, the permittee shall not discharge wastewater to receiving waters except in compliance with the following effluent limitations:

1. Effluent discharges are prohibited during periods when new water is allowed to enter the plant site. Additionally, there shall be no discharge as a result of the intake of new water.

2. The volume of wastewater which may be discharged shall not exceed the volume of infiltration, drainage and mine drainage waters which is in excess of the make-up water required for operation of the beneficiation process.

3. Limitations and Monitoring Requirements:

Effluent Characteristic	Instantaneous Maximum	Monitoring Location	Monitoring Frequency	Sample Type
Settleable Solids, ml/L	0.2	effluent	once per day each day of discharge	Grab
Turbidity, NTU	5 NTUs above natural conditions****	effluent	three times per week	Grab
		upstream	three times per week*	Grab
Arsenic, µg/L	50	effluent	once per season**	Grab
Flow, gpm	-	effluent	Daily***	Instantaneous

* See Part II.C.2. for details.
** See Part II.C.3. for details.
*** See Part II. C.5. for details.
****See Part II.B.5 for details

Those who receive a site-specific turbidity limit, described below, may not be required to take background turbidity samples. Samples for arsenic and turbidity monitoring must be taken during sluicing at a time when the operation has reached equilibrium. For example, samples should be taken when sluice paydirt loading and effluent discharge are constant.

4. Permittees may request a modified turbidity limit based upon a mixing zone approved by the Alaska Department of Environmental Conservation (ADEC) pursuant to 18 AAC 70.260. EPA will approve a modified turbidity limit proposed by ADEC under this General Permit if the modified limit and resulting mixing zone are consistent with the Clean Water Act, EPA's regulations, 18 AAC 70.250 and 255, and provided that:

   a. the modified turbidity limit does not exceed 1500 NTUs;

   b. the modified turbidity limit does not cause turbidity levels to exceed 100 NTUs in more than one-half of the cross-sectional area of resident and anadromous fish migration corridors;

   c. the modified turbidity limit is calculated using the 7-day, 10-year low flow (7Q10) as the chronic criterion design flow for the protection of aquatic life, see Permit Part VI.W.;

   d. the modified turbidity limit does not result in a mixing zone in an area of anadromous fish spawning or resident fish (as defined in Permit Part VI.T.) spawning redds when eggs or alevins are present;

   e. approved mixing zones do not overlap and the availability and extent of approved mixing zones is limited as necessary to avoid potentially harmful cumulative effects on the receiving environment; and,

   f. the public was provided reasonable notice of, and an opportunity to comment on, the modified turbidity limit and associated mixing zone, including site-specific assessments used to calculate the limit and zone.

prior to their approval by ADEC.

If ADEC issues a mixing zone and turbidity modification to a waterbody reclassified in the Alaska Water Quality Standards (AWQS), EPA will approve the turbidity modification and include it in a facility's GP if it meets the conditions of b. through f. above.

5. The volume of discharge shall not exceed the volume reported by the permittee on the NOI (Appendix A). If the permittee exceeds that volume, EPA will not consider the permittee in violation of the flow limit if:

   a. the permittee submits to EPA turbidity samples, flow measurements/seepage estimates for the discharge, and flow and turbidity measurements for the upstream receiving water taken during the period of the flow exceedence; and,

   b. those samples show that the permittee's discharge did not cause the standard of 5 NTU above background to be exceeded at the edge of the mixing zone.

   The permittee must report all exceedences of the flow limit, together with any turbidity and flow/seepage data that the permittee intends to use to avoid being considered in violation of the flow limit, pursuant to the reporting requirements in Part III.G.

   Pending decision on the modified turbidity limit, the limit in Permit Part II.B.2. applies.

6. Arsenic Modifications

   a. Permittees may request a modified arsenic limit reflecting the arsenic concentrations naturally present in the receiving waters as determined by ADEC. EPA will approve a modified arsenic limit proposed by ADEC under this General Permit provided:

      (1) the modified limit is consistent with the Clean Water Act, EPA's regulations, and state water quality standards regulations;

      (2) The arsenic concentration naturally present in the receiving waters is determined upstream from any human-caused influence on, discharge to, or addition of material to, the waterbody; and

      (3) the public was provided reasonable notice of, and an opportunity to comment on, the modified arsenic limit, including all data and other information used to calculate the limit, prior to its approval by ADEC.

   Pending decision on the modified arsenic limit, the limit in Permit Part II.B.2. applies.

b. An affected community or individual may request a modified arsenic limit in conjunction with a request that the State evaluate the need for a more stringent site specific criterion.

C. Other Monitoring Requirements

The following requirements apply to all facilities covered by this permit.

1. Inspection Program

The Permittee shall institute a comprehensive inspection program to facilitate proper operation and maintenance of the recycle system and the wastewater treatment system. The Permittee shall conduct a visual inspection of the site once per day, while on site, during the mining season. The Permittee shall maintain records of all information resulting from any inspections in accordance with part III.F. of this permit. These records shall include an evaluation of the condition of all water control devices such as diversion structures and berms and all solids retention structures including, but not limited to, berms, dikes, pond structures, and dams. The records shall also include an assessment of the presence of sediment buildup within the settling ponds. The Permittee shall examine all ponds for the occurrence of short circuiting.

2. Turbidity Monitoring

The Permittee shall monitor visually for turbidity at the edge of the mixing zone or at the point of discharge if no mixing zone is approved, at least once each day a discharge occurs. The Permittee shall maintain records of all information resulting from this observation in accordance with Permit Part III.F.

Discharge (effluent) and upstream samples shall be taken within a reasonable time frame of each other. All samples should be taken and stored in the manner set forth in Attachment 1. The sample results shall be reported in the Annual Report (AR). Monitoring shall be conducted in accordance with accepted analytical procedures. See Attachment 1 for sampling protocol.

3. Arsenic Monitoring

Arsenic samples shall be representative of the discharge and shall be taken at a *point prior to entering the receiving stream*. Sampling should be concurrent with a turbidity sample. Monitoring shall be conducted in accordance with accepted analytical procedures. All samples should be taken and stored in the manner set forth in Attachment 2. The Permittee shall report the sample results in the AR. See Attachment 2 for sampling protocol.

4. Settleable Solids Monitoring

   Settleable solids samples shall be representative of the discharge and shall be taken daily each day of discharge at a point *prior to entering the receiving stream.* Monitoring shall be conducted in accordance with accepted analytical procedures (Standard Methods, 18th Edition, 1992). The Permittee shall report the monthly average and daily maximum results in the AR. See Attachment 3 for sampling and analysis protocol.

5. Flow Monitoring

   Effluent flow shall be measured at the discharge *prior to entering the receiving water.* Effluent flow shall be measured at least once per day each day a discharge occurs. The operator must also make a good faith effort to estimate seepage discharging to waters of the United States each day that seepage occurs. Effluent flow and seepage flow shall be reported in gallons per minute (gpm). The flow measurements and seepage estimates, the number of discharge events, and the duration of each discharge event shall be reported in the AR for each day of the mining season.

D. Best Management Practices (BMP)

The following BMPs apply to all facilities covered by this permit.

1. The flow of surface waters (i.e., creek, river, or stream) into the plant site shall be interrupted and these waters diverted around and away to prevent incursion into the plant site

2. Berms, including any pond walls, dikes, low dams, and similar water retention structures shall be constructed in a manner such that they are reasonably expected to reject the passage of water.

3. Measures shall be taken to assure that pollutant materials removed from the process water and wastewater streams will be retained in storage areas and not discharged or released to the waters of the United States.

4. The amount of new water allowed to enter the plant site for use in material processing shall be limited to the minimum amount required as makeup water.

5. All water control devices such as diversion structures and berms and all solids retention structures such as berms, dikes, pond structures, and dams shall be reasonably maintained to continue their effectiveness and to protect from failure.

6. The operator shall take whatever reasonable steps are appropriate to assure that, after the mining season, all unreclaimed mine areas, including ponds, are in a condition that will not cause degradation to the receiving waters over those

resulting from natural causes.

7. During each mining season, a permittee may not discharge into the receiving water within three hundred feet of any other upstream or downstream placer mining operation which is discharging or from which it is visually apparent by the permittee that a discharge has occurred. Nor may a permittee discharge at a point within three hundred feet of the downstream edge of a mixing zone granted for any other upstream placer mining operation.

8. Care shall be taken by the operator during refueling operations to prevent spillage into surface waters or to groundwater. Any spills shall be cleaned up using materials such as sorbent pads and booms. All spills shall be reported to ADEC by calling 1-800-478-9300.

E. Other Requirements

The operator shall maintain fuel handling and storage facilities in a manner that will prevent the discharge of fuel oil into the receiving waters or on the adjoining shoreline. A Spill Prevention Control and Countermeasure Plan (SPCC Plan) shall be prepared and updated as necessary in accordance with provisions of 40 CFR Part 112 for facilities with the capacity to store 660 gallons in a single container above ground, 1320 gallons in the aggregate above ground, or 42,000 gallons below ground.

The Permittee shall indicate in the AR if an SPCC Plan is necessary and in place at the site and if changes were made to the Plan over the previous year.

F. Storm Exemption

A non-discharging facility may qualify for a storm exemption from the technology-based effluent limitation for settleable solids and the flow requirements in Permit Parts II.B.1. and II.B.2. of this NPDES general permit if the following conditions are met:

1. The treatment system is designed, constructed and maintained to contain

   a. the maximum volume of untreated process wastewater which would be discharged, stored, contained and used or recycled by the beneficiation process into the treatment system during a 4-hour operating period without an increase in volume from precipitation or infiltration, plus

   b. the maximum volume of water runoff (drainage waters) resulting from a 5-year, 6-hour precipitation event.

   In computing the maximum volume of water which would result from a 5-year, 6-hour precipitation event, the operator must include the volume which should result from the plant site contributing runoff to the individual treatment facility.

2. The operator takes all reasonable steps to maintain treatment of the wastewater and minimize the amount of overflow.

3. The operator complies with the notification requirements of Permit Parts III.G. and III.H.

III. MONITORING AND REPORTING REQUIREMENTS

A. Representative Sampling. All samples for monitoring purposes shall be representative of the monitored activity. To determine compliance with permit effluent limitations, "grab" samples shall be taken as established under Permit Part II.B. Specifically, effluent samples for settleable solids, turbidity, and arsenic shall be collected from the settling pond outlet or other treatment system's outlet prior to discharge to the receiving stream. Additionally, turbidity background samples shall be taken at a point that is representative of the receiving stream just above the permittee's mining operation.

B. Reporting of Monitoring Results. If sampling occurs, monitoring results shall be summarized each month and reported on EPA Form 3320-1 (DMR, OMB #2040-0004, expiration date 5/31/98) as part of the Annual Report (AR). The AR shall be submitted to the Environmental Protection Agency, Region 10, 1200 Sixth Avenue, NPDES Compliance Unit OCE-133, Seattle, Washington 98101-3188, **no later than January 31 for the previous calendar year**.

If there is no mining activity during the year or no wastewater discharge to a receiving stream, the Permittee shall notify EPA of these facts no later than January 31 for the previous calendar year.

The AR shall also be sent to the ADEC office located in Fairbanks. The address can be found in Permit Part I.F.5.

C. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

D. Additional Monitoring by the Permittee. If the Permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the AR. Such increased frequency shall also be indicated.

E. Records Contents. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The individual(s) who performed the sampling or measurements;
3. The date(s) analyses were performed;
4. The individual(s) who performed the analyses;

5. The analytical techniques or methods used; and
6. The results of such analyses.

F. **Retention of Records**. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the Director or ADEC at any time. Data collected on-site, copies of the Annual Reports (ARs), and a copy of this NPDES permit must be maintained on-site during the duration of activity at the permitted location.

G. **Notice of Noncompliance Reporting**.

1. Any noncompliance which may endanger health or the environment shall be reported as soon as the Permittee becomes aware of the circumstance. A written submission shall also be provided in the shortest reasonable period of time after the Permittee becomes aware of the occurrence.

2. The following occurrences of noncompliance shall also be reported in writing in the shortest reasonable period of time after the Permittee becomes aware of the circumstances:

   a. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Permit Part IV.G., Bypass of Treatment Facilities.); or

   b. Any upset which exceeds any effluent limitation in the permit (See Permit Part IV.H., Upset Conditions.).

   c. Any violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the Permit.

3. The written submission shall contain:

   a. A description of the noncompliance and its cause;

   b. The period of noncompliance, including exact dates and times;

   c. The estimated time noncompliance is expected to continue if it has not been corrected; and

   d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

4. The Director may waive the written report on a case-by-case basis if an oral report has been received by the NPDES Compliance Unit in Seattle, Washington, by phone, (206) 553-1846.

5. Reports shall be submitted to the addresses in Permit Part II.B., Reporting of Monitoring Results.

H. **Other Noncompliance Reporting.** Instances of noncompliance not required to be reported in Permit Part III.G., above, shall be reported at the time that monitoring reports for Permit Part II.B. are submitted. The reports shall contain the information listed in Permit Part III.G.3.

IV. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

B. Penalties for Violations of Permit Conditions.

1. Civil and Administrative Penalties. Pursuant to 40 CFR Part 19 and the Act, any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently $32,500 per day for each violation).

2. Criminal Penalties.

a. Negligent Violations. The Act provides that any person who negligently violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be punished by a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or by both.

b. Knowing Violations. The Act provides that any person who knowingly violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be punished by a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or by both.

c. Knowing Endangerment. The Act provides that any person who knowingly violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or

imprisonment of not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this subparagraph, be subject to a fine of not more than $1,000,000.

d. False Statements. The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Act or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this Act, shall upon conviction, be punished by a fine of not more that $10,000, or by imprisonment for not more than 2 years, or by both.

Nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

C. **Need to Halt or Reduce Activity not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. **Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.

F. **Removed Substances.** Solids, sludges, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner so as to prevent any pollutant from such materials from entering waters of the United States.

G. **Bypass of Treatment Facilities.**

1. Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this section.

2. Notice:

a. Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.

b. Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required under Permit Part III.G., Notice of

Noncompliance Reporting.

3. Prohibition of bypass.

   a. Bypass is prohibited and the Director or ADEC may take enforcement action against a Permittee for a bypass, unless:

      i. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

      ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

      iii. The Permittee submitted notices as required under paragraph 2 of this section.

   b. The Director and ADEC may approve an anticipated bypass, after considering its adverse effects, if the Director and ADEC determine that it will meet the three conditions listed above in paragraph 3.a. of this section.

H. Upset Conditions.

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph 2 of this section are met. An administrative review of a claim that noncompliance was caused by an upset does not represent final administrative action for any specific event. A determination is not final until formal administrative action is taken for the specific violation(s).

2. Conditions necessary for a demonstration of upset. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An upset occurred and that the Permittee can identify the cause(s) of the upset;

   b. The permitted facility was at the time being properly operated;

   c. The Permittee submitted notice of the upset as required under Permit Part III.G., Notice of Noncompliance Reporting; and

   d. The Permittee complied with any remedial measures required under Permit Part IV.D., Duty to Mitigate.

3. Burden of proof. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

I. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement

V. GENERAL REQUIREMENTS

A. **Anticipated Noncompliance.** The permittee shall also give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

B. **Permit Actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

C. **Duty to Reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit by resubmitting the information in Appendix A. The NOI must be submitted at least 90 days before the expiration date of this permit.

D. **Duty to Provide Information.** The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

E. **Other Information.** When the permittee becomes aware that it failed to submit any relavant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts or information.

F. **Signatory Requirements.** All applications, reports or information submitted to the Director shall be signed and certified.

1. All permit applications shall be signed as follows:

   a. For a corporation: by a responsible corporate officer.

   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

   c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

2. All reports required by the permit and other information requested by the

Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described above and submitted to the Director, and

b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

3. Changes to authorization. If an authorization under paragraph V.F.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph V.F.2. must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

G. **Availability of Reports**. Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of the Director. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.

H. **Oil and Hazardous Substance Liability.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

I. **Property Rights.** The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

J. **Severability**. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

K. **State Laws**. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act

L. **Paperwork Reduction Act.**

EPA has reviewed the requirements imposed on regulated facilities in this general permit under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq. The information collection requirements of this permit have already been approved by the Office of Management and Budget in submission made for the NPDES permit program under the provisions of the CWA.

VI. DEFINITIONS

A. "*5-Year, 6-Hour Rainfall Event*" means the maximum 6-hour precipitation event with a probable recurrence interval of once in 5 years, as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States", May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

B. "*Application*" means a written "notice of intent" pursuant to 40 CFR 122.28.

C. "*Best Management Practices*" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "waters of the United States". BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, waste disposal, or drainage from mined areas.

D. "*Bypass*" means the intentional diversion of waste streams around any portion of a treatment facility.

E. "*Director*" means the Regional Administrator of the United States Environmental Protection Agency, Region 10 or an authorized representative.

F. "*Drainage Water*" means incidental surface waters from diverse sources such as rainfall, snow melt or permafrost melt.

G. "*Expanding Facility*" means any facility increasing in size such as to affect the discharge but operating within the permit area covered by its general permit.

H. A "*Grab*" sample is a single sample or measurement taken at a specific time.

I. "*Hydraulicking*" means both the hydraulic removal of overburden and the use of

hydraulic power to move raw rock to the point of processing (i.e. to the gate of the sluice or other processing equipment).

J. "*Infiltration Water*" means that water that permeates through the earth into the plant site.

K. "*Instantaneous Maximum*" means the maximum value measured at any time.

L. "*Make-up Water*" means that volume of water needed to replace process water lost due to evaporation and seepage in order to maintain the quantity necessary for the operation of the beneficiation process.

M. "*Mining Season*" means the time between the start of mining in a calendar year and when mining has ceased for that same calendar year."

N. "*New Facility*" means a facility that has not operated in the area specified in the NOI prior to the submission of the NOI.

O. "*New Water*" means water from any discrete source such as a river, creek, lake or well which is deliberately allowed or brought into the plant site.

P. "*NTU*" (Nephelometric Turbidity Unit) is an expression of the optical property that causes light to be scattered and absorbed rather than transmitted in a straight line through the water.

Q. "*Plant Site*" means the area occupied by the mine, necessary haulage ways from the mine to the beneficiation process, the beneficiation area, the area occupied by the wastewater treatment storage facilities and the storage areas for waste materials and solids removed from the wastewaters during treatment.

R. "*Receiving Water*" means waters such as lakes, rivers, streams, creeks, wetlands, or any other surface waters that receive wastewater discharges.

S. "*Recommencing Facilities*" are those facilities that may have let permit coverage lapse but still meet the coverage requirements of the GP.

T. "*Resident Fish*" means Arctic grayling, northern pike, rainbow trout, lake trout, brook trout, cutthroat trout, whitefish, sheefish, Arctic Char (Dolly Varden), burbot, and landlocked coho, king, and sockeye salmon.

U. "*Severe property damage*" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

V. "*Short circuiting*" means ineffective settling due to inadequate or insufficient retention characteristics, excessive sediment deposition, embankment infiltration/percolation, lack of maintenance, etc.

W. "*Turbidity Modification*" means the procedures used to calculate a higher turbidity limit based on a mass balance equation that relates upstream and effluent flow and turbidity to downstream flow and turbidity. The basic form of this equation is:

$$Q_1C_1 + Q_2C_2 = Q_3C_3,$$

where C_1 = effluent turbidity;
C_2 = natural background turbidity
C_3 = receiving water downstream turbidity after mixing where the allowable increase is 5 NTU above background;
Q_1 = effluent flow
Q_2 = receiving water flow upstream from the discharge (i.e., 7Q10)
Q_3 = total receiving water flow downstream from discharge after complete mixing ($Q_1 + Q_2$).

X. "*Upset*" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Y. "*Wastewater*" means all water used in and resulting from the beneficiation process (including but not limited to the water used to move the ore to and through the beneficiation process, the water used to aid in classification, and the water used in gravity separation), mine drainage, and infiltration and drainage waters that commingle with mine drainage or waters resulting from the beneficiation process.

Z. "*Waters of the United States*." See 40 CFR 122.2.

ATTACHMENT 1

Turbidity Sampling Protocol

1. Grab samples shall be collected.
2. Samples shall be collected in a sterile one liter polypropylene or glass container.
3. Samples must be cooled to 4 degrees Celsius (iced).
4. Samples must be analyzed within 48 hours of sample collection.

ATTACHMENT 2

Arsenic Sampling Protocol

1. Grab samples shall be collected.

2. Samples shall be collected in a sterile one liter polypropylene or glass container.

3. Samples must be acidified promptly with nitric acid (HNO_3), to a pH less than 2 or sent to a laboratory within 48 hours of sample collection. Non-acidified samples must be chilled to 4 degrees Celsius (iced) until acidified at the laboratory.

4. Acidified samples must be analyzed within 180 days of the sample collection date.

5. Samples must be acidified for at least 16 hours prior to analysis.

ATTACHMENT 3

Settleable Solids Sampling Protocol

1. Grab samples shall be collected.
2. Samples shall be collected in a sterile one liter polypropylene or glass container.
3. Samples must be cooled to 4 degrees Celsius (iced), if analysis is not performed immediately.
4. Cooled samples must be analyzed within 48 hours of sample collection.

Settleable Solids Analysis Protocol

1. Fill an Imhoff cone to the liter mark with a thoroughly mixed sample.
2. Settle for 45 minutes, then gently stir the sides of the cone with a rod or by gently spinning the cone.
3. Settle 15 minutes longer, then record the volume of settleable matter in the cone as milliliters per liter. Do not estimate any floating material. The lowest measurable level on the Imhoff cone is 0.1 ml/l. Any settleable material below the 0.1 ml/l mark shall be recorded as trace.

APPENDIX A
MECHANICAL PLACER MINING PERMIT: AK3-37-0000
NOTICE OF INTENT INFORMATION

PERMITTEE NAME			PREVIOUS NPDES PERMIT NUMBER (if any) AKG-37-0
ADDRESS	SUMMER	WINTER	WATER THAT THE FACILITY DIRECTLY DISCHARGES TO (Receiving Water):
PHONE			
OPERATOR NAME ☐ Check if same as Permittee			
ADDRESS	SUMMER	WINTER	
PHONE			
FACILITY NAME:	Is your facility located in an area National Parks System Units (i.e., Parks and Preserves), National Monuments, Sanctuaries, Wildlife Refuges, Conservation Areas, Wilderness Areas, or Critical Habitat Areas. ☐ Y ☐ N *If yes, Which?*	LATITUDE	
NEAREST TOWN:		LONGITUDE	
MINING DISTRICT:		New Source? __Y __N (e.g. virgin ground)	
QUAD MAP, TOWNSHIP, RANGE, SECTION		MERIDIANS: __Umiat __Kateel __Fairbanks __Seward __Copper River	

For Mixing Zone information please contact: ADEC, 610 University Avenue, Fairbanks, Alaska 99709

Type of Operation:	Mechanical __No discharge __Discharge or Hydraulicking __No discharge only	Amount of Material Processed:
SIGNATURE:		DATE:
PRINTED NAME:		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Permittee Name:	Previous Permit No. (if any) AKG-37-0
Receiving Water:	

Drawing:

STATE OF ALASKA

FRANK H. MURKOWSKI, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

555 Cordova Street
Anchorage, AK 99501-2617
PHONE: (907) 269-7599
FAX: (907) 334-2415
http://www.state.ak.us/dec/

DIVISION OF WATER
DIRECTOR'S OFFICE

April 10, 2006

The Honorable Paul Seaton
House of Representatives
Alaska State Capitol, Room 102
Juneau, AK 99801-1182

RE: Request for mixing zone information

Dear Representative Seaton:

On April 6 Louie Flora of your office requested additional information related to spawning fish and mixing zones. His questions are below and the Department of Environmental Conservation (DEC) has provided answers with assistance from the Departments of Natural Resources (DNR) and Fish and Game (F&G) on those questions dealing with fish, spawning, and habitat.

1. **The old Mixing Zone regulations at 18 AAC 70.255(h) stated that mixing zones will not be authorized in an area of anadromous fish spawning or resident fish spawning redds. While we understand that the practice has been to authorize mixing zones on a temporal as well as spatial basis, for the purposes of this question we would like to stick just to the spatial. Can you please clarify the DEC, DNR and ADF&G interpretation of what an "area of anadromous fish spawning" and a "resident fish redd" is spatially?**

OHMP (formerly ADF&G-Habitat) considers an area "anadromous fish spawning" if anadromous fish species are known to utilize the stream segment for spawning. Since run strength varies by year and this in turn influences how much of traditional spawning habitat is used from year to year, multiple years of record are considered. Information sources include personal knowledge, ADF&G local area biologist information, other state or federal resource agency information, the anadromous waters catalog, and local knowledge. The working knowledge for anadromous fish spawning areas isn't perfect but most locations and stream reaches are known.

"Resident fish redds" are determined in a similar fashion except that they include both stream segments with actual redds for depositional spawners and known areas used by broadcast spawners. Information sources are similar to those for anadromous species. Agency working knowledge for resident fish spawning areas is less extensive than for anadromous species but it is augmented by best professional judgment based on the known habitat types and areas different species prefer for spawning.

In both instances, if the agencies lack necessary information, a permittee may be required to gather data on spawning. Also, OHMP's determinations are subject to revision should new information indicate that an area supports spawning (see 18 AAC 70.240(m) and DEC determines that an approved mixing zone is causing a significant adverse environmental effect.

2. **There has been concern expressed that under the flat prohibition a broadcast spawning species could in effect shut down entire watersheds to the permitting of wastewater discharges. Generally what is the length of a "broadcast" when a broadcast spawner spawns, and do they spawn in a specific type of river habitat?**

The length of a "broadcast" is dependent on the water velocity present at the time of spawning. As the name implies, broadcast spawners do not construct a nest or "redd" but rather passively discharge their eggs (which are then mixed with sperm in the water column). The fertilized eggs then drift to the stream bottom where they either adhere to rocks and vegetation or lodge between the gravels. Different species use a variety of habitats. For example, northern pike prefer to spawn in grassy margins of lakeshores, slow moving streams or sloughs. Arctic grayling will utilize a variety of habitats for spawning but tend to prefer slow water margins of streams or rivers and adjacent ponds or wetland complexes that warm up quicker in the spring.

3. **Has a river system where grayling or other broadcast spawning species inhabit been placed off limits to discharges and can you provide us with a number of instances when a mixing zone permit was denied in an area because of broadcast spawning?**

No river systems have been "placed off limits to discharges" because broadcast spawning species reside in the system. DEC has authorized mixing zones in river systems that are inhabited by broadcast spawners, but has placed timing restrictions on the discharges to avoid times when spawning fish, eggs, and alevins are present, based on a determination made by DNR or F&G (depending upon which agency has jurisdiction over a particular water body).

DEC can not track those potential dischargers that change their project once they learn that they would not be eligible for a mixing zone based on a prohibition on mixing zones due to spawning. Nor has DEC consistently tracked in the past, permits that were denied because the discharge could not avoid spawning (from either a temporal or a spatial basis). However, listed below are a few examples of mixing zone authorizations that were denied.

Nyac Placer Mine	Tuluksak River	Anadromous and Resident	No MZ granted. DNR/Habitat said no time when wastewater can be discharged. Applicant must meet WQS at end of pipe.
Nyac Placer Mine	Bear Creek	Anadromous and Resident	No MZ granted. DNR/Habitat said no time when wastewater can be discharged. Applicant must meet WQS at end of pipe.
Nyac Placer Mine	California Creek	Anadromous and Resident	No MZ granted. DNR/Habitat said no time when wastewater can be discharged. Applicant must meet WQS at end of pipe.
Moose Creek Apartments	Moose Creek	Anadromous and Resident	No MZ granted. Built a septic tank/leach field system and eliminated the wastewater treatment plant.
Golden Heart Utilities Drinking Water facility – filter backwash	Chena River	Resident	Existing continuous discharge to a grayling spawning area. Facility could not comply with discharge timing restrictions to avoid spawning. The discharge has been eliminated at significant initial and ongoing expense.

4. **Are all the placer mine discharges currently permitted for seasonal discharges into spawning streams for turbidity alone? In testimony before the House Resources Committee on April 5th a statement was made that "the bill eliminates any opportunity for a mixing zone for any other water quality criteria. Turbidity is one of many constituents that must be addressed before a mixing zone can be issued. Turbidity has been determined to be an indicator or surrogate such that if turbidity limits are met, the criteria for the other constituents will also be met" Is this a correct statement? Does DEC currently measure water quality criteria limits for metals based on the criteria for turbidity? It is our understanding that 5 Nephelometric Turbidity Units above background is the most stringent criteria to be met at the edge of a turbidity mixing zone. In the case of Toxic and Other Deleterious Organic and Inorganic Substances (18 AAC 70.020 (b) (11)) has it been the common practice to assume that 5 NTUs provides an adequate surrogate measurement when issuing a mixing zone permit?**

A copy of the current general permit for mechanical placer mining is attached. Placer mines authorized to operate under this general permit have effluent limitations for turbidity, settleable solids (sediment), and arsenic (see page 11). Water quality monitoring requirements under the permit include those three parameters and flow rates. The permit allows for a modified turbidity limit based upon a mixing zone authorized by DEC.

Placer mining is a physical process to extract metals and therefore, the metals are left in a particulate form. The decision to base the mixing zones for placer mine discharges on turbidity was based on a significant body of water quality data associated with the placer mining industry. The data indicate a relationship between turbidity and metals -- the water quality criteria for metals are met at or before the edge of the mixing zone where turbidity criteria are also

met. Water quality criteria for metals might be exceeded in these mixing zones, but the permit does not require monitoring for specific metals (except for arsenic in certain situations). This current permitting approach and mixing zone calculation (for turbidity) includes a requirement to use a more conservative low flow calculation (normally used for toxic substances), rather than the less conservative flow that would be used for conventional or non-toxic substances such as turbidity.

In most other types of discharges (e.g. mining with chemical metals extraction, municipal wastewater treatment), turbidity would not be a good indicator for metals because most of the metals are dissolved in the water and would not show up as turbidity. Most permits for these other dischargers require metals to be measured directly and do not use turbidity.

Sincerely,

Lynn J. Tomich Kent

Lynn J. Tomich Kent
Director

Enclosure: NPDES General Permit for Mechanical Placer Mining in Alaska

cc: Representative Ramras, Co-Chair, House Resources Committee
Representative Samuels, Co-Chair, House Resources Committee

American Fisheries Society
ALASKA CHAPTER

17 December 2005

Nancy Sonafrank
Division of Water - Section Manager
Department of Environmental Conservation
610 University Drive
Fairbanks, Alaska 99709

Dear Ms. Sonafrank,

The American Fisheries Society (AFS) is the oldest and largest international scientific organization of fisheries professionals, with nearly 8,000 members. The Alaska Chapter of AFS (AFS-AK) represents over 400 fishery scientists, biologists and managers employed in government, academia and the private sector throughout Alaska. AFS is not an advocacy group but we do provide science-based opinions on policy matters that we believe affect the conservation and sustainability of fishery resources and aquatic ecosystems.

The AFS-AK strongly opposes the Department of Environmental Conservation's (DEC) proposed amendments to the mixing zone provisions of the state's Water Quality Standards regulations codified in 18 AAC 70. Of greatest concern is DEC's proposal to allow exemptions from the current absolute prohibition on mixing zones in streams, rivers, and other flowing fresh waters where anadromous or select resident fish spawn. This proposal's justification is questionable. Weakening the state's water quality standards compromises the long-term health and sustainability of its fishery resources, as well as the subsistence, sport, and commercial fisheries that depend on them. The authors of the State Constitution recognized the fundamental importance of protecting Alaska's rich fishery resources against the avoidable problems plaguing other states. That forward-thinking commitment to a renewable natural resource has paid large dividends to Alaska's people, communities, and industries that rely on strong, healthy fish stocks.

Positive attributes of DEC's 2005 proposal are overshadowed by allowing exemptions. Given the present health of Alaska's water quality and fish stocks, the proposed amendment to Alaska's water quality regulations is unjustified. DEC's current water quality standards, with their absolute prohibition on mixing zones in spawning areas, were created to protect Alaska's fishery resources. The AFS-AK would endorse DEC's proposed amendments if they were limited to merging the regulations from six sections into one, expanding protected spawning areas to include lakes, and adding protections for shellfish. However, these select positive attributes of DEC's 2005 proposal are strongly overshadowed by the provision to allow exemptions from the current absolute prohibition on mixing zones in fish spawning areas.

We strongly caution DEC against relying upon mitigation plans [18AAC 70.240.(f).3-4] to minimize, repair, rehabilitate, restore, replace, or compensate for lost/impacted environments caused by permitted mixing zones in fish spawning areas. The effectiveness of various proposed mitigation measures cannot be assumed and must be shown by an objective analysis of the actual long term benefits. This is especially true in light of the many examples of failed mitigation measures, particularly in regards to maintaining healthy fish populations (e.g., Pacific Northwest salmon/bull trout declines despite multi-million dollar mitigation efforts). Using human engineered mitigation projects to replace naturally evolved, complex systems that are not fully understood is a tenuous, failure-prone approach. History has made clear that it is much easier and far less expensive in the long-term to simply maintain clean water and healthy habitats for fish than to attempt to restore them. Alaska should learn from others mistakes, not repeat them.

We have reviewed DEC's proposed regulatory changes, including those purporting to ensure that approved mixing zones will not adversely affect an area's ability to support present and future spawning, incubation and rearing [18 AAC 70.240(c-f)]. **The proposed regulations neither assure sufficient knowledge of pre-permit conditions (baseline data) nor assure effective, unbiased monitoring during permitted activities, both of which are essential to identifying non-compliance**. Experience has shown that even the best-intentioned and well-written regulations are ineffective without unbiased monitoring and timely and consistent enforcement in the face of non-compliance.

DEC intends to base its permitting decision on "practicable" available evidence provided by the applicant and "other credible sources." **"Credible sources" remain undefined, nor is it clear whether or not DEC considers comprehensive baseline studies "practicable."** Baseline data on pre-activity water quality, sediment, and biotic conditions (e.g., species diversity and productivity, population structure, incidence of disease, background levels of key pollutants, etc.) are essential for ensuring compliance with the proposed regulations. However, DEC repudiates this responsibility and asserts that the "burden of proof" is on the applicant to provide all available evidence with their permit application, implying that DEC has no intention of conducting baseline studies itself. Indeed, with the current administration's emphasis on reduced government, DEC does not have the resources to ensure consistent monitoring and enforcement. DEC further maintains that termination of an approved permit for non-compliance will normally rely upon evidence provided by the permitee ["Burden of Proof" link on www.state.ak.us/dec/water/wqsar/trireview/trireview.htm]. **This creates a clear conflict of interest and an opportunity for unethical permittee to mis-report monitoring data that would demonstrate non-compliance.** The responsibility for ensuring compliance with DEC regulations clearly lies with the state, and that responsibility requires unbiased and consistent state-sponsored monitoring oversight and enforcement.

Except in the rare case of mixing zones occurring in legislatively designated special areas (e.g., critical habitat areas), the proposed water quality standards do not require DEC to consult with ADF&G on mixing zone applications or proposed mitigation plans. Only DNR is required to be involved in permit application and mitigation plan review. It is incongruous and ill-advised for the state to exclude its own fishery professionals from permit decisions with the potential to affect the health of the state's fishery resources.

Collectively, these proposals demonstrate a dramatic and fundamentally short-sighted policy shift away from Alaska's heretofore forward-thinking commitment to maintaining its strong and healthy

renewable fisheries resources. We **strongly urge DEC to apply a precautionary principle approach and reconsider "opening the door" to aquatic resource degradation by eliminating the current prohibition on mixing zones.** We do not believe the proposed amendments to DEC's mixing zone regulations are in the long-term best interest of the fishery resources of the State of Alaska.

Thank you for the opportunity to comment. The AFS-AK is committed to the conservation and sustainable use of Alaska's fishery resources. Please let us know if our membership of fisheries professionals can aid you in crafting regulations that ensure the long-term health and sustainability of Alaska's fishery resources (CarolW@AlaskaLife.net).

Sincerely,

Jamal Moss
President-Elect, AFS-AK
NOAA Fisheries
Auke Bay Laboratory
11305 Glacier Hwy.
Juneau, AK 99801

cc: Kurt Fredriksson, Commissioner DEC
McKie Campbell, Commissioner ADF&G
Michael L. Menge, Commissioner DNR

Alaska Professional Design Council • PO Box 100515 • Anchorage AK 99510-0515

HB 328 Comment Letter

MEMBER SOCIETIES

Alaska Society of Professional Engineers

Alaska Society of Professional Land Surveyors

American Congress on Surveying & Mapping Alaska Section

American Institute of Architects Alaska Chapter

American Society of Civil Engineers Alaska Section

American Society of Landscape Architects Alaska Chapter

Architecture/Engineering Marketing Association of Alaska

American Council of Engineering Companies of Alaska

Professional Engineers in Private Practice Alaska Chapter

American Society of Interior Designers

April 12, 2006

Representative Jay Ramras and Representative Ralph Samuels
Co-Chairs, House Resources Committee
Alaska State Legislature
State Capitol
Juneau, AK 99801-1182

Re: House Bill 328 — Ban Mixing Zones in Spawning Areas

Dear Representatives Ramras and Samuels:

On behalf of the Alaska Professional Design Council (APDC), I am writing to express our opposition of House Bill 328 and concern as to the need for this legislation.

APDC is organized as a not-for-profit corporation in the State of Alaska and is composed of Alaska's professional design societies. APDC serves to coordinate and complement the efforts of the design professional societies in Alaska. APDC's professional design societies objectives are organized toward our common interests by:

1. Combining efforts so as to enhance the aesthetic, scientific, and practical efficiency of the design professions;
2. Advancing the art and science of planning and building by advancing the standards of education, training, and practice of design professions;
3. Coordinating the building industry and the design professions, to advance the quality of living through improved environment;
4. Encouraging the design professions to be of ever-increasing service to society; and
5. Providing dialog with legislative and administrative agencies on matters concerning the design professions and public interest.

The Alaska Professional Design Council wishes to express our concern with the proposed legislation because (a) it eliminates the possible use of good science in determining the applicability of mixing zones in certain areas, and (b) there are

existing regulations and statues that pertain to water quality standards, fish and game, and natural resources that appropriately address mixing zones.

It is also important to note that the current regulations do not undermine the ultimate responsibility of Alaska's resource agencies have to protect rivers, lakes and streams important to anadromous and resident fish. Under Alaska's current regulations, mixing zones in spawning areas are the exception rather than the rule.

HB 328 as it is currently proposed, takes an overly conservative approach to mixing zones. The bill's prohibition precludes the state resource agencies from working with communities and industrial users to develop creative solutions to permitting challenges.

Given favorable circumstances and proper management and oversight, mixing zones and healthy fish stocks can coexist. Alaska's resource agencies have the regulatory framework, technical expertise and resources in place to make sound and good science determinations on a case-by-case basis. The current regulations will protect Alaska's fisheries without unduly burdening other legitimate uses of the state's water.

APDC encourages the House Resources Committee not to move HB328 forward.

Thank you for considering APDC's position on this important issue.

Sincerely,
Alaska Professional Design Council

Robert J. Lang

Rob Lang, P.E.
President