

history on multiple species. Chum in particular are surviving at record low rates with brood years 10-12 having a projected average survival of 0.34%. Due to the eggtake requirement and number of release locations utilizing the summer stock HFH was dangerously close this past year of not being able to make broodstock goals and ended up utilizing 81% of the total return for broodstock. This puts multiple release sites at risk of being unable to meet their production goals due to inadequate numbers of chum returning to HFH.

NSRAA for the past 3 years has been attempting to purchase and operate the Gunnuk Creek facility to provide a second NSRAA broodstock location for HF stock summer chum. Currently it is still uncertain that NSRAA will be able to utilize that location. MCH is the next logical option to provide a second broodstock source for HF stock summer chum. MCH is currently permitted to hatch up to 24 million HF stock summer chum for release at Deep Inlet.

This past year NSRAA was able to take 3 million HF stock summer chum eggs at MCH. Initially it appeared that the HFH chum return was going to be less than the required broodstock goal. Deep Inlet was closed to common property fishing for 8 days to allow HF stock chum to build in Deep Inlet. Approximately 4,000 chum were collected by seine and rolled into a 40x40 net pen. These fish were towed to MCH, held for several days to key in on the fresh water source and then released into the broodstock holding area to ascend the fish ladder.

Two problems became apparent with this approach. Mortality on broodstock collected and towed was over 10%. and the common property fishery had to be closed for over a week to allow enough broodstock to concentrate in Deep Inlet. A release of HF stock chum at MCH would alleviate both of these concerns.

There are existing dates and cutoffs for chum spawning at MCH in the AMP to maintain adequate temporal separation in the two stocks. These would be maintained and they seem to have worked well for the past 27 years with both stocks outplanted from the facility at Deep Inlet.

Will the proposed project affect wild salmon stocks or existing fisheries? It is anticipated that limited effects will occur to wild salmon stocks. Medveje has been incubating and releasing this stock for 27 years. The nearest chum stock is located at Salmon Lake Creek and is a fall stock. This location provided some of the initial brood for the chum development at MCH. A temporal separation is currently occurring. Existing fisheries would benefit at HFH where additional chum could go to the common property fisheries with a reduced broodstock goal at HFH. In addition closure of Deep Inlet would be minimized due to summer chum brood returning directly to Bear Cove.

How will a significant contribution to common property fisheries be made? NSRAA has seen higher than average marine survival for the HF stock chum from Deep Inlet releases. Conditions favorable to the HF stock are currently being experienced on the west coast of Baranof in stark contrast to conditions on east Baranof for HF stock chum. Both Port Armstrong and HF share the same chum stock and are both experiencing record low marine survival. Any increase in survival of released fry will directly benefit common property fisheries in increased opportunity and less closures due to brood stock concerns.

How will potential effects and interactions between introduced or enhanced stocks and wild stocks be assessed? All chum will be uniquely otolith marked to allow for potential future

evaluation.

What marking and recovery studies are being proposed that will allow the project to be evaluated? All chum will be uniquely otolith marked. NSRAA has an extensive otolith sampling program for Deep Inlet THA, Bear Cove/Silver Bay SHA, and rack sampling.

What are the potential benefits to fisheries or wild stocks from the proposed project? Increased common property fishing opportunity at HFH and Deep Inlet.

Has this project been discussed with the department's area or regional management biologists? Not at this time.

DRAFT FOR DISCUSSION

PERMIT ALTERATION REQUEST

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III. IMPACTS ON EXISTING HATCHERY PROGRAM

A. Present Permitted Capacity
(numbers of green eggs by species)

Pink	300,000	Coho	410,000 Salmon L stock, 3.3 million CLR program
	77 million		
Chum	Up to 63 million Fall Up to 24 million Summer	Chinook	5.2 million Andrews Creek
Sockeye		Other	

B. Capacity After Request
(numbers of green eggs by species)

Pink	No Change Shared Capacity of 77 million	Coho	No Change
Chum	Up to 63 million Fall Up to 44 million Summer	Chinook	No Change
Sockeye		Other	

C. Water Use

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

Approximately 20 cfs or 10,000 gpm is available from Medvejie Creek, and about 10 cfs or 4,500 gpm is consumed (water rights for 13cfs). Two large lakes store water in the watershed - Indigo Lake at 3,000' elevation and Medvejie Lake at 200' elev.

2. List the amount of water presently being used.

Approximately 13 cfs is used at the peak demand.

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

No change.

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.

Will need to move 20 million MCH fall chum eggs to SCH for incubation, hatch and trasport to Deep Inlet.

V. DECLARATION AND SIGNATURE

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

Name of Applicant

Date Signed

Signature of Applicant