

## HACCP Step 1 – Activity Description

<b>Activity Description</b>	
Facility: Ft. Richardson Hatchery	Site: Bear Lake
Project Coordinator: Larry Ranson	Activity/Management Objective: Collection and transportation of coho salmon eggs from Bear Lake broodstock to FRH for use in coho salmon sport fish stocking projects
Site Manager: Andrea Tesch	
Address: Ft. Richardson Hatchery Mile 0.5 Arctic Valley Rd Ft. Richardson, AK 99505	
Phone:	

<b>Project Description</b> i.e. Who; What; Where; When; How; Why
<p><b>Who: ADF&amp;G hatchery personnel in Coordination with CIAA hatchery personnel</b></p> <p><b>What: Collection &amp; transportation of Bear Lake coho salmon eggs to Ft. Richardson hatchery.</b></p> <p><b>Where: Bear lake and Ft. Richardson hatchery</b></p> <p><b>When: First 2 weeks of October</b></p> <p><b>How: Collection of coho salmon at the Bear Lake weir site following standard eggtake procedures and family tracking for BKD.</b></p> <p><b>Why: For sportfish enhancement projects.</b></p>

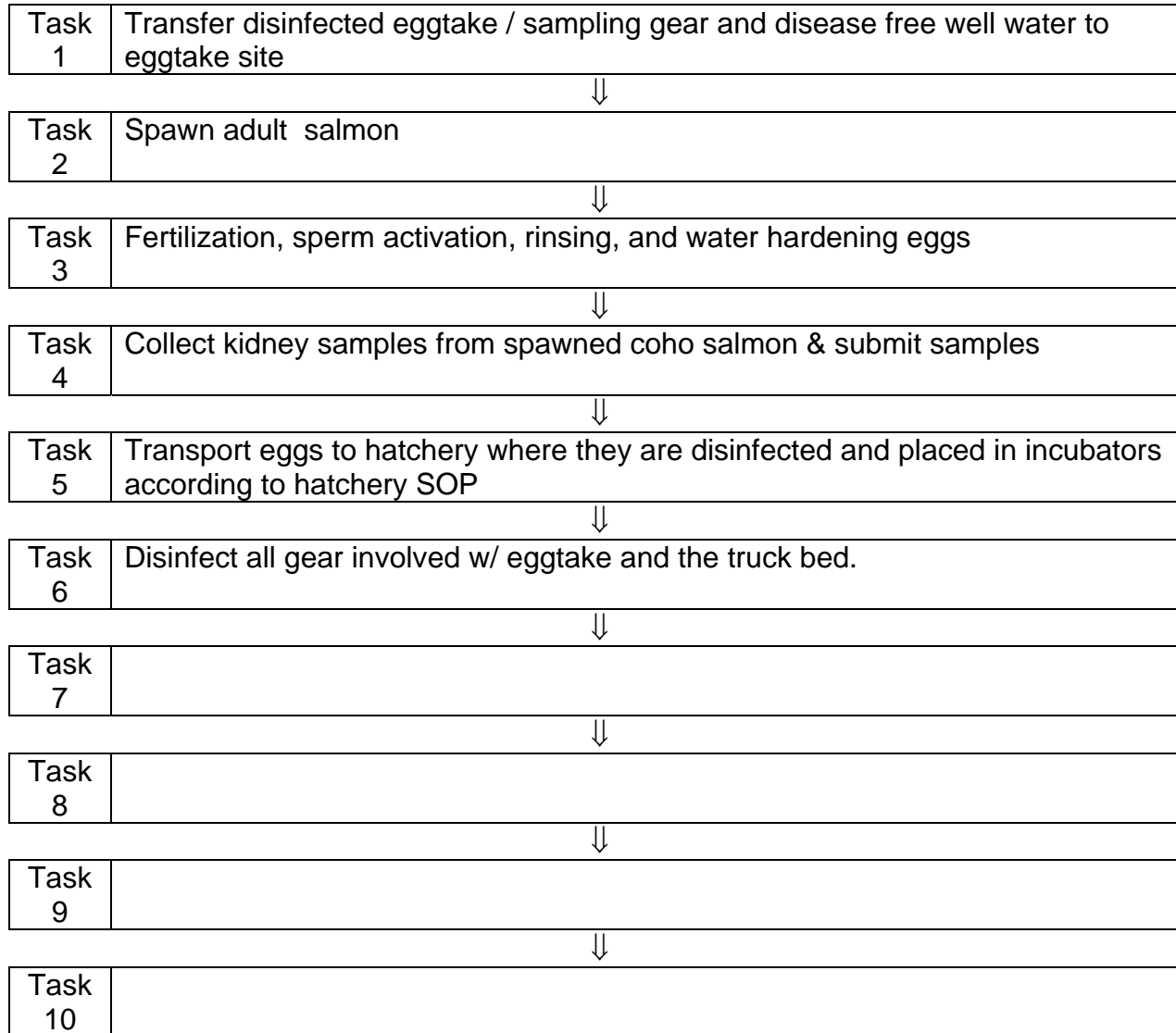
## HACCP Step 2 – Identify Potential Hazards

(to be transferred to column 2 of HACCP Step 4 – Hazard Analysis Worksheet)

<b>Hazards: Species or Contaminants Which May Potentially Be Moved/Introduced</b>
Vertebrates:
Invertebrates: Worms
Plants: weeds
Other Biologics (e.g. disease, pathogen, parasite, or non-pathogens):  Bacterial kidney disease ( <i>Renibacterium salmoninarum</i> )
Others (non-biological contaminants e.g. pesticide residue, oil products, etc. or harborage via packing or construction materials, etc.):  Contaminants transferred on raingear, cocolers, etc.

### HACCP Step 3 – Flow Diagram

Flow Diagram Outlining Sequential Tasks to Complete Activity/Project  
Described in HACCP Step 1 – Activity Description  
(to be transferred to column 1 of the HACCP Step 4 – Hazard Analysis Worksheet)



### HACCP Step 4 - Hazard Analysis Worksheet

<b>1</b> Tasks (from HACCP Step 3 - Flow Diagram)	<b>2</b> Potential hazards identified in HACCP Step 2	<b>3</b> Are any potential hazards significant? (yes/no)	<b>4</b> Justify evaluation for column 3	<b>5</b> What control measures can be applied to prevent undesirable results?	<b>6</b> Is this task a critical control point? (yes/no)
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Task 1 transfer disinfected sampling gear and disease free well water to eggtake site	Vertebrates	No			
	Invertebrates	No			
	Plants	No			
	Others Biologics	Yes	Eliminate potential transfer of diseases	All gear is disinfected prior to transport	
	Others	No			

Task 2 Spawning adult samon	Vertebrates	No			
	Invertebrates	No			
	Plants	No			
	Others Biologics	Yes	Eliminate external pathogens	Disinfect exterior surface of fish and spawn knife	
	Others	No			

**HACCP Step 4 - Hazard Analysis Worksheet (continued)**

<b>1</b> Tasks (from HACCP Step 3 - Flow Diagram)	<b>2</b> Potential hazards identified in HACCP Step 2	<b>3</b> Are any potential hazards significant? (yes/no)	<b>4</b> Justify evaluation for column 3	<b>5</b> What control measures can be applied to prevent undesirable results?	<b>6</b> Is this task a critical control point? (yes/no)
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Task #3 Fertilization, sperm activation, rinsing nd water hardening of eggs	Vertebrates	No			
	Invertebrates	No			
	Plants	No			
	Others Biologics	Yes	Not introduce viral and bacterial agents	Rinse eggs in disease free water	
	Others	No			

Task #4 Collect kidney samples from spawned coho salmon and submit samples to ADF&G pathology lab	Vertebrates	No			
	Invertebrates	No			
	Plants	No			
	Others Biologics	Yes	Disease screening / family tracking required by pathology	Disinfect sampling tools between samples disinfect exterior of fish	yes
	Others	No			

**HACCP Step 4 - Hazard Analysis Worksheet (continued)**

1 Tasks (from HACCP Step 3 - Flow Diagram)	2 Potential hazards identified in HACCP Step 2	3 Are any potential hazards significant? (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)
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Task #5 Transport eggs to hatchery where they are disinfected and placed in incubators according to hatchery SOP	Vertebrates	No			
	Invertebrates	No			
	Plants	No			
	Others Biologics	Yes	Kill egg surface pathogens	Disinfect eggs for 15 minutes in iodophore solution	Yes
	Others	No			

Task #6 Disinfect all gear involved with eggtake and truck bed	Vertebrates	No			
	Invertebrates	No			
	Plants	Yes	Weeds		
	Others Biologics	Yes	Kill viral and bacterial agents	Clean all equipment w/ disinfectant solution	Yes
	Others	No			

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### HACCP Step 5 – HACCP Plan Form

<b>HACCP Plan Form</b>								
(all CCP's or "yes's" from column 6 of HACCP Step 4 – Hazard Analysis Worksheet)								
Critical Control Point (CCP)	Significant Hazard(s)	Limits for Each Control Measure	Monitoring				Evaluation & Corrective Action(s) (if needed)	Supporting Documentation (if any)
			What	How	Frequency	Who		
Pathology disease screening	Introduce BKD to hatchery. Prevent cross contamination of sample	Follow proper pathology sample collection procedures	Kidney samples	Eliza Test	Each fish	Pathology	Dispose of eggs that test positive for BKD	Pathology Report
Disinfect egg surface	Introduce BKD into hatchery	Follow SOP for egg disinfection	Eggs	Ipdophore	15 minutes upon entry to hatchery	Fish Culturist		
Disinfect eggtake gear	Introduce BKD into hatchery	Follow SOP disinfection procedures	Gear & truck	Disinfection solution	After each eggtake	Hatchery personnel		
Facility: Fort Richardson Hatchery					Activity/Management Objective: Collection & transportation of Bear Lake coho salmon eggs from Bear Lake broodstock to the Ft. Richardson hatchery.			
Address: P.O. Box 5555, Ft. Richardson, AK 99505								
Signature:					Date:			
HACCP Plan was followed.								