

BFHC - HACCP Plan.doc

HACCP Step 1 - Activity Description	
Facility: Bozeman Fish Health Center	Site: Hatcheries, Off Site Trouble Shooting and Wild Fish Health Survey Locations
Project Coordinator: Crystal Hudson	Project Description: Fish health sampling for disease certification, wild fish health survey and trouble shooting
Site Manager: Crystal Hudson	
Address: 920 Technology Blvd. Suite G Bozeman, MT 59715	
Phone: 406-582-8656	

Project Description (Who, What, Where, When, How & Why)
<p>Who: Station staff</p> <p>What: Collect fish and fish organs for pathogen analysis</p> <p>Where: Various hatcheries, wild environments and within the laboratories</p> <p>When: Throughout the year</p> <p>How: Fish are collected by nets, traps, fishing, electrofishing by staff and other partners</p> <p>Why: Samples are collected for health certification and/or for the wild fish health survey</p>

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HACCP Step 2 - Potential Hazard Identification

Vertebrates:

Invertebrates:

Non-target species esp. New Zealand mud snails, quagga and zebra mussels

Plants:

Non-target species esp. Eurasian water milfoil and curly leaf pond weed

Other Biologics:

Targeted and non-targeted species

Others:

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HACCP Step 3 - Flow Diagram

Task # 1	Prepare collection materials at BFHC and drive to site
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Task # 2	At site prepare dissection/collection area for sample collection
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Task # 3	Collect and dissect each species/lot separately and disinfect or use different dissection tools and gear between each lot and/or species
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Task # 4	Clean up dissection area, load equipment into vehicle and drive to next collection site or back to BFHC for testing
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Task # 5	Unload samples and gear at designated site in lab
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HACCP Step 4 - Hazard Analysis

Task	Hazard	Probable?	Justification	Control Measures	CCP?
Prepare collection materials at BFHC and drive to site	Invertebrate: Non-target species esp. New Zealand mud snails, quagga and zebra mussels	No	All materials are disinfected or clean prior to transport		No
	Plant: Non-target species esp. Eurasian water milfoil and curly leaf pond weed	No	All materials are disinfected or clean prior to transport		No
	Other Biologic: Targeted and non-targeted species	No	All materials are disinfected or clean prior to transport		No
At site prepare dissection/collection area for sample collection	Invertebrate: Non-target species esp. New Zealand mud snails, quagga and zebra mussels	No	All materials are disinfected or clean prior to transport		No
	Plant: Non-target species esp. Eurasian water milfoil and curly leaf pond weed	No	All materials are disinfected or clean prior to transport		No
	Other Biologic: Targeted and non-targeted species	No	All materials are disinfected or clean prior to transport		No
Collect and dissect each species/lot separately and disinfect or use different dissection tools and gear between each lot and/or species	Invertebrate: Non-target species esp. New Zealand mud snails, quagga and zebra mussels	No	No transport of hazards involved		No
	Plant: Non-target species	No	No transport of hazards involved		No
	Other Biologic: Targeted	No	No transport of		No

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	and non-targeted species		hazards involved		
Clean up dissection area, load equipment into vehicle and drive to next collection site or back to BFHC for testing	Invertebrate: Non-target species esp. New Zealand mud snails, quagga and zebra mussels	Yes	Possible unknown aquatic organisms may be present in samples or on collection gear	Disinfection of gear or containment of samples, gear and trash at site	Yes
	Plant: Non-target species esp. Eurasian water milfoil and curly leaf pond weed	Yes	Possible unknown aquatic organisms may be present in samples or on collection gear	Disinfection of gear or containment of samples, gear and trash at site	Yes
	Other Biologic: Targeted and non-targeted species	Yes	Possible unknown aquatic organisms may be present in samples or on collection gear	Disinfection of gear or containment of samples, gear and trash at site	Yes
Unload samples and gear at designated site in lab	Invertebrate: Non-target species esp. New Zealand mud snails, quagga and zebra mussels	Yes	Possible unknown aquatic organisms may be present in samples or on collection gear	Disinfection or containment of samples, trash and gear in designated area in lab	Yes
	Plant: Non-target species esp. Eurasian water milfoil and curly leaf pond weed	Yes	Possible unknown aquatic organisms may be present in samples or on collection gear	Disinfection or containment of samples, trash and gear in designated area in lab	Yes
	Other Biologic: Targeted and non-targeted species	Yes	Possible unknown aquatic organisms may be present in samples or on collection gear	Disinfection or containment of samples, trash and gear in designated area in lab	Yes

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HACCP Step 5 - HACCP Plan

Critical Control Point #1:

Task # 4: Clean up dissection area, load equipment into vehicle and drive to next collection site or back to BFHC for testing

Significant Hazards:

Invertebrate: Non-target species esp. New Zealand mud snails, quagga and zebra mussels Plant: Non-target species esp. Eurasian watermilfoil and curly leaf pond weed Other Biologic: Targeted and non-targeted species

Control Measures:

Disinfection or containment of samples, trash and gear

Limits for Control Measures:

Disinfection with 70% ethanol for collection material, 10%+ bleach solution for 10 minutes with UV drying for gear and/or 100% isolation of materials

Monitoring: What?

Equipment disinfection and sample containment

Monitoring: How?

Visible observation and timed disinfection

Monitoring: Frequency?

During procedure

Monitoring: Who?

Fish Health staff

Evaluation & Corrective Actions:

Re-disinfect area and gear if containment was breached and/or dispose of samples

Supporting Documentation: AFS Blue Book, Aquatic Animal Health Inspection Manual, and the Aquatic Animal Health Policy, 713 FW 1-5

Critical Control Point #2:

Task # 5: Unload samples and gear at designated site in lab

Significant Hazards:

Invertebrate: Non-target species esp. New Zealand mud snails, quagga and zebra mussels Plant: Non-target species esp. Eurasian watermilfoil and curly leaf pond weed Other Biologic: Targeted and non-targeted species

Control Measures:

Disinfection or containment of samples, trash and gear in designated area in lab

Limits for Control Measures:

Proper check-in and logging of samples, disinfection of gear by washing in wash machine on hot with bleach, washing down other gear with bleach, soaking tools in 10%+ bleach for 10 minutes and then autoclaving for next use, autoclave trash and disposal in dumpster.

Monitoring: What?

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Sample check in and equipment disinfection	
Monitoring: How? Visible observation and timed disinfection	
Monitoring: Frequency? Each return from a sample collection	
Monitoring: Who? Fish Health Staff	
Evaluation & Corrective Actions: Re-disinfect tools and/or gear. If contamination occurred to samples trash them.	
Supporting Documentation: AFS Blue Book, Aquatic Animal Health Inspection Manual, and the Aquatic Animal Health Policy, 713 FW 1-5	
Facility: Bozeman Fish Health Center	Activity: Fish health sampling for disease certification, wild fish health survey and trouble shooting
Address: 920 Technology Blvd. Suite G Bozeman, MT 59715	
Signature:	Date:

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HACCP Checklist: Fish Health Management

Facility Bozeman Fish Health Center
Site Hatcheries, Off Site Trouble Shooting and Wild Fish Health Survey Locations
Coordinator Crystal Hudson
Manager Crystal Hudson
Address 920 Technology Blvd. Suite G, Bozeman, MT 59715

- Task # 1: Prepare collection materials at BFHC and drive to site**
- Task # 2: At site prepare dissection/collection area for sample collection**
- Task # 3: Collect and dissect each species/lot separately and disinfect or use different dissection tools between each lot and/or species**
- Task # 4: Clean up dissection area, load equipment into vehicle and drive to next collection site or back to BFHC for testing**

CRITICAL CONTROL POINT

- Hazards were contained
Hazards: Invertebrate: Non-target species esp. New Zealand mud snails, quagga and zebra mussels Plant: Non-target species esp. Eurasian watermilfoil and curly leaf pond weed Other Biologic: Targeted and non-targeted species
- Control measures were implemented
Control Measures: Disinfection or containment of samples, trash and gear at site
- Control limits were maintained
Control Limits: Disinfection with 70% ethanol for collection material, 10%+ bleach solution for 10 minutes with UV drying for gear and/or 100% isolation of materials
- Corrective actions were (performed if necessary)
Corrective Actions: Re-disinfect area and gear if containment was breached and/or dispose of samples
- Task # 5: Unload samples and gear at designated site in lab**

CRITICAL CONTROL POINT

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Hazards: Invertebrate: Non-target species esp. New Zealand mud snails, quagga and zebra mussels Plant: Non-target species esp. Eurasian watermilfoil and curly leaf pond weed
Other Biologic: Targeted and non-targeted species
- Control measures were implemented
Control Measures: Disinfection or containment of samples, trash and gear in designated area in lab
- Control limits were maintained
Control Limits: Proper check-in and logging of samples, disinfection of gear by washing in wash machine on hot with bleach, washing down other gear with bleach, soaking tools in 10%+ bleach for 10 minutes and then autoclaving for next use, autoclave trash and disposal in dumpster.
- Corrective actions were (performed if necessary)
Corrective Actions: Re-disinfect tools and/or gear. If contamination occurred to samples trash them.