Fish Propagation Project Application

New: ☒ Renewal: ☐

Project Name: Siletz Tribal Hatchery Program

PART 1 – APPLICANT INFORMATION

Applicant: Confederated Tribes of the Siletz Indians (CTSI)

501(c)(3) tax exempt status: Yes ☒ No ☐

Contact Name: Stan Van de Wetering

Address: 201 SE Swan Ave.

City: Siletz State: OR Zip: 97380

Phone: 541-444-8294 Email:

Signature: _______________________________ Date: _______________________________

A goal of the Salmon and Trout Enhancement Program (STEP) is to achieve the recovery and sustainability of Oregon’s native stocks of salmon and trout. Through STEP, Oregonians can submit a proposal to ODFW and the Fish and Wildlife Commission to conduct a project consistent with this goal.

The following sections of the STEP Fish Propagation Project Application will ask you to provide the information needed to thoroughly review your proposed project and determine if it is consistent with STEP goals. The review will also determine whether a project is consistent with the Native Fish Conservation Policy (NFCP) and contributes to the broader goals of the Oregon Plan for Salmon and Watersheds (OPSW) to restore salmon runs, improve water quality, and achieve healthy watersheds.

As a STEP volunteer, become familiar with these important plans and policies that guide and direct STEP activities. As you complete this application, consider and explain how your proposed project will help STEP to achieve its goals and will contribute to Oregon’s efforts to recover native fish and establish healthy watersheds.
PART 2 – TYPE OF REARING PROJECT AND OBJECTIVE

Fish Species to be Reared: Winter Steelhead

Intent of Rearing Project (check only one):

- [x] Type 1 Increase fishing and harvest opportunities
- [ ] Type 2 Enhance existing natural production
- [ ] Type 3 Restore fish to vacant habitat
- [ ] Type 4 Develop broodstock

Note: OAR 635-009-0125 defines STEP fish propagation projects as the following:
- **Supplementation** – A project involving continued planting to maintain or increase fish abundance where natural production is insufficient to meet management objectives (Type 1)
- **Rehabilitation** – A project in which fish are released to rebuild a currently depressed run (Type 2 and 3)
- **Broodstock Development** – A project in which reared fish are released and the resulting adults return to a recapture facility to provide an egg source for management program (Type 4)

Project Start Date: March 2020  Project End Date: Renewal March 2024

Project Duration:
- If Type 1: [x] 5 years
- If Type 2, 3, or 4: [ ] 3 years Coho salmon
- [ ] 4 years Chum salmon
- [ ] 5 years Chinook salmon
- [ ] 4 years Steelhead
- [ ] 4 years Trout

*Note: Projects that continue beyond the above-listed time periods must apply for renewal at the end of that time period.*

Describe how the proposed project (please answer all that apply):

(a) Addresses ODFW fish management needs as outlined in subbasin fish management, species, recovery or conservation, or other plans (please cite specific plan, goal, objective, etc.)

Rearing winter steelhead at the Siletz Tribal Hatchery for release into Little Rock Creek in the Siletz River basin for subsequent harvest as adults is an integral part of the Mid Coast Fish District’s management objectives. The fishery for winter steelhead in the Siletz basin is limited to hatchery fin-clipped fish only. The Siletz Tribal Hatchery Plan will produce adipose and left maxillary clipped winter steelhead for recreational harvest, which is consistent with the Mid Coast Fish District management goal of improving angling opportunity. The proposed program will provide a modest 5,000 smolt addition to the current 50,000 smolt release of winter steelhead in the Siletz River dictated by the Coastal Multispecies Conservation and Management Plan (CMP 2014). The CMP also states a goal to minimize interactions with listed fish, which will be accomplished by timing smolt releases such that the majority of hatchery winter steelhead smolts migrate to the ocean before wild Coho Salmon emigrate to the ocean (Siletz HGMP 2016).

The Confederated Tribes of Siletz Indians (CTSI) Tribal Council has approved (October 2019) the use of the Siletz Tribal Hatchery property for the proposed STEP Siletz Tribal Hatchery Program.

(b) Will contribute to fisheries. Identify the fisheries and note any current special regulations such as “adipose fin-clipped only” that would affect the proposed project operation.

Currently, there is a selective fishery for winter steelhead in the Siletz restricted to adipose fin-clipped hatchery fish only. The goal of Siletz Tribal Hatchery is to rear up to 5,000 smolts that will contribute directly to available stock for harvest by recreational anglers. All smolts will be adipose and left maxillary clipped to identify them as available for...
harvest. The differential clip will identify fish from the tribal release and provide for evaluation and monitoring of the program.

(c) Addresses the factors limiting adequate natural production in the basin (lack of spawning habitat, poor rearing habitat). Also, please cite any information that supports that determination. This program does not currently address any limiting factors to natural production in the Siletz basin.

(d) Contribute to other STEP, OPSW, and salmon and/or watershed recovery needs (education, citizen participation, other social benefit, etc.).

The Siletz Tribal Hatchery is owned and operated by Confederated Tribes of the Siletz Indians (CTSI). The plan includes CTSI volunteers and youth members in the maintenance, feeding, rearing process, and adult recovery at the hatchery. In the event there are insufficient numbers of volunteers from the CTSI community, the Mid Coast STEP Program will query volunteers for assistance. This plan offers an opportunity for education and working experience in the field of fisheries for the CTSI community. Each July, CTSI holds “Culture Camp”, an event intended for youth Tribal members to become involved in indigenous cultural practices, and has historically included a fishing component for which the hatchery property is utilized. A return to hatchery rearing operations would offer an educational opportunity during this event.

(e) Is addressed under an existing Hatchery Genetic Management Plan or Hatchery Management Plan.

The Siletz Tribal hatchery production will be addressed with modifications to the existing Siletz winter steelhead HGMP.

(f) Is consistent with the goals of the Hatchery Management Policy and the NFCP (please answer all that apply):

a. Fosters and sustains opportunities for sport, commercial, and tribal fishers consistent with the conservation of naturally produced native fish.

The Siletz Tribal Hatchery Program will produce adipose, left maxillary clipped winter steelhead to augment the existing ODFW hatchery release in the Siletz. This program enhances the cultural aspect by providing additional hatchery fish harvestable by CTSI anglers. In addition, these fish are available for harvest to all license holding sport anglers. Because many trapped fish will be distributed to Siletz Tribal members as a food resource, this program encourages cultural food practices held by the Siletz Tribe for centuries. The adipose, left maxillary clip will identify hatchery fish to spawning surveyors and aid in the determination of percent hatchery origin spawners on spawning grounds. The Siletz Tribal Hatchery volunteers will operate the fish trap on Little Rock Creek and remove returning hatchery fish from the system.

b. Contributes toward the sustainability of naturally produced native fish through the responsible use of hatcheries and hatchery-produced fish.

The Siletz Tribal Hatchery will only release fish into Little Rock Creek, a tributary to the Siletz River. The mouth of the larger Rock Creek system is approximately four miles downstream of the current winter steelhead acclimation site on Palmer Creek, a small tributary located at river mile 56. Hatchery fish will be volitionally released as full-term smolts for rapid migration in April to avoid wild Coho salmon interactions. Returning hatchery fish will be removed from the system at the adult trap at the Siletz Tribal Hatchery.

c. Maintains genetic resources of native fish spawned or reared in captivity.

Eyed eggs will come from Siletz River wild winter steelhead broodstock spawned by ODFW staff at the Alsea Hatchery.
d. Minimizes adverse ecological impacts to watersheds caused by hatchery facilities and operations.

Per the Siletz winter steelhead HGMP, the broodstock utilized for producing fertilized eggs are collected from the Siletz River Falls trap or by anglers and transported to the Alsea Hatchery for spawning.

Effluent mitigation will be accomplished by running fish holding pond effluent through the mud bottomed settling pond, where nitrogenous compounds may be detoxified by bacteria and taken up by aquatic plants.
### PART 3 – LOCATION OF REARING PROJECT OR FACILITY

<table>
<thead>
<tr>
<th>Country:</th>
<th>Lincoln</th>
<th>Basin or Watershed:</th>
<th>Siletz River</th>
</tr>
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<tbody>
<tr>
<td>Stream:</td>
<td>Little Rock Creek</td>
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</tbody>
</table>

*And one of the following:*

- **Road Address:** Near milepost 13 on the Logsdon Rd.
- **River or Stream Mile:** 8.5 (rough estimate w/ ORWAP)
- **Legal (Township / Range / Section):** T10S R08W S07
- **UTM Coordinate:** 443643.92E 4952117.96N

*Please include a map showing the project location within the watershed.*

### Other salmon, steelhead and/or trout species present in basin:

<table>
<thead>
<tr>
<th>Species</th>
<th>Run</th>
<th>Hatchery or Naturally Produced?</th>
<th>State or Federally Listed?</th>
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<tbody>
<tr>
<td>Cutthroat</td>
<td></td>
<td>Naturally</td>
<td></td>
</tr>
<tr>
<td>Steelhead</td>
<td>Summer</td>
<td>Hatchery/Naturally</td>
<td></td>
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<tr>
<td>Steelhead</td>
<td>Winter</td>
<td>Hatchery/Naturally</td>
<td></td>
</tr>
<tr>
<td>Chinook</td>
<td>Spring</td>
<td>Naturally</td>
<td></td>
</tr>
<tr>
<td>Chinook</td>
<td>Fall</td>
<td>Naturally</td>
<td></td>
</tr>
<tr>
<td>Coho</td>
<td></td>
<td>Naturally</td>
<td>Federally/Threatened</td>
</tr>
<tr>
<td>Chum</td>
<td></td>
<td>Naturally</td>
<td></td>
</tr>
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</table>

### List all other propagation programs in the basin or watershed:

<table>
<thead>
<tr>
<th>Species</th>
<th>Responsible Agency or Organization</th>
<th>Number Released</th>
<th>Program Objective</th>
</tr>
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<tr>
<td>StS</td>
<td>ODFW</td>
<td>50,000</td>
<td>Harvest</td>
</tr>
<tr>
<td>StW</td>
<td>ODFW</td>
<td>50,000</td>
<td>Harvest</td>
</tr>
</tbody>
</table>

If other propagation programs exist, what is the relationship of the proposed project to these other programs?

**CTSI employees responsible for the Siletz Tribal Hatchery will work closely with ODFW Alsea Hatchery staff to obtain 7,500 eyed winter steelhead eggs for rearing. In addition, CTSI staff will seek guidance and advice on effective egg rearing processes, fry feeding regiments, and hatchery maintenance from Alsea Hatchery staff.**

The program provides a modest increase in smolt releases of hatchery winter steelhead to the Siletz basin. **Broodstock for the Siletz Tribal Hatchery will be the same stock currently used for the larger ODFW winter steelhead program in the basin.**
PART 4 – OPERATION

Please explain the proposed operation including the following (where applicable) or attach a copy of the existing Hatchery Genetic Management Plan (HGMP) or Hatchery Management Plan (HMP):

(a) Source of broodstock.

This program is designed to augment consumptive recreational winter steelhead fisheries in the Siletz River basin. The Siletz Tribal Hatchery program will rely on broodstock collections by the ODFW Siletz winter steelhead program through capturing fish at the Siletz Falls trapping facility or by angler caught methods.

Broodstock collection activities occur at the Siletz Falls trap located at river mile (RM) 64.5 on the Siletz River at ~720 feet above MSL. The trap is associated with a fish ladder around a 41-foot high falls. The timing of adult broodstock collections is early January for the early run component and later April and May for the later component of the run. Angler-caught wild winter steelhead are collected from January through mid-April as a means to reduce impacts on the upper basin population of wild winter steelhead in the Siletz basin. A total of 40 pair of wild winter steelhead are needed to provide for all program needs, including the Siletz Tribal Hatchery program.

(b) Number of eggs needed.

7,500 eyed eggs to provide for the 5,000 smolts identified for the program.

(c) Number of broodstock (males and females) needed.

All winter steelhead for the Siletz Tribal Hatchery program’s fertilized egg needs will be collected as part of the Siletz Winter Steelhead Program. At the Alsea Hatchery, individual winter steelhead are spawned randomly as they ripen. The stated goal of the Alsea Hatchery Management Plan’s Siletz winter steelhead program is to collect 40 pairs of mature fish for broodstock. The Alsea Hatchery does not utilize back-up broodstock as a sufficient number of eggs are taken to fulfill the smolt release goal of 50,000.

(d) Mating procedures.

The Siletz winter steelhead HGMP program outlines that winter steelhead are spawned using a 1:1 male to female ratio. Individual family groups are kept separate. There is a 100 percent sampling for viruses to facilitate culling if either or both parents have a high titer for virus.

(e) Number of fry needed.

The Siletz Winter Steelhead program began in 1995, and average survival from egg to fry stage is 98% (Siletz River winter steelhead HGMP 2016). Based on this standard, 7,350 fry are needed for this project.

(f) Number of fingerling needed.

Since 1995, the Siletz StW program has seen 93% survival for fry to fingerling. Based on this standard, 6,835 fingerlings are needed for this project.

(g) Number of pre-smolt needed.

The Siletz River winter steelhead HGMP does not provide figures for average fingerling to pre-smolt survival. Since 1995, the Siletz winter steelhead program at the Alsea Hatchery has seen 98% survival for fingerling to smolt. Based on this standard, 6,698 smolt are needed for this project.

(h) Number of smolt needed.
(i) Since 1995, the Siletz winter steelhead program has seen 98% survival for fingerling to smolt. Based on this standard, 6,698 smolts are needed for this project, well above the 5,000 smolt release goal. Excess smolts that would cause more than a 5% overage for the overall release will be moved to closed water bodies.

(j) Anticipated or historical losses at each stage.

The Siletz winter steelhead program began in 1995. Established historical loss averages at the Alsea Hatchery for each stage will be used to anticipate loss rates at the Siletz Tribal Hatchery. The Siletz River winter steelhead Program overall loss from eyed-egg to release since 1995 is 11%. Our current goal of 5,000 smolt released from 7,500 eyed-eggs would allow for 33% losses over the development process.

The Siletz River winter steelhead Program average losses at each stage since 1995 are as follows: Eyed-egg to fry: 2%; Fry to fingerling: 7%; Fingerling to smolt: 2%.

(k) Anticipated or historical number of adult returns resulting from rearing project.

The average Siletz winter steelhead SAR rate from 1992-2015 is 4.49%. The Siletz River winter steelhead HGMP plan establishes a 3.00% return rate goal, which has been exceeded in 15 of the 23 years for which data is available. Using the average SAR for those 23 years, we anticipate 4.49% SAR for the Siletz Tribal Hatchery Program. Given our proposed 5,000 smolt release and assuming the 3.80% average SAR, we expect 225 adult returns as a result of the rearing project.

(l) How returning adults will be collected.

In the Siletz River, trap catches recorded by ODFW occur at Siletz Falls, Mill Creek Life Cycle Monitoring site, and Schooner Creek. The Siletz Tribal Hatchery contains a fish trap on Little Rock Creek that will be utilized to collect returning hatchery fish. The trap will be run by CTSI natural resources biologists and volunteers between the months of January and May. Hatchery winter steelhead captured in traps will be removed from the system.

(m) Disposition of collected adults.

Hatchery fish trapped at Siletz Falls trap are removed from the system. Trapped winter steelhead at the Siletz Tribal Hatchery deemed edible will be distributed to the Tribal community, via a fish tote into the town of Siletz and on a first come, first serve basis and fish deemed non-edible will be used for stream enrichment. Wild broodstock adults used for spawning are returned to the Siletz River.

(n) Other projects that may receive eggs or reared fish from this project.

None

Release Program (summarize proposed fish releases):

<table>
<thead>
<tr>
<th>Number Released</th>
<th>Date of Release</th>
<th>Size (fish/lb) or Stage</th>
<th>% Marked</th>
<th>Release Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,000</td>
<td>April</td>
<td>6</td>
<td>100 AdLM</td>
<td>Little Rock Creek (Siletz River)</td>
</tr>
</tbody>
</table>
(o) If fish are marked, please describe the type of mark and the reason for marking.
100% of smolt reared at the Siletz Tribal Hatchery will receive an adipose, left maxillary clip to allow for fish to be harvested in selective fisheries in the Siletz River and aid in monitoring and evaluation of the program.

**PART 5 – FACILITY INFORMATION**

Please describe (or provide attachments that describe) the facility including:

(a) Design- include a diagram or sketch that shows structures, water diversions, water distribution system, settling ponds, fish ladders, adult traps, etc.

The Siletz Tribal Hatchery consists of a concrete fish trap diversion dam on Little Rock Creek and a pipeline to deliver water to two asphalt lined rearing ponds (volume = 29,162.5 ft³ or 218,151 gallons) via gravity flow (peak summer flows = ~1cfs, or 0.5 cfs per pond). Outflow from the rearing ponds is passed to an earth bottomed settling pond via a concrete channel. Outflow from the settling pond is passed to Little Rock Creek via a channel. Additional structures at the site include three adjacent covered structures. The East structure stores power equipment used to maintain the hatchery grounds, and other supplies. The West structure will serve as the location for egg rearing troughs. The South structure houses the rearing tanks.

A gravel driveway is used to access the hatchery grounds. See Appendix A.

(b) Water supply – identify source, quantity available, quantity needed, and provide existing water quality and temperature (daily, weekly, monthly) data.

Water is supplied to indoor egg rearing troughs via gravity flow from Spring Creek and Little Rock Creek. Little Rock Creek gravity flow will be used if the flow is obstructed in the Spring Creek line (see Appendix B for details on backup equipment). Water for rearing and settling ponds is supplied via gravity flow from Little Rock Creek. The CTSI possess water rights for 9.0 cfs from Little Rock Creek and 2.0 cfs from Spring Creek (see Appendix D).

(c) Incubation, rearing, and/or broodstock holding facilities – dimensions, capacity, water required, etc.

The Siletz River winter steelhead HGMP outlines the broodstock and incubation facilities at the Alsea Hatchery relevant to the Tribal Hatchery Program as follows. The Alsea Hatchery holds Stock 33W winter steelhead broodstock in circular tanks with 9.5 feet diameter and 4 feet height. The approximate flow rates to these tanks is 40 gallons per minute. Broodstock are treated for fungus with formalin three days a week. Alsea Hatchery incubation facilities consist of 24 stacks of 8-tray vertical incubators. North Fork Alsea water diverted at the intake is delivered to the hatchery by a 42-inch mainline. An 18-inch line delivers water from the mainline to the hatchery building. Two 4-inch lines feed water in tandem to a screened headbox supported over incubators to create a supply and flow reservoir. In addition, there are four 15-foot shallow trough incubators. Equipment includes a Jensorter egg picker, mechanical counter, egg picking trough, and other necessary equipment. Incubation system is equipped with low-water alarm system.

Eyed-eggs delivered to the Siletz Tribal Hatchery from the Alsea Hatchery will be incubated in California style STEP incubators set up in 16 feet x 2 feet x 2 feet fiberglass Canadian troughs. Water is supplied via gravity flow from Spring Creek to the incubators housed in the West hatchery barn. Free swimming fry will be ponded in circular tanks (6 feet diameter and 3 feet deep). Once fry exceed the capacity of the
circular tanks, they will be transferred to the two asphalt-lined ponds on the hatchery property. Each pond has a volume of 218,151 gallons and receive peak summer flows of 0.5 cfs, equivalent to approximately 8 hours for full volumetric turnover.

(d) Adult trapping, holding and handling facilities.

Hatchery-origin winter steelhead adults returning to the Siletz Tribal Hatchery will be trapped for distribution to Siletz Tribal members using the concrete fish trap at the diversion dam. The trap will be monitored from the month of January through May by Siletz biologists, technicians, and volunteers.

(e) Water treatment (if applicable) and discharge process. Please also note whether a National Pollutant Discharge Elimination (NPDES) Permit is required.

No NPDES permit is required. All water effluent from the Siletz Tribal Hatchery is discharged into Little Rock Creek. The Tribal Hatchery will incorporate the earthen settling pond as an effluent catchment during fish rearing.

(f) Known existing or potential disease issues or considerations.

No known disease outbreaks have been detected at the Tribal Hatchery in recent years, as the facility has not held fish for a number of years. However, the ponds will be monitored for fish that show external signs of bacterial or viral infections and/or parasites. The Tribe will work with the ODFW Fish Health Program to carry out timely sampling upon observation of potential disease outbreak.

(g) Process for disease monitoring.

The CTSI Aquatics Program Director, Stan Van De Wetering has significant past experience monitoring salmonids for disease. Stan and the Siletz Tribal biologists will visually monitor fish for presence of disease on a regular, to-be-determined basis. ODFW Fish Health staff will be consulted and asked to visit the Siletz Tribal Hatchery if deemed necessary.

(h) Anticipated facility operation and maintenance costs.

Siletz Tribal Hatchery and its volunteers will be managed and organized by Siletz Natural Resource biologists. Operational costs including insurance and maintenance of the facility, is usually around $44,000 annually.

Documents attached that demonstrate legal access to the site or property rights:

- Lease(s) □ Access Agreement □
- Option(s) □ Water Right X
- Easement □ Other written Authorization □

Attach a written statement from the appropriate local planning authorities of the county or jurisdiction within which the proposed facility is located stating whether the proposed operation is in compliance with all local comprehensive land-use and/or estuary plans.

Note: It is the responsibility of the project sponsor to obtain all water rights, access agreements, easements, use permits or any other permits needed to undertake the project.

The Siletz Tribal Hatchery resides on property owned exclusively by the Confederated Tribes of the Siletz Indians.
Please explain how this project will be monitored and evaluated and by whom (volunteer, ODFW or other) including:

(a) Monitoring for disease.

The ponds will be monitored for fish that show external signs of bacterial or viral infections and/or parasites. The CTSI staff will work with the ODFW staff to carry out timely sampling upon observation of potential disease outbreak.

Prior to release, an ODFW pathologist will certify the fish are ready for release.

(b) Monitoring of juvenile survival and/or distribution (if applicable).

Onsite monitoring of egg-to-fry and fry-to-smolt survival will be carried out by CTSI biologists, technicians, and volunteers.

(c) Monitoring of adult returns to this or other collection facilities (if applicable).

Adult returns will be monitored at the Tribal Hatchery by CTSI biologists, technicians, and volunteers. Adult returns are also monitored at Siletz Falls and the Mill Creek life cycle monitoring traps by ODFW District and Research staff. Adult wild winter steelhead that enter the Siletz Tribal Hatchery will be handled according to the standard ODFW protocol minimizing stress, injury, mortality, and delay in migration. Data will be collected by CTSI biologists including the number of unmarked winter steelhead collected and released from the traps and the number of mortalities associated with trapping operations (if any). Dates of trap operation and the frequency of handling unmarked winter Steelhead will also be collected and reported to ODFW.

(d) Monitoring of adult returns to natural spawning areas (if applicable).

The Siletz Tribal Hatchery winter steelhead will be 100 percent adipose, left maxillary clipped as a means of integrating hatchery and harvest management. Marking fish with an adipose fin clip allows for selective harvest of hatchery fish while requiring release of all naturally-produced fish. The left maxillary clip also allows for better monitoring, evaluation and control of impacts of the hatchery program to naturally-produced fish.

(e) Contribution to sport or commercial fisheries (if applicable).

Because the Siletz Tribal Hatchery Program is yet to be implemented, direct estimates of smolt-to-adult survival rates, fishery contribution, escapement, and hatchery returns are not available. However, the similarities between the Alsea Hatchery StW program and the Siletz Tribal Hatchery program regarding broodstock collection, size at release, and release locations allow for inference from the Siletz River Winter Steelhead Program Stock 33W HGMP. For the 1992 to 2015 brood years, the average smolt-to-adult (SAR) survival rate for the Siletz River Winter Steelhead Program was 4.49%. SAR for winter steelhead in the Siletz River are derived from harvest tag reporting, and is thus indicative of sport fishery contribution by hatchery stock. A commercial fishery does not exist for winter steelhead.

(f) Estimated monitoring costs.

Hatchery trapping is integrated with hatchery operation and maintenance costs.

If this is a project renewal, please identify or provide a summary of past monitoring information including:

(a) Results of disease monitoring (please attach appropriate reports).

NA
Please identify any potential social consequences resulting from project returns and how those will be monitored or evaluated.

The Siletz Tribal Hatchery Program aims to provide a modest 5,000 adipose, left maxillary clipped smolt release increase to the current Siletz River winter steelhead smolt release to increase future harvest opportunity to sport and tribal anglers. The hatchery program will prioritize recruiting volunteers from the Siletz Tribal population and provide environmental and general scientific education to volunteers and visitors. The proposed increase in hatchery fish will enhance the opportunity for Siletz Tribal members to participate in the culturally significant practice of angling for salmonid fishes and their consumption as a culturally and nutritionally important food source. Furthermore, returning winter steelhead that are trapped at the Siletz Tribal Hatchery will be returned to the CTSI to be utilized as a food source. Sport anglers, having equal opportunity to catch returning winter steelhead within the Siletz River, may see recreational benefits resulting from this program.

Monitoring of project returns will be accomplished through angler reporting of adipose and maxillary clipped winter steelhead catches and trapping fish at the Siletz Tribal Hatchery by CTSI staff and volunteers.

PART 7– OTHER SUPPORTING INFORMATION

Please attach additional documents or provide information that details the project history, how the project may have evolved from the original design, or any changes / improvements that have been made to the operation.
<table>
<thead>
<tr>
<th>Reviewer</th>
<th>Name</th>
<th>Date</th>
<th>Approve</th>
<th>Do Not Approve</th>
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<tbody>
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<td>STEP Coordinator</td>
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<td>Fish Division Administrator</td>
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<td>F &amp; W Commission(^2)</td>
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1 Please attach any comments that explain your position or will aid the project review.
2 Projects that release more than 100,000 fish must be authorized by the Fish and Wildlife Commission to do so.
Appendix B
Backup Equipment

The most likely point of failure to water flow through systems at the Siletz Tribal Hatchery is the gravity feed line from Spring Creek to the incubators and troughs. Failure could occur at this crucial component during summer low flow conditions, if pockets of air or debris block the pipe from Spring Creek to the hatchery, or if the pipe is damaged by roadside activity. The integrity of the Spring Creek gravity feed line will be monitored daily by CTSI Natural Resources staff and/or volunteers at the Siletz Tribal Hatchery. In the case of failure, gravity fed lines beginning at the Little Rock Creek fish trap diversion can carry water to incubation systems. In addition, the Siletz Tribal Hatchery maintains several pumps used to direct Little Rock Creek water from the fish trap diversion and rearing ponds to the incubation systems in the west hatchery barn.

There is a much lower chance of failure to the pond flow systems, as this system relies on larger concrete conduits and Little Rock Creek flows continuously throughout the year.

In the case of an electrical failure or outage, which would compromise the air pumps used to aerate the incubation systems, the Siletz Tribal Hatchery maintains several marine batteries that will be employed as a backup electrical source.
Appendix C
Map of Siletz River Basin

Figure 1. Map of the Siletz River Basin.

(courtesy of ODFW)
Appendix D

STATE OF OREGON
COUNTY OF LINCOLN
CERTIFICATE OF WATER RIGHT

THIS CERTIFICATE ISSUED TO

CONFEDERATED TRIBES OF SILETZ INDIANS
P.O. BOX 549
SILETZ, OREGON 97380

confirms the right to use the waters of ROCK CREEK AND SPRING CREEK, tributaries of the SILETZ RIVER, for SALMON HATCHERY AND MAINTENANCE OF SILETZ RIVER HATCHERY PONDS CONSTRUCTED UNDER PERMIT R-2006.

This right was perfected under Permit 24425. The dates of priority are MARCH 28, 1951 FOR ROCK CREEK AND DECEMBER 20, 1952 FOR SPRING CREEK. This right is limited to 11.0 CUBIC FOOT PER SECOND, BEING 9.0 CFS FROM ROCK CREEK AND 2.0 CFS FROM SPRING CREEK, or its equivalent in case of rotation, measured at the point of diversion from the source.

The points of diversion are located as follows:

SWW NW\(\) AND SEW NW, SECTION 7, T 10 S, R 8 W, WM.

The use shall conform to such reasonable rotation system as may be ordered by the proper state officer.

A description of the place of use to which this right is appurtenant is as follows:

NW\(\) NW PONDS

SWW NW PONDS, GRINDING ROOM SUPPLY

SEW NW HATCHERY

SECTION 7

TOWNSHIP 10 SOUTH, RANGE 8 WEST, W.M.

This certificate describes that portion of the water right suspended by the provisions of an order of the Water Resources Director entered SEPTEMBER 8, 1992, approving Transfer 6681 and together with Certificate 67714, supersedes Certificate 43777, State Record of Water Right Certificates. The suspension expired September 8, 1994.

The issuance of this superseding certificate does not confirm the status of the water right in regard to the provisions of ORS 540.610 pertaining to forfeiture or abandonment.

The right to the use of the water for the above purpose is restricted to beneficial use on the lands or place of use described. The use confirmed herein may be made only at times when sufficient water is available to satisfy all prior rights, including rights for maintaining instream flows.

WITNESS the signature of the Water Resources Director,

affixed ________________ MAY 24 1995 ________________

/\ MARSHA O. PAGEL
Marsha O. Pagel, Director

Recorded in State Record of Water Right Certificates numbered 68498.
T-6681.LHN
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<th>Reviewer</th>
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<th>Date</th>
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<th>Do Not Approve</th>
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<td>STEP Biologist</td>
<td>Christine Clapp</td>
<td>9/24/19</td>
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<td>District Fish Biologist</td>
<td>John Sprague</td>
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<td>Watershed Manager</td>
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<td>9/26/19</td>
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<tr>
<td>Regional Supervisor</td>
<td>Bernadette</td>
<td>9/30/19</td>
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<td>Ryan McCormick</td>
<td>10/14/19</td>
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<td>Chris Loring</td>
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<td>F &amp; W Commission²</td>
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1 Please attach any comments that explain your position or will aid the project review.
2 Projects that release more than 100,000 fish must be authorized by the Fish and Wildlife Commissioner to do so.