

<b>Activity Description</b>	
Facility: Quinault National Fish Hatchery	Site: Humptulips, WA. (Cook Cr. - Quinault R)
Project Coordinator: Mark Galloway Ray Brunson	Activity: Aquaculture (Coho, fall Chinook, and chum salmon and steelhead trout)  <b>FALL CHINOOK SALMON</b>
Site Manager: Vacant	
Address: 3 Sockeye Rd. Humptulips, WA. 98552	
Phone: 360.288.2508	

<b>Project Description</b>
<p>The Quinault NFH is located on Cook Creek 4.5 miles above its confluence with the Quinault River. The Quinault River then flows approximately 16.5 miles before entering the Pacific Ocean. The Quinault NFH was established in 1968 "...to restore and enhance depleted runs of salmon and steelhead on the Quinault Indian Reservation and adjacent Federal lands...".</p> <p>Cook Creek originates from Quinault Ridge on the west slope of the Olympic Mountains in the Olympic National Forest. The creek flows through a patchwork of U.S. Forest Service (USFS) and Rayonier Timberlands Operating Company lands before leaving the USFS property and entering the Quinault Indian Reservation at about river mile (RM) 5.2. Tribal and Rayonier Timberlands Operating Company lands are managed for timber harvest.</p> <p>Each year's proposed fish production program is communicated with the State and Tribal co-managers through the annual Future Brood Document process that includes all Washington hatcheries. The current production program includes releases of 1.5 million fall chum, 600,000 fall Chinook, 600,000 coho salmon, and 190,000 steelhead trout into Cook Creek. We also release 50,000 steelhead trout yearlings into the Hoh River and 60,000 coho sub-yearlings into a beaver pond adjacent to the Quinault River. The hatchery also transfers 50,000 steelhead trout sub-yearlings to the Chalaat Creek facility operated by the Hoh Tribe. The overall production program, including the species and numbers produced, has remained fairly stable over the last 10 years.</p>

**Hazards: Species Which May Potentially Be Moved/Introduced**

**Vertebrates:**

List Species/Types: None.  
Comments: No survey done.

**Invertebrates:**

List Species/Types: None.  
Comments: No survey done.

**Plants:**

List Species/Types: None.  
Comments: No survey done.

**Other Biologics: (Pathogen)**

List Species/Types: *Renibacterium salmoninarum* (bacterial kidney disease).  
*Flavobacter psychrophilum* (bacterial coldwater disease).  
*Infectious Hematopoietic Necrosis Virus* (IHN)  
*Aeromonas salmonicida* (furunculosis)

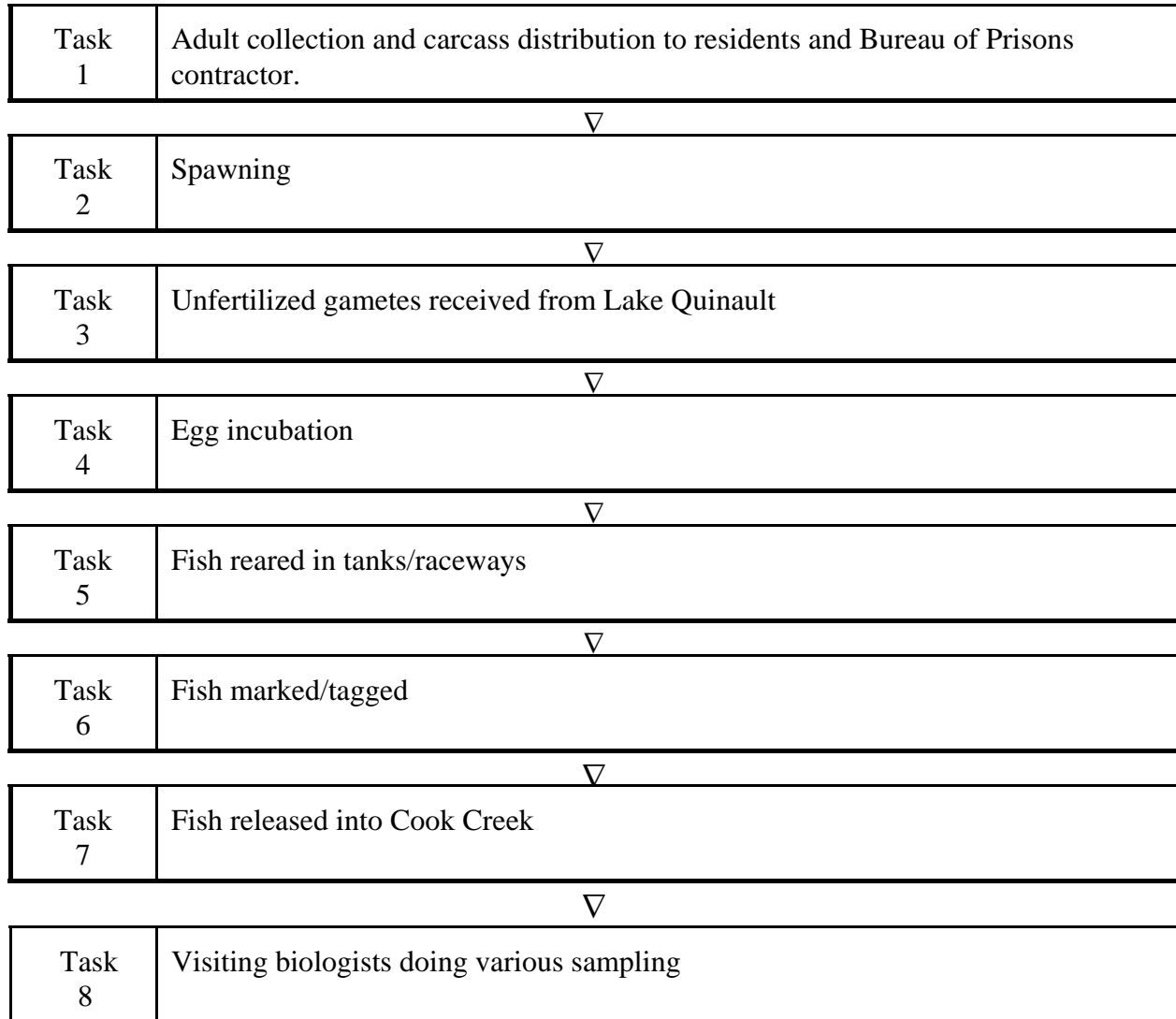
Comments:

**Others:**

List Species/Types: None.  
Comments:

## Flow Diagram

### *Fall Chinook*



### Hazard Analysis Worksheet

1 Tasks (from HACCP Step 3 - Flow Diagram)	2 Potential hazards identified in HACCP Step 2	3 Are any potential hazards probable? (yes/no)	4 Justify evaluation for Column 3	5 What control measures can be applied to prevent undesirable results?	6 Is this task a critical control point (yes/no)
Adult Collection	Vertebrates None				
	Invertebrates None				
	Plants None				
	Others Fish Pathogens	No	Carcasses processed		No
Spawning	Vertebrates None				
	Invertebrates None				
	Plants Noone				
	Others Fish Pathogens	Yes	Potential transmission of pathogens	Egg and /or adult culling and egg water hardening in iodophor	No
Receive unfertilized gametes from Lake Quinault	Vertebrates None				
	Invertebrates None				
	Plants None				
	Others Fish pathogens	Yes	Potential pathogen carriers	Disinfect equipment or do not receive	Yes

1 Tasks (from HACCP Step 3 - Flow Diagram)	2 Potential hazards identified in HACCP Step 2	3 Are any potential hazards probable? (yes/no)	4 Justify evaluation for Column 3	5 What control measures can be applied to prevent undesirable results?	6 Is this task a critical control point (yes/no)
Egg incubation	Vertebrates None				
	Invertebrates None				
	Plants none				
	Others Fish pathogens	Yes	Potential pathogen carriers	Disinfect equipment	No
Fish rearing	Vertebrates None				
	Invertebrates none				
	Plants None				
	Others Fish pathogens	Yes	Potential pathogen amplification	Treat for disease, disinfect equipment	No
Fish marked/tagged	Vertebrates none				
	Invertebrates none				
	Plants None				
	Others Fish pathogens	Yes	Potential pathogen transmission	Disinfect tag unit between species and hatcheries	Yes

1 Tasks (from HACCP Step 3 - Flow Diagram)	2 Potential hazards identified in HACCP Step 2	3 Are any potential hazards probable? (yes/no)	4 Justify evaluation for Column 3	5 What control measures can be applied to prevent undesirable results?	6 Is this task a critical control point (yes/no)
Fish released at the hatchery in Cook Creek	Vertebrates None				
	Invertebrates None				
	Plants None				
	Others Fish pathogens	Yes	Potential pathogen transmission	Treat for disease and/or do not release	Yes
Visiting biologists	Vertebrates None				
	Invertebrates None				
	Plants None				
	Other Fish pathogens	Yes	Potential pathogen transmission	Disinfect equipment and personal gear	Yes

<b>HACCP Plan Form</b>								
			<b>Monitoring</b>					
<b>Critical Control Point (CCP)</b>	<b>Significant Hazard(s)</b>	<b>Limits for each Control Measure</b>	<b>What</b>	<b>How</b>	<b>Frequency</b>	<b>Who</b>	<b>Evaluation &amp; Corrective Action(s) (if needed)</b>	<b>Supporting Documentation (if any)</b>
Unfertilized gametes received from Lake Quinault	Pathogen or disease transfer	Use 200 ppm chlorine or 100 ppm iodophor solutions for disinfection - 10 minute contact time	Transport vehicle and associated gear	Apply to all surfaces and hoses via spray or bath	For each transfer	FWS crew	Visual observation by hatchery crew and log book entry	Log book
Fish marked or tagged	Pathogen transmission	Use 200 ppm chlorine, 70% isopropyl alcohol or 100 ppm iodophor solutions for disinfection - 10 minute contact time	Disinfect tag equipment and trailer	Apply to all surfaces and pipes via spray or wipe	Between each species and hatchery	Tag super	Visual inspection and log check. If not completed disinfect before beginning next program	Log book
Fish released at the hatchery in Cook Creek	Pathogen or disease carriers	Pre-release sample by pathologist	60 fish sample from release group	Random sample from release group	Once 28-42 days before release	OFHC	No release or treat for disease before release	Fish health inspection report

HACCP Plan Form								
			Monitoring					
Critical Control Point (CCP)	Significant Hazard(s)	Limits for each Control Measure	What	How	Frequency	Who	Evaluation & Corrective Action(s) (if needed)	Supporting Documentation (if any)
Visiting biologists	Pathogen or disease transmission	Use iodophor or 70% alcohol and ten minute contact time	Disinfect equipment and personal gear	All surfaces via dip or wipe	Upon leaving on each trip	Staff	Visual inspection	n/a
<b>Facility:</b> Quinault National Fish Hatchery					<b>Activity:</b> Aquaculture (Fall Chinook Salmon)			
<b>Address:</b> 3 Sockeye Road Humptulips, WA 98552								
<b>Signature:</b>  <b>HACCP Plan is followed. Plan will be modified to reflect future ANS risks as they become apparent and identified.</b>					<b>Date:</b>			