

# MEMORANDUM

# State of Alaska

TO: Phyllis Weber  
Habitat Biologist  
Habitat Division  
Anchorage

DATE: May 27, 1983

FILE NO:

TELEPHONE NO: 452-1531, ext. 217

FROM: Fred M. Andersen *FMA*  
Upper Yukon Area Management Biologist  
Division of Commercial Fisheries  
Department of Fish and Game  
Fairbanks

SUBJECT: Tolovana and  
Hammond Rivers

83-1401

We have searched our files and talked with Mike Kramer of the Sport Fish Division here and found the following information on the anadromous nature of the two streams in question.

In the case of the Hammond River, Mary Tishulin of Bettles reported to Lance Trasky in 1974 that king salmon spawn in this system. Charles Kay, in 1977, reported that the Hammond River supported spawning chum salmon during the 1950's (based on information provided by Mr. Ross Brockman of Bettles).

For the Tolovana River, the only direct evidence I can find is a citation from a 1970 Sport Fish Division report which states that between July 18-21 of that year six adult kings and 19 adult chums were captured in gillnets in the lower river area.

cc: Barton  
Kramer  
Regnart

Attachments

ALASKA DEPT. OF  
FISH & GAME

MAY 31 1983

HABITAT  
REGIONAL OFFICE

# MEMORANDUM

# State of Alaska

TO: Richard A. Neve', Commissioner  
Department of Environmental  
Conservation

DATE: May 20, 1983

FILE NO:

TELEPHONE NO: 465-4100

FROM: Don W. Collinsworth, Commissioner  
Department of Fish and Game

SUBJECT: Tolovana/Livengood  
Water Quality  
Reclassification

The Department of Fish and Game has reviewed your public notice regarding the receipt of a petition pursuant to the Alaska Water Quality Regulations (18 AAC 70) to reclassify the waters of a portion of the Tolovana River, and about 16 clearwater tributary streams. We are opposed to the proposed reclassification to exclude uses of the referenced waters other than "industrial" for the following reasons.

## Species Presence

The Tolovana River supports Alaska blackfish, burbot, least cisco, humpback whitefish, broad whitefish, round whitefish, sheefish, Arctic grayling, northern longnose sucker, slimy sculpin, northern pike, king salmon, chum salmon and perhaps other fishes. Test netting conducted on the lower Tolovana River in July 1970 yielded a catch of six king and 19 chum salmon. No current information is available regarding the abundance of salmon or the areas of spawning in the Tolovana River. The Tolovana River discharges to the Minto Flats where many ponds, lakes and sloughs provide productive feeding and rearing habitats for many fishes such as whitefish and northern pike. Pike also spawn in the Minto Flats.

Regarding the tributary streams affected by the proposal, my Sport Fish Division states that given clear water conditions, one could expect to find grayling and other resident fish in the major tributaries such as Livengood Creek, and possibly its tributaries.

The Tolovana River is prime furbearer habitat for otter, beaver and mink. The Minto Flats host muskrat, red fox, coyote, wolves, wolverine and lynx. We share the opinion of the local residents who testified at your May 3, 1983 public hearing, in Fairbanks, that past mining discharges have resulted in the deposition of silt in the Minto Flats which has diminished the abundance of muskrats.

A wide variety of waterfowl utilize the Minto Flats area. Among those are Canada Geese, trumpeter and whistling swans, sandhill cranes, and many species of shorebirds and ducks.

The Tolovana River and Minto Flats area contain prime habitat for moose and black bear. The current population of moose is low, but the potential for a larger population is good. Numbers of black bear are moderate to high.

Use

The Minto Flats area is utilized extensively by sport fishermen. My Sport Fish Division estimated that the annual fishing effort during the period from 1977 through 1981 ranges from 2,045 to 3,866 angler-days, with an average of 3,000 angler-days per year. The subsistence fishery in the vicinity of the New Minto Village, located on the Tolovana River, is extensive.

Minto Flats is mostly utilized by trappers from Minto and Nenana; but the eastern portion is intensively trapped by residents from the Fairbanks area.

The sport and subsistence harvest of waterfowl is extensive. The Minto Flats area is thought to be the most heavily utilized area for this purpose in the Tanana Basin.

Big game hunting is moderate to heavy in this vicinity. My Game Division estimated that approximately 80 moose hunters utilized the area during the 1980-1981 season. Pursuit of black bear is popular in the Flats and surrounding hills during the spring months; both hunters and bears tend to concentrate along the major rivers, such as the Tolovana, during autumn.

Discussion

At your May 3 hearing, testimony was provided regarding occasional use of the water for drinking, swimming and washing. I concur with the petitioner that surface water should not be consumed directly because of the danger of infection by disease organisms, but submit that such organisms can be killed by boiling or chemical treatment. However, removal of suspended solids or heavy metals, such as arsenic, from mining discharge cannot be readily accomplished by an individual user.

A concept stressed by my representative on the Placer Mining Task Force was that it is not realistic to reclassify a segment of a drainage to a lower quality and then assume that the subsequent downstream impacts would be negligible. Enclosed for your information is a copy of a draft report entitled "The Effects of Sedimentation on Salmonids and Macro-invertebrates." The document was prepared by my Habitat Division and is a summary of the effects of settleable and suspended solids on fishes and the aquatic system. In addition, the effects of suspended particles on prey distribution and the feeding ability of sight-feeding avian and mammalian species must not be overlooked.

The exact ramifications of the reclassification of a waterbody for "industrial use" have never been clearly explained to my staff or, in our opinion, to the public at your Fairbanks hearing. For example, the basis for statements by your staff regarding the continued enforcement of the standard for settleable solids by requiring the installation of a settling basin(s) is not apparent in your regulations. Would such

enforcement be delegated to the Environmental Protection Agency? If so, can we realistically anticipate a product?

Many of the criteria in 18 AAC 70.020 to protect the various uses of the water are narratives rather than measurable standards. Measurable effluent standards need to be defined for the industrial and other use classifications.

#### Recommendations

My recommendations on reclassification pursuant to 18 AAC 70.055 are listed below in order of descending preference.

1. Deny the request, on the basis of the impacts that can be expected to occur in the reclassified area and the area downstream.
2. Hold this and other similar requests in abeyance until the EPA has determined the best practicable control technology (based partially on economic concerns) which will be applied during the summer of 1984, and measurable standards are established throughout the Alaska Water Quality Criteria (18 AAC 70.020).
3. Retain the current classification on the Tolovana River, but reclassify the requested tributaries to the standard affording protection to fish and wildlife values (18 AAC 70.020 I.(C)), or to a use requiring a higher protection as you may determine.

Thank you for the opportunity to provide our views on this critical issue.

cc: Commissioner Wunnicke - ADNR  
Keith Schreiner - USFWS, Anchorage  
Curt McVee - BLM, Anchorage

1977 file OK

2. Wildlife

On 4/8/77, JFWAT observed a goshawk flying above 71APL/AMS-2. While helicoptering the Isom Creek Valley, AS 76, JFWAT sighted a moose about 2-3 miles west of the TAPS ROW.

JFWAT contacted Mr. Ross Brockman, a long time resident of Wiseman, and Mr. Brockman told JFWAT that in the 1950's Chum salmon spawned in a slough near the present Dietrich Camp, up the Hammond River, and in the Middle Fork of the Koyukuk River.

3. Spur Dikes

APSC is upgrading and armoring the dikes on AS 97. APSC is also adding a lift to the dikes along the South Fork of the Koyukuk River, AS 95.

4. Prospect Creek AS 91

APSC removed gravel pad where a shoo-fly access road had been constructed for the south approach to the Prospect Creek ROW bridge. APSC knocked over trees and damaged previously undisturbed areas during their effort and AOFK Kittler wrote APSC an AOFK NCR. At Prospect Creek on the Haul Road, APSC added an armor coat lift to the channel plug on the north side of the stream west of the highway.

5. OFF ROW Wood Cutting

JFWAT observed where unidentified persons cut live trees for firewood immediately adjacent to APSC's TAPS ROW. Approximately 40 to 50 trees were felled on State land south of the Salcha River, AS 53A, and about 10-15 trees were cut on Federal land north of Hess Creek, AS 73.

*Carl Yamaguchi*  
for  
Charles Kay  
Habitat Biologist

cc: C. Champion, SPCO  
M.J. Turner, APO  
J. Holland, SPCO  
D. Keyes, APO  
D. Norton, NOAA  
B. Green, SPCO  
J. Burns, ADF&G  
J. Sizemore, APO  
H. Kittler, APO  
J. McCoy, APO  
K. Francisco, ADF&G

## Outline Issues

### Response to Hammond River

The Department of Fish and Game has two memos on file in Fairbanks pertaining to the sighting of chum and king salmon. These sightings were made prior to 1975. King salmon have been reported to have been caught in the vicinity of King Creek, about 15 miles upstream from the Hammond River confluence with the Koyukuk River.

Data referred to in 1971-72 by U.S. Fish and Wildlife Service surveyors were termed "superficial." The surveyors also stated that several sites were only sampled once. The object of such surveys was to determine fish presence or absence. Many adjacent tributaries with potential rearing habitat for anadromous fish were not sampled. Sampling at one point in time does not provide conclusive evidence for determining that a waterway does not contain anadromous fish.

Use of the upper reaches of streams by anadromous fish changes yearly depending on population levels, weather conditions, instream flow levels, and water chemistry. If returning population estimates are accurate, there will be hundreds of streams and adjacent tributaries used by pink and chum salmon on the Seward Peninsula that have not seen salmon for several years.

At present the Hammond River is thought to be important to anadromous fish species. It will be retained in the Catalog of Waters Important to

Anadromous Fish until field surveys document that there is no use of the waterway by anadromous fish.

The Department thanks Mr. Jackson for bringing the Hammond River to our attention. We are sorry for the lack of up-to-date surveys. Due to limited staff and appropriations, many of streams are not surveyed on a regular basis. The Hammond River will go on a priority list of streams to verify as funds become available.

The Department appreciates help from the public in bringing issues to our attention. It is through public input that Departmental staff becomes more informed of the ever changing environment.

L. Jackson  
E. 26<sup>TH</sup> AVE #6  
Anchorage, ALASKA  
99504

ANCHORAGE, ALASKA  
PM  
15 MAR  
1982

REC

MAR 17 1982

RESOURCE ASSESSMENT  
BRANCH, HABITAT

Mr. Rich Cannon  
Habitat Special Projects  
ADF # 6  
570 W. 3<sup>RD</sup>. AVE.  
ANCHORAGE, ALASKA 99502

Wiseman B1, C1  
King Salmon  
almost to junction  
of King Creek.

Terry Bendick in  
Fairbanks  
George Van Klee

on the north side of  
approximately five miles  
Highway. Wiseman, Alaska is approximately  
Fairbanks, Alaska on the Dalton Highway.

In our three years of working on the Hammond River we have never  
seen fish other than Grayling in the river. The Grayling  
population appears to be quite small and very dispersed. Our  
findings are consistent with data collected by the U.S. Fish &  
Wildlife Service in 1971-72 \* in which Grayling were the only  
fish identified in their sampling of the Hammond River.

The Hammond River is not a salmon river or spawning ground and  
therefore should not be considered an anadromous river. We  
hope the above information will be beneficial to the State of  
Alaska and Dept. of Fish and Game in correcting the status of  
the Hammond River.

\* FISHERY RESOURCES OF WATERS  
ALONG THE ROUTE OF THE TRANS-  
ALASKA PIPELINE BETWEEN YUKON  
RIVER AND ATIGUN PASS IN NORTH  
CENTRAL ALASKA,  
Resource Publication 124  
U.S. Fish and Wildlife Service  
Dept. of Interior  
Washington D.C. 1975

Sincerely  
*Pelham L. Jackson*  
Pelham L. Jackson  
Koyukuk Gold Company

RECEIVED  
MAR 17 1982

RESOURCE ASSESSMENT  
BRANCH, HABITAT

March 15, 1982

Mr. Rich Cannon  
Habitat Special Projects  
ADF&G  
570 W. 53rd. Ave.  
Anchorage, Alaska 99502

Dear Mr. Cannon:

The Fairbanks office of Fish & Game, Habitat Division, Region III has informed us that Fish & Game is soliciting public input for hearings to be held in May regarding the classification of anadromous streams and rivers.

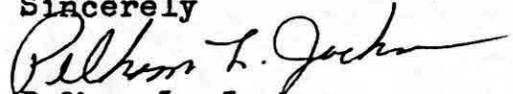
For the last three years we have been prospecting and mining on the Hammond River and its tributaries. Hammond River is located approximately five miles north of Wiseman, Alaska on the Dalton Highway. Wiseman, Alaska is approximately 265 miles north of Fairbanks, Alaska on the Dalton Highway.

In our three years of working on the Hammond River we have never seen fish other than Grayling in the river. The Grayling population appears to be quite small and very dispersed. Our findings are consistent with data collected by the U.S. Fish & Wildlife Service in 1971-72 \* in which Grayling were the only fish identified in their sampling of the Hammond River.

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