

State of Alaska
 Department of Fish and Game
 Public Review Nomination for Waters
 Important to Anadromous Species

1984 REVISION

84-722

Addition

Deletion

Name of Waterbody (if known): Gold Creek

Location:

Anadromous Waters Catalog Volume and Number SE #1

USGS 1:63,360 Quadrangle Juneau B-2

or 1:250,000 (if 1:63,360 not available) _____

| Species | Date(s) Observed | Stage(s) (Spawning, Rearing, Migration) |
|---------|------------------|---|
| pink | March 22, 1982 | Spawning |
| | | |
| | | |
| | | |

Comments: Please provide any clarifying information. Also, please include a map of the area identifying the stream reach. This can be a copy of the map from the Anadromous Waters Atlas.

The Commercial Fisheries Division conducted sampling for pink salmon fry & pre-emergent fry in Gold Creek on March 22, 1984. They found no evidence of spawning activity. Rick Reed requested that this stream be deleted from the AWC (reference attached memos from Reed to Clark, March 30, 1984 and from Thomason to Reed, March 28, 1984).

Name of Observer (please print) Phyllis K. Weber CWJ

Date: April 5, 1984 Signature: Phyllis K. Weber 4/5/84

Address: Region II Habitat

drafting chie
PKW
4/16/84

Drafted

MEMORANDUM

State of Alaska
ALASKA DEPT. OF
FISH & GAME

TO: John A. Clark
Director
Habitat Division

DATE: March 30, 1984 APR 2 1984

FILE NO:

TELEPHONE NO:

465-4290

HABITAT
REGIONAL OFFICE

FROM: Rick Reed *RR*
Regional Supervisor
Habitat Division
Department of Fish and Game

SUBJECT:

Nomination of Gold
Creek to Anadromous
Fish Waters Catalog/
Atlas

This is in reference to the March 19, 1984 letter from the City and Borough of Juneau, concerning the nomination of a section of Gold Creek to the Anadromous fish waters catalog/atlas.

As a result of the objection by the City/Borough, we requested that the Commercial Fish Division check the nominated stream portion for pre-emergent fry. In sixteen sample sites, no fry or eggs were found (see attached March 28 memo from Greg Thomason). Also based upon the recent research documentation of extensive straying by pink salmon discussed in the memo, it appears the Commissioner was correct in his assumption that all the pinks observed in Gold Creek were strays.

Based upon the above information and field sample results, I recommend that Gold Creek not be entered in the catalog.

I would like also to respond to a few inaccuracies in the City/Borough's letter:

1. The recent review of the Gold Creek Development Plan under Section 404 of the Clean Water Act was terminated when the applicant withdrew the application. We are not aware of a current 404 permit review.
2. We understand that a conceptual development plan was adopted by branches of the local government system. (The lack of specific development plans was apparently one reason that the application was withdrawn from COE review.)
3. During meetings with City staff, their hired consultants, and representatives of various resource agencies, Habitat Division has expressed uncertainty about Gold Creek's anadromous fish production. Human activities, such as snow removal and disposal, flume maintenance, gasoline and other fuel spills, all reduce Gold Creek's salmon production potential.
4. Formal notification of catalog updates is given by the Department through the Public Notice process. Courtesy notification is done in person and by telephone to parties with known development/resource exploitation plans that may be affected by a change of regulatory authority from AS 16.05.840 to AS 16.05.870.

John A. Clark

2

March 30, 1984

Per your request I did advise Anchorage we would be recommending deletion of Gold Creek.

If you have further questions please contact us.

Enclosures

cc: C. Yanagawa

MEMORANDUM

State of Alaska

TO: Rick Reed
Regional Supervisor
Habitat Division
Juneau

FROM: Greg Thomason *GTJ*
Fisheries Biologist
Commercial Fisheries Division
Juneau

DATE: March 28, 1984

FILE NO:

TELEPHONE NO: 465-4250

SUBJECT: Preemergent pink salmon
fry sampling in Gold Creek

On March 22, 1984, Doug Jones, Larry Talley and I (Commercial Fisheries Division) and Mark Schwan (Sport Fish Division) used preemergent fry sampling gear in Gold Creek below the concrete flume to determine indirectly if there had been any pink salmon spawning in the creek in 1983. Spawning activity, whether eggs were fertilized or not, should have been evident by the existence of either dead eggs (if no fertilization occurred or mortality of fertilized eggs occurred prior to hatching), live eggs or live or dead fry (if fertilization was successful). We sampled four areas of the creek downstream of the flume, from just below the flume down to the lower intertidal area, each in what appeared to be the best spawning substrate available. We did a total of 16 "digs", i.e., circular sections of the substrate each 0.2 square meters in area, for a total area sampled of 3.2 square meters (34.4 square feet), to a depth of 0.3 to 1.0 meter (1 to 3 feet). Pink salmon generally do not deposit eggs below a depth of about 0.3 meters (1 foot) in the gravel. We feel that we adequately sampled the available spawning area in the lower creek.

We found no evidence that spawning had occurred in Gold Creek in 1983. There were no live fry and no remains of dead eggs or fry which should have been present even if all live fry had emerged and left the stream already. This emergence may have occurred prior to our sampling because the Gold Creek water temperature was a relatively warm 4°C. This compares with temperatures of 0° to 2.5°C found during the previous two weeks in about 30 other preemergent streams which we sampled throughout northern Southeast Alaska. Therefore, fry development in Gold Creek may well have been accelerated by comparison with fry development in other pink salmon streams in the region. However, egg fertilization and survival are never 100% successful, and some evidence of this in the form of dead eggs or fry can remain in stream gravels for more than a year after spawning occurs. Therefore, at least some dead eggs or fry should have been present in our samples if any spawning had occurred in the creek in 1983; however, we found no such dead eggs or fry.

Pink salmon adults were reported in lower Gold Creek in 1983, but these may have been stray fish from nearby streams or hatcheries (Sheep Creek, Salmon Creek, Cowee Creek, e.g.) which were only "milling" in lower Gold Creek enroute to their home stream. Doug Jones and I recently documented a very high degree of straying in pink salmon populations tagged at the mouths of several streams in Southeast Alaska (ADF&G Informational Leaflet No. 231, "U.S./Canada Salmon Stock Interception Research, Southern Southeastern Alaska Pink Salmon (Oncorhynchus gorboscha) Tagging Study, 1982"). In another study, some pink salmon tagged inside Salmon Creek, near Juneau, in 1983, were recovered in spawning condition several days later in Cowee Creek (Douglas Island).

Any pink salmon adults observed in Gold Creek in 1984 and subsequent years should be monitored closely to determine if spawning is actually occurring in the creek. Preemergent sampling should be conducted again in the spring of subsequent years if any spawning is actually observed during the previous season.



THE CITY AND BOROUGH OF JUNEAU

CAPITAL OF ALASKA

155 SOUTH SEWARD ST. JUNEAU, ALASKA 99801

March 19, 1984

HABITAT
RECEIVED

MAR 19 1984

REGION I
JUNEAU

Commissioner Collinsworth
Alaska Department of Fish and Game
P.O. Box 3-2000
Juneau, AK 99802

Dear Commissioner Collinsworth,

The City and Borough strongly opposes the nomination of Gold Creek to the "Catalog of Anadromous Streams". We feel that the nomination is untimely, improper and inappropriate with respect to the current review of the Gold Creek Development Plan under Section 404 of the Clean Water Act.

Planning for the Gold Creek development area has been going on for several years. To date the City has spent two years and close to one million dollars in environmental and engineering studies. After an extensive public review process, the Planning Commission and City and Borough of Juneau Assembly approved the Development Plan for Gold Creek in May 1983.

Including the city generated studies, the research and documentation of the fishery resources utilizing Gold Creek are quite vague. It is our belief, based on the environmental background data and assessment presented in the Gold Creek Reclamation Project, Preliminary Report, prepared by Dames and Moore that the productivity of tidal portion of Gold Creek is at best, marginal. The Department of Fish and Game, Habitat Division, has supported this belief on several occasions during the agency review of the Section 404 permit for the Gold Creek Development. However, in spite of the limited productivity of Gold Creek, the City and Borough has agreed to enhance the fisheries resource of the Creek as mitigation for the Gold Creek Development.

Gold Creek has no clearly defined channel in the area south of Egan Drive, and is contained within an artificial concrete channel above Egan Drive. As part of the Gold Creek Development Plan, it is the City's intent to enhance Gold Creek through the design and construction of a spawning channel and the preservation of a substantial portion of the braided stream channel within the intertidal area. In addition, the "Alaska Aquarium" has been proposed at the mouth of Gold Creek in the Gold Creek Development Plan. It is anticipated that the spawning channel and a small salmon hatchery will be integrated into the design of the Aquarium. They should provide an outstanding attraction to visitors and residents alike.

Department of Fish and Game
March 19, 1984
Page No. 2

The City has a commitment to the Gold Creek Development project for the protection and enhancement of the fishery resources identified as utilizing this stream. We feel that it would be highly inappropriate to proceed with the nomination of the mouth of Gold Creek to the "Catalog of Anadromous Streams", in the midst of the Section 404 Permit review for the Gold Creek Development.

The City has dealt with the Department of Fish and Game honorably and with a forthright manner in attempting to develop the best possible plan to enhance Gold Creek as salmon habitat.

Your department's attempt to suddenly nominate a small portion of Gold Creek to the catalog, without formally notifying the City, is not the manner by which mitigation measures should be addressed. Your attention to this matter would be greatly appreciated.

Sincerely,



Thomas S. Peterson for

N.L. Teague
Manager

cc: Frank VanHulle
Richard Reed
Susan St. Pierre
Gold Creek File

177/LB/jm

HABITAT
RECEIVED
MAR 19 1984
REGION I
JUNEAU

State of Alaska
 Department of Fish and Game
 Nomination for Waters
 Important to Anadromous Fish

1984
 Year of Revision

84-721

Anadromous Water Catalog Volume SOUTHEAST
 USGS Quad JUNEAU B-2
 Name of Waterway Gold Creek
 Anadromous Water Catalog Number of Waterway _____

Change to _____ Atlas
 _____ Catalog
 Both
 Addition
 Deletion _____
 Correction _____

Name addition:

USGS name _____

Local name _____

For Office Use

| | |
|---------------------------|------------|
| Nomination # _____ | |
| Regional Supervisor _____ | Date _____ |
| | |
| Drafted _____ | Date _____ |

| Species | Date(s) Observed | Spawning | Rearing | Migration |
|--------------------|----------------------|---------------|---------|-----------|
| <u>Pink Salmon</u> | <u>Aug 15, 1984</u> | <u>X n=3</u> | | |
| | <u>Sept 27, 1984</u> | <u>X n=12</u> | | |
| <u>Chum Salmon</u> | <u>Aug 15, 1984</u> | <u>X n=28</u> | | |

Comments: Provide any clarifying information, including number of fish observed, location of fish survey data, etc.

Intertidal Spawning under Egan Drive and directly downstream from Egan Drive. Creek is anadromous up to concrete flume.

Attach a copy of a map showing location of mouth and upper points of each species, specific stream reaches identified for spawning or rearing, locations of barriers, such as falls. Attach a copy of the fish survey data, if available.

Name of Observer (please print) MIKE BETHERS

Date: Sept 27, 1984 Signature: Michael Bether

HABITAT
 RECEIVED

Address: _____

SEP 27 1984

Signature of Area Biologist:
 REGION I
 JUNEAU

Michael Bether



STATE OF ALASKA

MIKE BETHERS
 AREA MANAGEMENT BIOLOGIST
 JUNEAU - YAKUTAT AREA

DEPARTMENT OF FISH AND GAME
 DIVISION OF SPORT FISH
 SUITE 303

230 S FRANKLIN STREET
 JUNEAU, ALASKA 99801
 PHONE (907) 465-4270

MEMORANDUM

State of Alaska

| To | HABITAT | INT | DATE |
|------------|---------|-----|------|
| SECRETAR | | | |
| DEPUTY DIR | | | |
| HB III | | | |
| Admin Asst | | | |
| SECRETARY | | | |
| CT III | | | |
| FILE | | | |

TO: Mike Bethers
Area Management Biologist
Sport Fish Division

DATE: September 28, 1984

FILE NO:

TELEPHONE NO: 465-4290

FROM: Rick Reed *RM*
Regional Supervisor
Habitat Division
Department of Fish and Game

SUBJECT: Nomination of Gold Creek
to the Anadromous Catalog

I have received the nomination form (copy attached) you submitted to add Gold Creek to the Catalog of Waters Important to Anadromous Fish. I am reluctant to concur with the nomination, given that the Commissioner withdrew last year's nomination based upon pre-emergent fry sampling (see attached letter).

Consequently in this case, to comply with the Commissioner's previous position, I believe we have to demonstrate fry survival prior to entering the stream into the catalog. I am therefore not going to sign the nomination at this time.

enclosures

cc: F. Van Hulle
J. Clark, Habitat
J. Hall

ALASKA DEPT. OF
FISH & GAME

OCT - 3 1984

HABITAT
REGIONAL OFFICE

File: "Anadromous
Streams"

BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF FISH AND GAME

OFFICE OF THE COMMISSIONER

P.O. BOX 3-2000
JUNEAU, ALASKA 99802
PHONE: (907) 465-4100

May 18, 1984

Mr. N. L. Teague
Manager
City and Borough of Juneau
155 South Seward Street
Juneau, Alaska 99801

Dear Mr. Teague:

This is a follow-up to my March 23, 1984, letter regarding the nomination of Gold Creek to the "Catalog of Waters Important for Spawning, Rearing and Migration of Anadromous Fishes." The department has conducted pre-emergent fry sampling in Gold Creek, and as a result of that survey, we have decided not to include Gold Creek in the catalog. The catalog is currently undergoing final review by the Attorney General's office without Gold Creek included.

Thank you for bringing this matter to our attention.

Sincerely,



Don W. Collinsworth
Commissioner

MEMORANDUM

State of Alaska

TO: John A. Clark
Director
Habitat Division

DATE: March 30, 1984

FROM: Rick Reed *RN*
Regional Supervisor
Habitat Division
Department of Fish and Game

ALASKA DEPT. OF
FISH & GAME
FILE NO:
TELEPHONE NO:
APR 9 1984
SUBJECT:
HABITAT
REGIONAL OFFICE

465-4290

Nomination of Gold
Creek to Anadromous
Fish Waters Catalog/
Atlas

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Based upon the above information and field sample results, I recommend that Gold Creek not be entered in the catalog.

I would like also to respond to a few inaccuracies in the City/Borough's letter:

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| To | HABITAT | INT | DATE |
|------|------------|-----|------|
| / | DIRECTOR | | |
| | DEPUTY DIR | B | |
| | HB III | | |
| | Admin Asst | | |
| | SECRETARY | | |
| | CT III | | |
| FILE | ANS 2.0 | | |

CC: Reed
YANAGIWA

*PLEASE OMIT
GOLD CREEK FROM
CATALOG. RB 4/3/84*

John A. Clark

2

March 30, 1984

Per your request I did advise Anchorage we would be recommending deletion of Gold Creek.

If you have further questions please contact us.

Enclosures

cc: C. Yanagawa

MEMORANDUM

State of Alaska

TO: Rick Reed
Regional Supervisor
Habitat Division
Juneau

FROM: Greg Thomason *GT*
Fisheries Biologist
Commercial Fisheries Division
Juneau

DATE: March 28, 1984

FILE NO:

TELEPHONE NO: 465-4250

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