Klawock River Hatchery -Increase coho salmon permitted capacity by 1.3M green eggs for release at Neck Lake. -

Received 2/14/2018 -

PERMIT ALTERATION REQUEST

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B.

STATE OF ALASKA DEPARTMENT OF FISH AND GAME PRIVATE NONPROFIT PROGRAM

1. INDENTIFICATION OF APPLICANT

A. Applicant Information

| Bill Gass | | SSRAA |
|----------------|--------|--------------|
| Applicant Name | | Organization |
| 14 Borch st | | 907-225-9605 |
| Address | | Phone Number |
| Ketchikan | Alaska | 99901 |
| City | State | Zip |

Klawock River Hatchery Name

47 PNP Permit Number

II. STATEMENT OF APPLICANT'S GOALS AND OBJECTIVES

A. Describe the nature of the requested alteration, why you have decided to request it, and what you generally expect to accomplish by the expansion of your program, including answers to the following questions. Will the proposed project affect wild salmon stocks or existing fisheries? How will a significant contribution to common property fisheries be made? How will potential effects and interactions between introduced or enhanced stocks and wild stocks be assessed? What marking and recovery studies are being proposed that will allow the project to be evaluated? What are the potential benefits to fisheries or wild stocks from the proposed project? Has this project been discussed with the department's area or regional management biologists? (Attach additional pages as necessary.)

SSRAA is requesting a permit alteration for the Klawock River Hatchery (KRH) that would allow for the collection of 1,300,000 green eggs of Klawock River stock coho for release at Neck Lake. Klawock River is currently permitted for 5 million eggs with all of those eggs reared in the Klawock Lake. The facility has a large indoor rearing area with significant space and water that is completely unused. SSRAA has considered other projects with similar rearing capacity with costs exceeding \$2,000,000. Over the past 10 years SSRAA has attempted to increase fall coho production, through various programs with mixed results. The latest attempt involves raising additional fall coho in Neck Lake for 1 year prior to transporting those fish to saltwater for rearing and imprinting prior to release at Neets Bay and Anita Bay. Since brood year 2011, SSRAA has taken eggs at Whitman Lake Hatchery incubated those eggs at Burnett Inlet Hatchery to the fed fry stage, transported the fry by air to Neck Lake for rearing in net pens and then transported resultant smolt to Neets Bay and Anita Bay for release the following year. The ancestral stock for this program is from the Chickamin River and the results to date have been poor. One of the challenges SSRAA has encountered rearing in Neck Lake is the presence of a parasite that the young fry ingest when grazing on naturally occuring zooplankton in the lake. Starting fish in the indoor ponds at Klawock Hatchery and using the Klawock Lake stock rather than the Chickamin River stock are two strategies that may reduce the detrimental effects of the parasite. SSRAA projects that by employing this strategy, fish could be introduced to Neck Lake at 3 grams rather than the 0.5 grams. SSRAA believes that the Klawock Lake stock is inherently better equipped to deal with the parasite than the Chickamin River stock.

Neck Lake is well positioned to provide harvest for common property fishers to include the troll fleet in the central region, the gillnet fleet in district 106 and a substantial sport fishery that has developed around the Neck Lake release. By adding a fall run fish to the release to the existing summer stock, the effective harvest season in the corridor would run from late June through late September. There is a naturally occuring fall coho run in 108 Creek, which isin very close proximity to Neck Creek, which has coexisted with the Neck Lake summer coho run for 20 years. SSRAA conducted stream surveys in 108 Creek in the late 90's and early 2000's looking for stray fish from Neck Lake, but no recoveries of stray fish were documented. Neck Lake appears to possess qualities that produce a high level of homing fidelity, as there have been very few tags recovered anywhere other than Neck Lake. For example, the Burnett Inlet Hatchery, the natal site for the summer coho program, is located 40 kilometers from Neck Lake, and has recovered only 1 Neck Lake tag among the 1,800 collected over the years. SSRAA does not anticipate meaningful numbers of strays into 108 Creek from any fish released from Neck Lake.

SSRAA intends to evaluate the program through coded wire tagging as well as harvest information from the collection raceway at Neck Creek. This proposal was discussed at the RPT meeting in Ketchikan in December 2017.

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PERMIT ALTERATION REQUEST

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III. IMPACTS ON EXISTING HATCHERY PROGRAM

A. <u>Present Permitted Capacity</u>

(numbers of green eggs by species)

| Pink | | Coho | 5,000,000 |
|---------|-----------|---------|-----------|
| Chum | | Chinook | |
| Sockeye | 1,000,000 | Other | |

B. Capacity After Request

(numbers of green eggs by species)

| Pink | | Coho | 6,300,000 |
|---------|-----------|---------|--|
| Chum | | Chinook | ······································ |
| Sockeye | 1,000,000 | Other | |
| | | | |

C. <u>Water Use</u>

1. List the total amount of water available and the source.

2. List the amount of water presently being used.

| 15 cfs | Click here and type text | |
|--------|--------------------------|--|

3. List the additional amount of water needed for this alteration.

1 cfs

Click here and type text

PERMIT ALTERATION REQUEST

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IV. HATCHERY DESIGN

A. Please provide a detailed description of new facilities needed with this alteration (e.g., buildings, incubators, rearing space, piping, etc.). This description should represent a solid concept of the proposed hatchery changes/expansion. Drawings showing the layout of new structures should be attached when appropriate.

No changes are needed to accomplish this plan. Click here and type text

V. DECLARATION AND SIGNATURE

I declare that the information given in this application is, to my knowledge, true, correct, and complete.

Bill GA55 Name of Applicant

Signature of Applicant

Z/M/2017 Date Signed