

## HACCP Step 1 – Activity Description

<b>Activity Description</b>	
<b>Facility:</b> <b>Ft. Richardson Hatchery - ADF&amp;G SF</b>	<b>Site:</b> Fort Richardson Hatchery
<b>Project</b> Coordinator: Andrea Tesch	Incubate and rear all species without disease outbreaks within the hatchery or transference to stocked waters as well as no escapement of reared species from the hatchery to ship creek waters.
<b>Site</b> Manager: Andrea Tesch	
<b>Address:</b> Box 5267 Fort Richardson, Alaska 99505	
<b>Phone:</b> 907-428-1347	

<b>Project Description</b> i.e. Who; What; Where; When; How; Why
<p><b>Who:</b> Fort Richardson Hatchery Staff</p> <p><b>What:</b> Incubate and rear all species; Arctic Grayling, Arctic Char, Rainbow trout, Coho Salmon, King Salmon.</p> <p><b>Where:</b> Fort Richardson Hatchery.</p> <p><b>When:</b> During the entire rearing cycle.</p> <p><b>How:</b> By use of proper Fish culture procedures.</p> <p><b>Why:</b> 1) To control potential catastrophic losses due to disease outbreaks.            2) To control escapement of reared species into the Ship Creek drainage.</p>



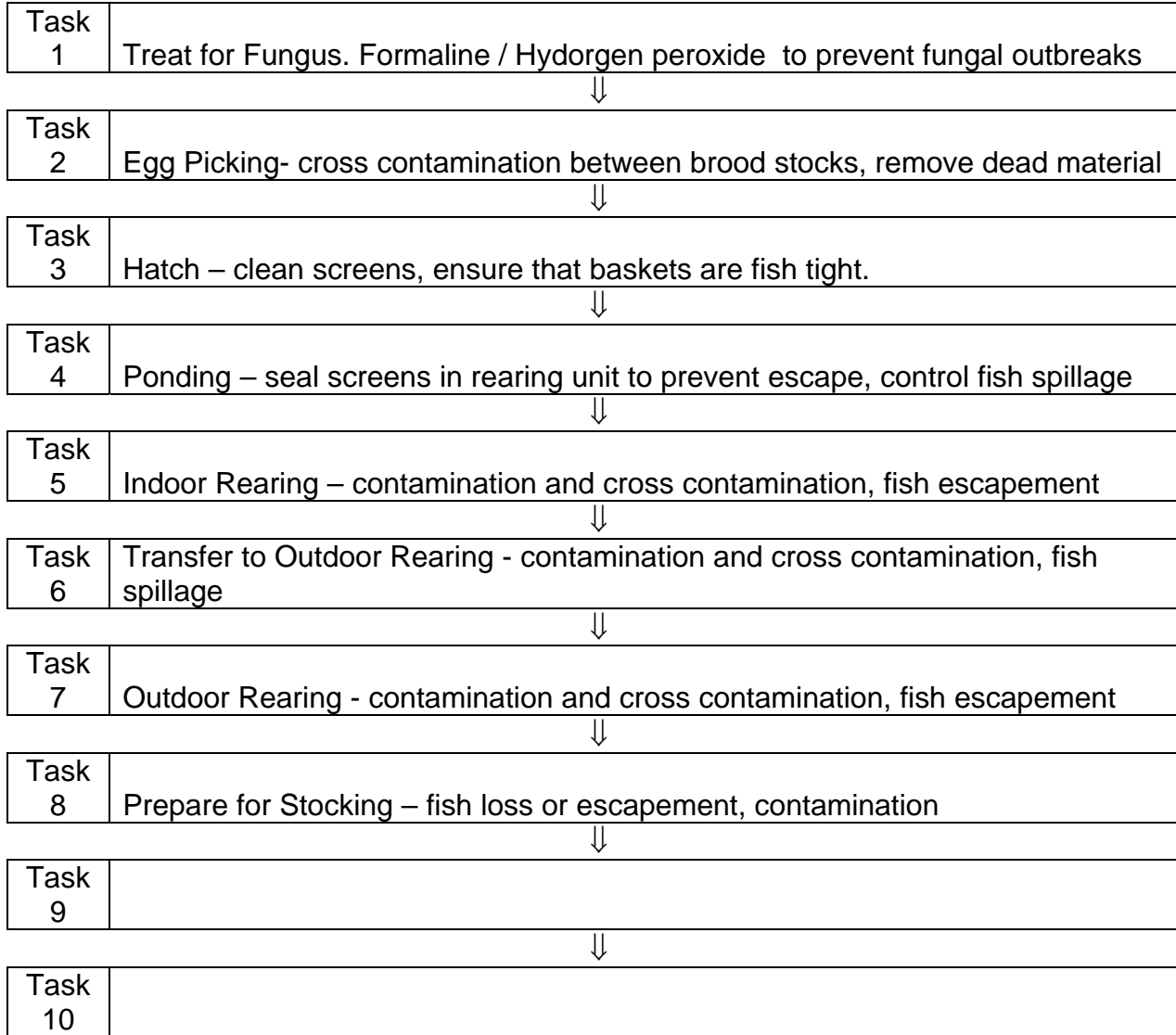
## HACCP Step 2 – Identify Potential Hazards

(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: All reared species Mink Birds Dogs Cats Bears
Invertebrates:
Plants: Saprolognia Filamentous Algae Moss
Other Biologics (e.g. disease, pathogen, parasite, or non-pathogens):  Gyrodactulus BKD Furunculosis Pseudomonas
Others (non-biological contaminants e.g. pesticide residue, oil products, etc. or harborage via packing or construction materials, 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

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)
Task 1 Treat for Fungus	Vertebrates N/A	N/A			
	Invertebrates N/A	N/A			
	Plants Saprolognia	Yes	Catastrophic losses due to unchecked fungal masses	Treat with fungicide every 2 or 3 days at 1:600 ppm	Yes
	Others Biologics N/A	N/A			
	Others N/A	N/A			
Task 2 Egg Picking	Vertebrates Reared species	yes	Mixing of genetic material between stocks	Follow standard egg picking protocol	
	Invertebrates				
	Plants Saprolognia	Yes	Catastrophic losses due to unchecked fungal masses	Removal of dead organic material to inhibit fungal growth	
	Others Biologics BKD	Yes	Control of disease prior to outbreak	Single family tracking	Yes
	Others				

### 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 # 3 Hatch Screen Cleaning	Vertebrates Reared species	Yes	Introduction of unwanted fish into Ship Creek	Clean screen carefully with no leakage. Screening effluent .	.Yes
	Invertebrates				
	Plants				
	Others Biologics				
	Others				

Task # 4 Ponding Start Up Feeding	Vertebrates Reared species	Yes	Introduction of unwanted fish into Ship Creek Mixing of Stocks	Screening effluent . Seal screens, proper size screens	.Yes
	Invertebrates				
	Plants Saprolognia	Yes	Prevent fungal mats in the raceways	Remove un eaten feed and mortalities	
	Others Biologics				
	Others				

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### 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 Indoor Rearing	Vertebrates Reared species	Yes	Introduction of unwanted fish into Ship Creek	Clean screen carefully with no leakage. Screening effluent .	.Yes
	Invertebrates				
	Plants				
	Others Biologics Bacterial Pathogens	Yes	Catastrophic losses due to disease outbreaks	Separate tools, disinfect equipment, Separate water supplies	Yes
	Others				

Task # 6 Transfer to Outdoor Rearing	Vertebrates Reared species	Yes	Introduction of unwanted fish into Ship Creek Mixing of Stocks	Screening effluent . Seal screens, proper size screens transfer hoses well secured	.Yes
	Invertebrates				
	Plants				
	Others Biologics				

	Others				
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*For additional pages, select entire page and copy to a new page. 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 # 7 Outdoor Rearing	Vertebrates Reared species, Birds Mink, Bears, Dogs and Cats	Yes	Introduction of unwanted fish into Ship Creek , Catastrophic losses due to disease outbreaks	Clean screen carefully with no leakage. Screening effluent .Outdoor rearing should be indoor rearing	.Yes
	Invertebrates				
	Plants				
	Others Biologics Bacterial Pathogens	Yes	Catastrophic losses due to disease outbreaks	Separate tools, disinfect equipment, Separate water supplies Outdoor rearing should be indoor rearing	Yes
	Others				

### 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		
Treat for Fungus	Egg mortality	No uncontrolled fungal growth	Monitor fungus	Visual inspection	2 to 3 days	Inc. super	Treat with fungicide	
Egg Picking	BKD out break	Titer level of antigen	BKD	Single Family Tracking	Eggtake Sampling	Inc. Super	Destroy all gametes from positive fish.	
Facility:					Activity/Management Objective:			
Address:								
Signature:					Date:			
HACCP Plan was followed.								

### HACCP Plan Form

(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		
Hatch Screen Cleaning	Release of alevins		Screens	Visual	Ea 1 – 2 days during hatch	Inc supervisor	Clean screens, repair or replace as necessary	
Ponding, start up feeding	Release of alevins		Screens	Visual	2X day	Rearing supervisor	Repair any leaks, verify correct screen size	

Facility:	Activity/Management Objective:
Address:	
Signature:	Date:
HACCP Plan was followed.	

## HACCP Plan Form

(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		
Facility:					Activity/Management Objective:			
Address:								
Signature:					Date:			
HACCP Plan was followed.								