

MFMAOTrappingHACCP2006

HACCP Step 1 - Activity Description	
Facility: U.S. FWS - Montana Fish and Wildlife Service MAO	Site: Aquatic Habitats
Project Coordinator: Ron Skates	Project Description: Fish Trapping (permanent or portable weirs and trap boxes)
Site Manager: Ron Skates	
Address: 4052 Bridger Canyon Road Bozeman, MT 59715	
Phone: 406-585-9010	

Project Description (Who, What, Where, When, How & Why)
<p> Sampling Stored equipment is loaded into vehicles and driven to the stream being sampled, where traps designed to capture fish moving in either direction are placed in the stream and monitored daily. Captured fish are either placed in live wells located in the stream current or held in metal tubs or plastic buckets before being processed. Holding Captured fish are identified to species, sexed if possible, measured to total length, weighed on a portable scale, given a fin clip or receive a tag; before being released back into the water. On occasion, fish that are kept for scientific purposes are placed in plastic bags or a bucket in the field and transported to a freezer. Equipment used to process fish is either stored on site or loaded into a vehicle and reused on a daily basis until project ends. Upon completion of sampling, all portable equipment is removed from the stream, loaded into vehicles, and transported back to a storage location. </p>

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HACCP Step 2 - Potential Hazard Identification

Vertebrates:

any fish species or other vertebrates (native or non-native) found in drainage basin

Invertebrates:

New Zealand Mud Snails, Zebra mussels.

Plants:

Native or non-native plants found in drainage basin.

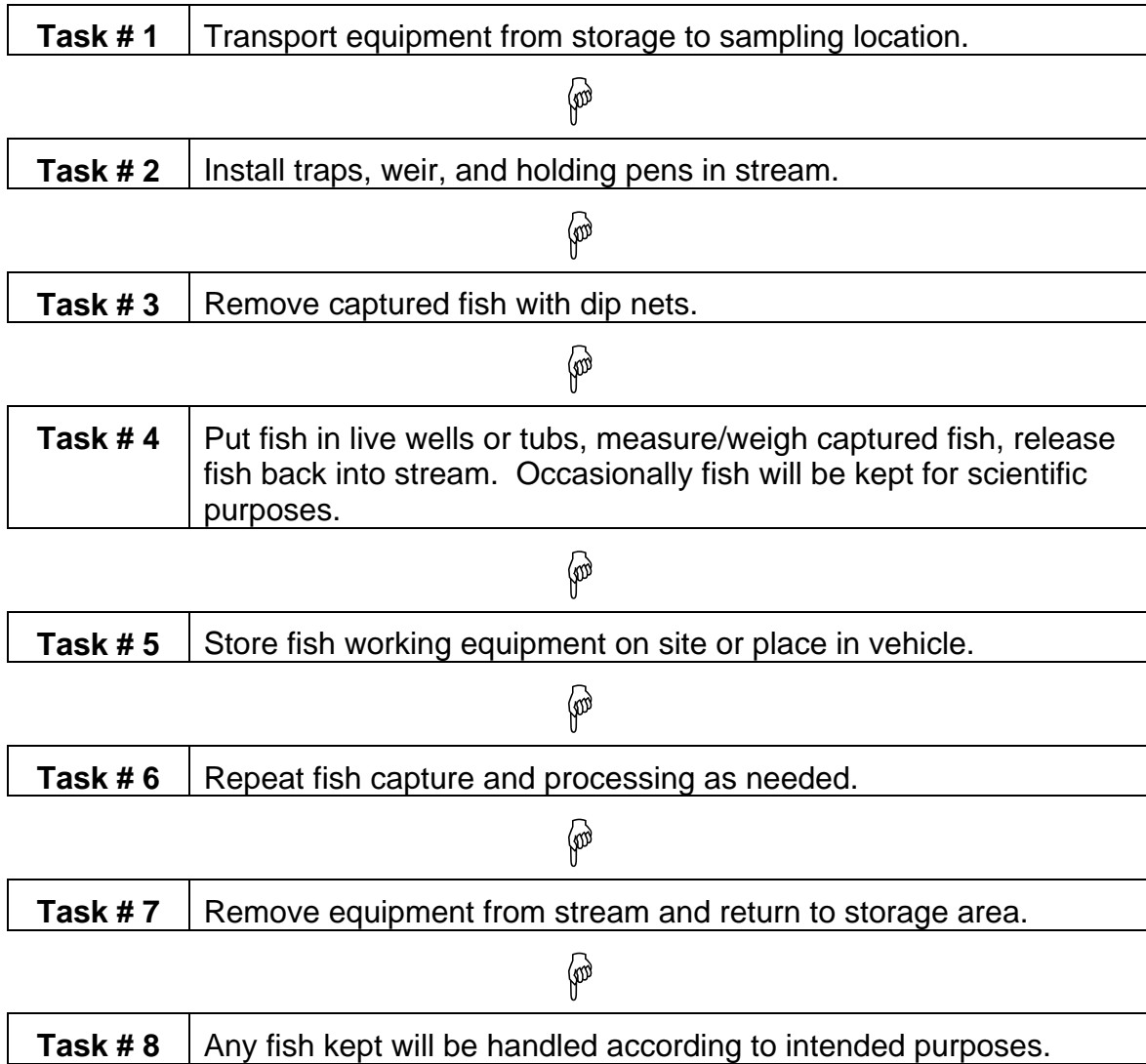
Other Biologics:

whirling disease

Others:

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HACCP Step 3 - Flow Diagram



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HACCP Step 4 - Hazard Analysis

Task	Hazard	Probable?	Justification	Control Measures	CCP?
1. Transport equipment from storage to sampling location.	Vertebrate: any fish species or other vertebrates (native or non-native) found in drainage basin	No			No
	Invertebrate: New Zealand Mud Snails, Zebra mussels.	No			No
	Plant: Native or non-native plants found in drainage basin.	No	equipment is clean and free of hazards		No
	Other Biologic: whirling disease	No	equipment is clean and free of hazards		No
2. Install traps, weir, and holding pens in stream.	Vertebrate: any fish species or other vertebrates (native or non-native) found in drainage basin	No	equipment is clean and free of hazards		No
	Invertebrate: New Zealand Mud Snails, Zebra mussels.	No	equipment is clean and free of hazards		No
	Plant: Native or non-native plants found in drainage basin.	No	equipment is clean and free of hazards		No
	Other Biologic: whirling disease	No	equipment is clean and free of hazards		No
3. Remove captured fish with dip nets.	Vertebrate: any fish species or other vertebrates (native	Yes	Could be present	controlled at subsequent steps	No

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	or non-native) found in drainage basin				
	Invertebrate: New Zealand Mud Snails, Zebra mussels.	Yes	Could be present	controlled at subsequent steps	No
	Plant: Native or non-native plants found in drainage basin.	Yes	Could be present	controlled at subsequent steps	No
	Other Biologic: whirling disease	Yes	Could be present	controlled at subsequent steps	No
4.Put fish in live wells or tubs, measure/weigh captured fish, release fish back into stream. Occasionally fish will be kept for scientific purposes.	Vertebrate: any fish species or other vertebrates (native or non-native) found in drainage basin	Yes	Could be present	controlled at subsequent step	No
	Invertebrate: New Zealand Mud Snails, Zebra mussels.	Yes	Could be present	controlled at subsequent step	No
	Plant: Native or non-native plants found in drainage basin.	Yes	Could be present	controlled at subsequent step	No
	Other Biologic: whirling disease	Yes	Could be present	controlled at subsequent step	No
5.Store fish working equipment on site or place in vehicle.	Vertebrate: any fish species or other vertebrates (native or non-native) found in drainage basin	Yes	some species are not present in all waters	empty all live wells and dispose of fish properly	Yes
	Invertebrate: New Zealand Mud Snails, Zebra mussels.	Yes	some species are not present in all waters	wash gear and equipment with disinfectant, allow to	Yes

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				dry before using again	
	Plant: Native or non-native plants found in drainage basin.	Yes	some species are not present in all waters	wash gear and equipment with disinfectant, allow to dry before using again	Yes
	Other Biologic: whirling disease	Yes	some species are not present in all waters	wash gear and equipment with disinfectant, allow to dry before using again	Yes
6.Repeat fish capture and processing as needed.	Vertebrate: any fish species or other vertebrates (native or non-native) found in drainage basin	Yes	Could be present	Hazard controlled at subsequent step	No
	Invertebrate: New Zealand Mud Snails, Zebra mussels.	Yes	Could be present	Hazard controlled at subsequent step	No
	Plant: Native or non-native plants found in drainage basin.	Yes	Could be present	Hazard controlled at subsequent step	No
	Other Biologic: whirling disease	Yes	Could be present	Hazard controlled at subsequent step	No
7.Remove equipment from stream and return to storage area.	Vertebrate: any fish species or other vertebrates (native or non-native) found in drainage basin	Yes	some species are not present in all waters	wash gear and equipment with disinfectant, allow to dry before using again	Yes

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	Invertebrate: New Zealand Mud Snails, Zebra mussels.	Yes	some species are not present in all waters	wash gear and equipment with disinfectant, allow to dry before using again	Yes
	Plant: Native or non-native plants found in drainage basin.	Yes	some species are not present in all waters	wash gear and equipment with disinfectant, allow to dry before using again	Yes
	Other Biologic: whirling disease	Yes	some species are not present in all waters	wash gear and equipment with disinfectant, allow to dry before using again	Yes
8.Any fish kept will be handled according to intended purposes.	Vertebrate: any fish species or other vertebrates (native or non-native) found in drainage basin	No	samples taken for specific intent and stored		No
	Invertebrate: New Zealand Mud Snails, Zebra mussels.	No			No
	Plant: Native or non-native plants found in drainage basin.	No	not part of fish samples		No
	Other Biologic: whirling disease	No	not part of fish samples		No

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HACCP Step 5 - HACCP Plan

Critical Control Point #1:

Task # 5: Store fish working equipment on site or place in vehicle.

Significant Hazards:

Vertebrate: any fish species or other vertebrates (native or non-native) found in drainage basin

Control Measures:

empty all live wells and dispose of fish properly

Limits for Control Measures:

wash gear and equipment with disinfectant, allow to dry before using again

Monitoring: What?

equipment

Monitoring: How?

visually

Monitoring: Frequency?

each time equipment is used

Monitoring: Who?

Field supervisor

Evaluation & Corrective Actions:

re-wash equipment

Supporting Documentation:

Critical Control Point #2:

Task # 5: Store fish working equipment on site or place in vehicle.

Significant Hazards:

Invertebrate: New Zealand Mud Snails, Zebra mussels.

Control Measures:

wash gear and equipment with disinfectant, allow to dry before using again

Limits for Control Measures:

wash gear and equipment with disinfectant, allow to dry before using again

Monitoring: What?

equipment

Monitoring: How?

visually

Monitoring: Frequency?

each time equipment is used

Monitoring: Who?

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Field supervisor
Evaluation & Corrective Actions: re-wash equipment
Supporting Documentation:
Critical Control Point #3: Task # 5: Store fish working equipment on site or place in vehicle.
Significant Hazards: Plant: Native or non-native plants found in drainage basin.
Control Measures: wash gear and equipment with disinfectant, allow to dry before using again
Limits for Control Measures: wash gear and equipment with disinfectant, allow to dry before using again
Monitoring: What? equipment
Monitoring: How? visually
Monitoring: Frequency? each time equipment is used
Monitoring: Who? Field supervisor
Evaluation & Corrective Actions: re-wash equipment
Supporting Documentation:
Critical Control Point #4: Task # 5: Store fish working equipment on site or place in vehicle.
Significant Hazards: Other Biologic: whirling disease
Control Measures: wash gear and equipment with disinfectant, allow to dry before using again
Limits for Control Measures: wash gear and equipment with disinfectant, allow to dry before using again
Monitoring: What? equipment
Monitoring: How? visually

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<p>Monitoring: Frequency? each time equipment is used</p>
<p>Monitoring: Who? Field supervisor</p>
<p>Evaluation & Corrective Actions: re-wash equipment, make sure mud is removed thoroughly</p>
<p>Supporting Documentation:</p>
<p>Critical Control Point #5: Task # 7: Remove equipment from stream and return to storage area.</p>
<p>Significant Hazards: Vertebrate: any fish species or other vertebrates (native or non-native) found in drainage basin</p>
<p>Control Measures: wash gear and equipment with disinfectant, allow to dry before using again</p>
<p>Limits for Control Measures: wash gear and equipment with disinfectant, allow to dry before using again</p>
<p>Monitoring: What? equipment</p>
<p>Monitoring: How? visually</p>
<p>Monitoring: Frequency? each use</p>
<p>Monitoring: Who? field supervisor</p>
<p>Evaluation & Corrective Actions: re-wash equipment</p>
<p>Supporting Documentation:</p>
<p>Critical Control Point #6: Task # 7: Remove equipment from stream and return to storage area.</p>
<p>Significant Hazards: Invertebrate: New Zealand Mud Snails, Zebra mussels.</p>
<p>Control Measures: wash gear and equipment with disinfectant, allow to dry before using again</p>
<p>Limits for Control Measures: wash gear and equipment with disinfectant, allow to dry before using again</p>

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Monitoring: What? equipment
Monitoring: How? visually
Monitoring: Frequency? each use
Monitoring: Who? field supervisor
Evaluation & Corrective Actions: re-wash equipment
Supporting Documentation: <div style="background-color: #4b4b0b; height: 20px; width: 100%;"></div>
Critical Control Point #7: Task # 7: Remove equipment from stream and return to storage area.
Significant Hazards: Plant: Native or non-native plants found in drainage basin.
Control Measures: wash gear and equipment with disinfectant, allow to dry before using again
Limits for Control Measures: wash gear and equipment with disinfectant, allow to dry before using again
Monitoring: What? equipment
Monitoring: How? visually
Monitoring: Frequency? each use
Monitoring: Who? field supervisor
Evaluation & Corrective Actions: re-wash equipment
Supporting Documentation: <div style="background-color: #4b4b0b; height: 20px; width: 100%;"></div>
Critical Control Point #8: Task # 7: Remove equipment from stream and return to storage area.
Significant Hazards: Other Biologic: whirling disease
Control Measures:

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wash gear and equipment with disinfectant, allow to dry before using again	
Limits for Control Measures: wash gear and equipment with disinfectant, allow to dry before using again	
Monitoring: What? equipment	
Monitoring: How? visually, make sure all mud is washed off thoroughly	
Monitoring: Frequency? each use	
Monitoring: Who? field supervisor	
Evaluation & Corrective Actions: re-wash equipment	
Supporting Documentation:	
Facility: U.S. FWS - Montana Fish and Wildlife Service MAO	Activity: Fish Trapping (permanent or portable weirs and trap boxes)
Address: 4052 Bridger Canyon Road Bozeman, MT 59715	
Signature:	Date:

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HACCP Checklist:

Fish Trapping (permanent or portable weirs and trap boxes)

Facility U.S. FWS - Montana Fish and Wildlife Service MAO
Site Aquatic Habitats
Coordinator Ron Skates
Manager Ron Skates
Address 4052 Bridger Canyon Road, Bozeman, MT 59715

- Task # 1: Transport equipment from storage to sampling location.**
- Task # 2: Install traps, weir, and holding pens in stream.**
- Task # 3: Remove captured fish with dip nets.**
- Task # 4: Put fish in live wells or tubs, measure/weigh captured fish, release fish back into stream. Occasionally fish will be kept for scientific purposes.**
- Task # 5: Store fish working equipment on site or place in vehicle.**

CRITICAL CONTROL POINT

- Hazards were contained
Hazards: Vertebrate: any fish species or other vertebrates (native or non-native) found in drainage basin
- Control measures were implemented
Control Measures: empty all live wells and dispose of fish properly
- Control limits were maintained
Control Limits: wash gear and equipment with disinfectant, allow to dry before using again
- Corrective actions were (performed if necessary)
Corrective Actions: re-wash equipment

- Hazards were contained
Hazards: Invertebrate: New Zealand Mud Snails, Zebra mussels.
- Control measures were implemented

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Control Measures: wash gear and equipment with disinfectant, allow to dry before using again

- Control limits were maintained
Control Limits: wash gear and equipment with disinfectant, allow to dry before using again
- Corrective actions were (performed if necessary)
Corrective Actions: re-wash equipment

- Hazards were contained
Hazards: Plant: Native or non-native plants found in drainage basin.
- Control measures were implemented
Control Measures: wash gear and equipment with disinfectant, allow to dry before using again
- Control limits were maintained
Control Limits: wash gear and equipment with disinfectant, allow to dry before using again
- Corrective actions were (performed if necessary)
Corrective Actions: re-wash equipment

- Hazards were contained
Hazards: Other Biologic: whirling disease
- Control measures were implemented
Control Measures: wash gear and equipment with disinfectant, allow to dry before using again
- Control limits were maintained
Control Limits: wash gear and equipment with disinfectant, allow to dry before using again
- Corrective actions were (performed if necessary)
Corrective Actions: re-wash equipment, make sure mud is removed thoroughly

- Task # 6: Repeat fish capture and processing as needed.**

- Task # 7: Remove equipment from stream and return to storage area.**
CRITICAL CONTROL POINT
- Hazards were contained

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Hazards: Vertebrate: any fish species or other vertebrates (native or non-native) found in drainage basin

- Control measures were implemented
Control Measures: wash gear and equipment with disinfectant, allow to dry before using again
- Control limits were maintained
Control Limits: wash gear and equipment with disinfectant, allow to dry before using again
- Corrective actions were (performed if necessary)
Corrective Actions: re-wash equipment

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Hazards: Invertebrate: New Zealand Mud Snails, Zebra mussels.

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Control Limits: wash gear and equipment with disinfectant, allow to dry before using again
- Corrective actions were (performed if necessary)
Corrective Actions: re-wash equipment

- Hazards were contained
Hazards: Other Biologic: whirling disease

- Control measures were implemented

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Control Measures: wash gear and equipment with disinfectant, allow to dry before using again

- Control limits were maintained
Control Limits: wash gear and equipment with disinfectant, allow to dry before using again
- Corrective actions were (performed if necessary)
Corrective Actions: re-wash equipment

- Task # 8: Any fish kept will be handled according to intended purposes.**