

FEMA ID Number: 1817-DR-WA PW 817 & 819 Project Title: Samish Hatchery  
 Friday Creek Repairs

**Specific Project Information File (SPIF)  
 Programmatic Biological Assessment (PBA) for Washington State**

FEMA Disaster Number: FEMA-1817-DR-WA  
 FEMA Project Number: 817 and 819  
 Project Name (e.g., Sam's Dike): WDFW Samish Hatchery  
 Watershed Name: WRIA #3 Lower Skagit  
 Project Type (e.g., Revetment repair): Emergency and Permanent Hatchery Repair and Debris Removal on Friday Creek intake.

**Applicant Information**

Applicant Name: **Washington Department of fish and Wildlife**  
 Contact Person Name (e.g., individual who can answer project questions about project):  
**Anthony Sanich** Contact email: **Anthony.Sanich@dfw.wa.gov**  
 Contact Telephone Number: **360-902-8428** ext. \_\_\_\_\_

Name of Person Completing this SPIF: **Tim Snowden** Title: **FEMA Environmental Specialist**  
 Date: **March 25, 2010**

**Project Information**

**Location:**

Select one of the following categories:

Is the project located at a single site?  Yes.

Does the project have multiple locations?  Yes. How Many?

Explain:

Provide the following location information for the site(s):

Identifier	Location Number			
	1	2	3	4
County	Skagit			
City, if applicable	Burlington			
Street Address, if applicable	5585 Old 99 North			
Latitude, Longitude (in decimal degrees)	48.56791 -122.3363			
Section	31			
Township (N)	36N			
Range (W or E)	4EWM			
Hydraulic Unit Code(HUC)	17110002			
In Surface Water?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, Name of Water body	Friday Creek			
Work Below ordinary high water mark?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

**Surrounding Environment:**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Riverine          | <input type="checkbox"/> Marine                               |
| <input checked="" type="checkbox"/> Forest (Hardwood) | <input type="checkbox"/> Estuarine                            |
| <input type="checkbox"/> Old growth present           | <input type="checkbox"/> Wetland                              |
| <input type="checkbox"/> Second growth present        | <input checked="" type="checkbox"/> Agricultural / Some Urban |
|   | <input type="checkbox"/> Arid (Desert/steppe)                 |

See Appendix A for USGS quadrangle map with scale. Location of the project(s) marked on the map.

**Damage Description:**

Describe the damages including type and extent of damages: **PW-817: Record flooding on Friday Creek a Tributary to Samish River caused the following damage to the Samish Hatchery system:**

1. The water main for the Hatchery which runs across Friday Creek below the Intake was exposed as a result of 30 ft. of rip rap protection being washed away.
2. Two (2), 4 ft. 7 inch x 4 ft. 7 inch square of removable debris screens to the Intake with 3/32 aluminum screen mounted to a 2 Inch x 3 Inch square aluminum frame and a 1.5 Inch square support in the middle of the screen were damaged beyond repair.
3. Three (3), 25 Ft. x 6 Ft. high steel tubular cyclone fence section including posts and top rail spanning the Friday Creek Intake were damaged.
4. Approximately 21 cy of 5/8 Inch crushed stone course at the Intake parking area washed away.
5. A 24 inch diameter steel pipe housed air pressure relief valve as part of the Intake air control vault was damaged and leaking.
6. An average of 2 Inches of aggregate, crushed rock, washed out over a 285 ft. section of the access road along Friday Creek along with debris in 250 ft.. of "V" shaped ditch.
7. The last two (2) sections of Jersey barrier along bank, protecting the access road need to be reset.

**PW-819: Flooding deposited 520 cubic yards of sediment debris and an undisclosed number of trees and vegetative debris at the Friday Creek intake. A 12 inch diameter by 24 foot corrugated metal pipe was totally filled with sediment.**

What were the composition and/or size and/or dimensions of the original structure(s)? (For example, 8-ft wide by 4-ft. long by 1-ft. deep concrete weir, 18-in CMP culvert, etc.) **See above dimensions**

See attached Appendix B for photograph(s) of damaged elements.

**Project Description:**

**Status:**

Status of Project(s): % Complete: **70% as of March 26, 2009**

**Project Timing:**

Actual Start Date:	Actual Start Date In-Water Work: <b>Emergency Jan. 7 &amp; 8 and March 23 through the 26th</b>
Actual End Date:	Actual End Date In-Water Work:

**Narrative:**

Provide a detailed description of the work to be accomplished including purpose, number and type of structures to be installed, repaired or constructed; construction materials used (for example size, dimensions and type of pilings (steel, wood, concrete), construction machinery (to be) used (for example, vibration or impact pile driver) and anticipated construction techniques to be employed.

**Work Completed:**

Applicant utilized force account labor, equipment, material and rented equipment over January 7 & 8 and March 23 through the 26th, 2009 to complete the following repairs:

**PW-817:**

1. To excavate and replace air pressure relief valve as part of the Intake air control vault.
2. Provide and installed approximately 24cy of 1 1/4 inch crushed rock to complete the repairs to the access road adjacent to Friday Creek.

**PW-819:**

Applicant removed 520 cubic yards of debris, sediment, and gravel from the intake along with vegetative debris.

**Work to be Completed:** Work window for activities conducted below the OHWM in the Samish R is August 15 to September 15 of the calendar year.

**PW-817:**

1. Replace approximately 26cy. of 50 pound average rip rap protecting the water main at the Friday Cr. Crossing. This was preexisting rip rap that was lost due to flooding.
2. Provide and install the two (2) removable debris screen replacements to the 3/32 aluminum Intake screen mounted to the aluminum frame.
3. Replace three (3), 25 Ft. x 6 Ft. high steel tubular galvanized cyclone fence sections including the steel galvanized posts, and top rail which spans Friday Creek Intake.
4. Provide and install approximately 21cy of 5/8 Inch crushed rock at the Intake parking area
5. Clean and shape 250 ft. of roadside ditch along the access road.
6. Reset the last two (2) sections of Jersey barrier along stream bank, protecting the access road.

**PW-819:**

Clean and flush 12 inch diameter by 24 foot corrugated metal pipe and remove remaining vegetative debris.

**Project Noise/Visual Disturbance:**

- Kind of equipment: **backhoe, loader and pickups** (for example, backhoe, vacuum truck, etc.)
- Noise created above ambient levels?  Yes  No

Work Hour Started: <b>N/A</b> <b>No Spotted Owl or Murrelet</b>	Equipment Start Time:
Work Hour Ended:	Equipment End Time:

Do you propose to clear any area for temporary access?  Yes  No

- If yes, how much area? \_\_\_\_\_ Give units (acres, square feet, etc.)  
Identify the location for the temporary access. (For example, lat. Long.) \_\_\_\_\_
- Is the area previously disturbed?  Yes  No  
If so, how? (Examples: parking lot, gravel road, road prism) **The intake structure and screens, access road and rip rap along water line with attachments have existed for many years. The repairs are within the pre-disaster foot print and will not change the function or capacities of the damaged elements.**

Please answer the following questions, yes, no or N/A:

- Will (did) the proposed project stay within the footprint of the existing/original foot print? **YES**
- Is (was) blasting included in the project? If so, when, how frequently? **NO**
- Is (was) stream diversion part of the project plan? If so, how? **NO**
- Will (was) fish capture, handling or electro-shocking included in the project? **NO** If so, will (were) USFWS/NMFS standards be followed? **N/A**
- Are (were) the Integrated Streambank Bank Protection Guidelines (ISPG) followed?
- Were Anadromous Salmonid Passage Facility Design (Feb. 2008) requirements followed? **N/A**
- Will (did) the project include removal of, or disturbance to, riparian habitat? **NO** If so, how much?

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- Will the project replace a structure that was a barrier to fish passage with a fish passable structure? **NO**
- Is the project fish passable as defined in NMFS 2008 Guidelines? **YES**

See Appendix C for drawings and completed photographs, if available.

## Biological Information

Indicate by checking the boxes if any of the following are present in the watershed of the project area.

### Endangered

- Upper Columbia River Spring-run Chinook (*Oncorhynchus tshawytscha*)
- Snake River Sockeye (*Oncorhynchus nerka*)
- Upper Columbia River Steelhead (*Oncorhynchus mykiss*)

### Threatened

- Bull trout, Coastal/Puget Sound IRU (*Salvelinus confluentus*)
- Bull trout, Columbia River IRU (*Salvelinus confluentus*)
- Coho salmon, Lower Columbia River ESU (*O. kisutch*)
- Chinook salmon, Lower Columbia River ESU (*Oncorhynchus tshawytscha*)
- Chinook salmon, Puget Sound ESU (*Oncorhynchus tshawytscha*)**
- Chinook salmon, Snake River Spring/Summer-run ESU (*Oncorhynchus tshawytscha*)
- Chinook salmon, Snake River Fall-run ESU (*Oncorhynchus tshawytscha*)
- Chum salmon, Columbia River ESU (*Oncorhynchus keta*)
- Chum salmon, Hood Canal summer ESU (*Oncorhynchus keta*)
- Steelhead trout, Lower Columbia River ESU (*Oncorhynchus mykiss*)
- Steelhead trout, Middle Columbia River ESU (*Oncorhynchus mykiss*)
- Steelhead trout, Coastal/Puget Sound DPS (*Oncorhynchus mykiss*)**
- Steelhead trout, Snake River ESU (*Oncorhynchus mykiss*)

### Designated

- Critical habitat for Coastal/Puget Sound bull trout IRU
- Critical habitat for Columbia River bull trout IRU
- Critical habitat for Columbia River chum salmon ESU
- Critical habitat for Hood Canal summer chum salmon ESU
- Critical habitat for Lower Columbia River Chinook salmon ESU
- Critical habitat for Upper Columbia River Spring-run Chinook salmon ESU
- Critical habitat for Snake River Spring/Summer-run Chinook salmon ESU
- Critical habitat for Snake River Fall-run Chinook salmon ESU
- Critical habitat for Puget Sound Chinook salmon ESU
- Critical habitat for Lower Columbia River steelhead trout ESU
- Critical habitat for Upper Columbia River steelhead trout ESU
- Critical habitat for Middle Columbia River steelhead trout ESU
- Critical habitat for Snake River steelhead trout ESU

Lake Ozette sockeye salmon are not covered by this programmatic at this time.  
Bull Trout East of Cascades are not covered by this programmatic at this time.

### Essential Fish Habitat

- Chinook salmon**
- Coho salmon**
- Pink Salmon

**Terrestrial Listed Species**

Work in this location has potential to affect:

- Marbled Murrelet present or potential to affect:  Yes  No
- Marbled Murrelet Critical Habitat:  Yes  No
- Northern Spotted Owl present or potential to affect:  Yes  No
- Northern Spotted Owl Critical Habitat:  Yes  No
- Other Species: **None**
- Other Critical Habitat: **None**

**Marine Mammals**

- Are marine mammals present in the project area?  Yes  No
- Is the project in or likely to affect critical habitat for Marine Mammals?  Yes  No

**Notifications, Permits, Applications and/or Approvals**

Describe any contacts/correspondence with the US Army Corps of Engineers, National Marine Fisheries Service, US Fish and Wildlife Service or Washington State Department of Fish and Wildlife. Attach correspondence to SPIF.

Agency	Nature of Contact	Result	Date
USACE	Request for emergency work	See appendix B	1/29/2009
USACE	Permit letter for Samish Hatchery Work	No enforcement	2/25/2010
USFWS	Informal Consult. For Samish Work	NLAA for Samish River work	1/25/2010
NMFS	Informal Consult For Samish Work	NLAA for Samish River work.	11/24/2009

Has a Joint Aquatic Resources Permit Application (JARPA) been submitted?  Yes  No.  
If yes, attach a copy.

Has a Hydraulic Project Approval been issued for the project?  Yes  No. If yes, attach a copy. Attached for Samish Hatchery Work.

If applicable was a biological assessment (BA) prepared for projects in this area/on this river system?  Yes  No. If yes, attach a copy of the BA, and any correspondence with US Fish and Wildlife Service and/or National Marine Fisheries Service regarding it (including a request for concurrence letters and concurrence response letters).

***Attach Appendices A, B, and C, and appropriate attachments for notifications, permits, applications and/or approvals.***

Eligibility for Programmatic Consultation <i>(This section completed by FEMA)</i>
<p>This application:</p> <p><input type="checkbox"/> Meets all the requirements of this programmatic consultation</p> <p><input checked="" type="checkbox"/> Does not meet all of the requirements of this programmatic consultation, but PBA is applicable. If project doesn't meet programmatic provide explanation below. <i>For example:</i></p> <ul style="list-style-type: none"> <li>• <i>Sub-base native materials were exposed.</i></li> <li>• <i>An excavator was used to remove damaged/unsuitable material that was waterward of Ordinary High Water Mark (OHWM).</i></li> <li>• <i>An excavator was used to key in the toe of slope waterward of OHWM.</i></li> </ul>
<p><b>Explanation:</b> Scope of Work describes the replacement of screens at the hatchery intake. This will involve in water work however following the Conservation Measures and BMPs listed below there should not be an adverse affect. The rip rap replaces pre-existing rip rap however it is not rock on top of rock but rock over waterline at the stream crossing.</p>

### ***Programmatic Biological Assessment Identification***

Note: All lower-case Roman numeral CMs in PBA Appendix C that are appropriate to an activity should be indicated in the following table in addition to the CM numbers specifically required by the Activity/Facility.

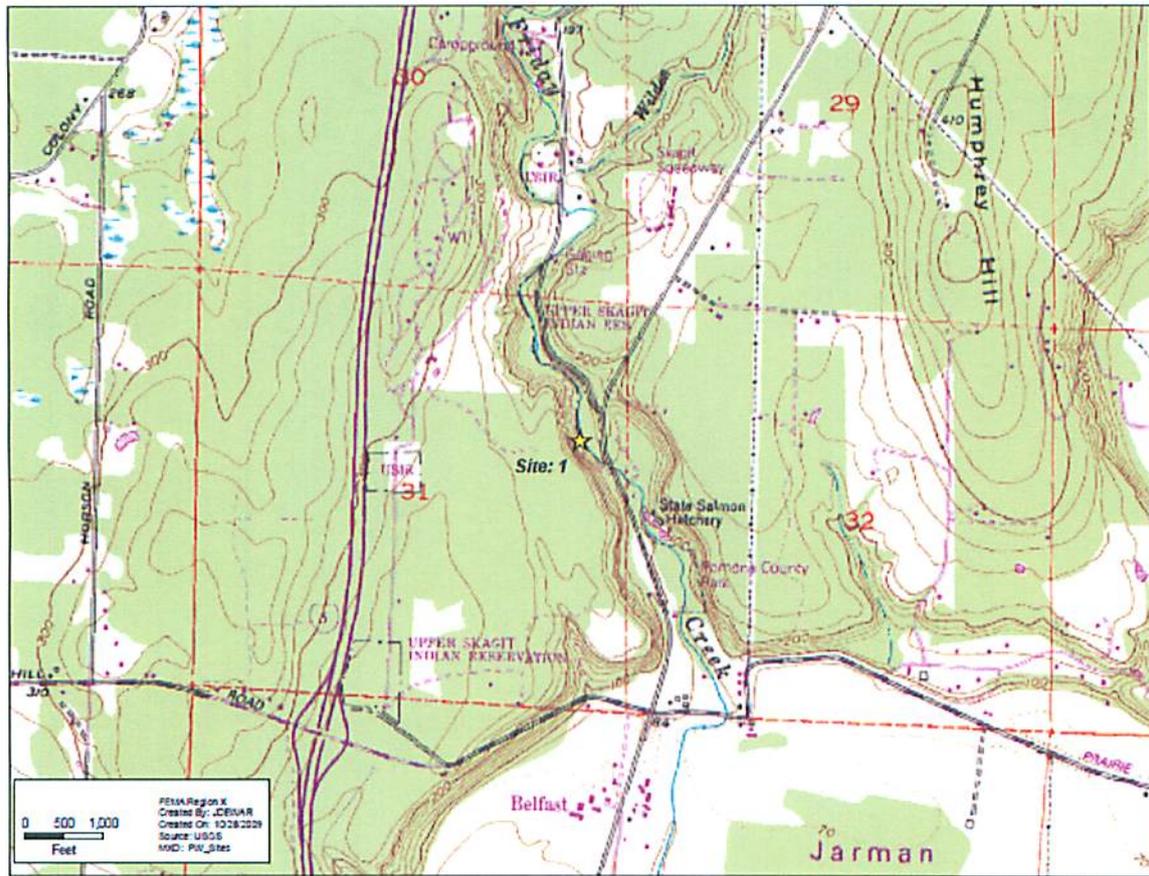
<b>Location Identification</b> <small>(Use Project Location Numbers from the location information table on next page)</small>	<b>PBA Category</b>	<b>Specific CM Numbers Used*</b> (1-33 & i-xxvii)	<b>CM Numbers Not Used<sup>1</sup></b>
1	1, 2, 9, & 10	1 - 4, 7, 10, 15, 16, 18 ii, iii, v - xiv, & xxiv	4, 30 I, iv,& xx - xxiii

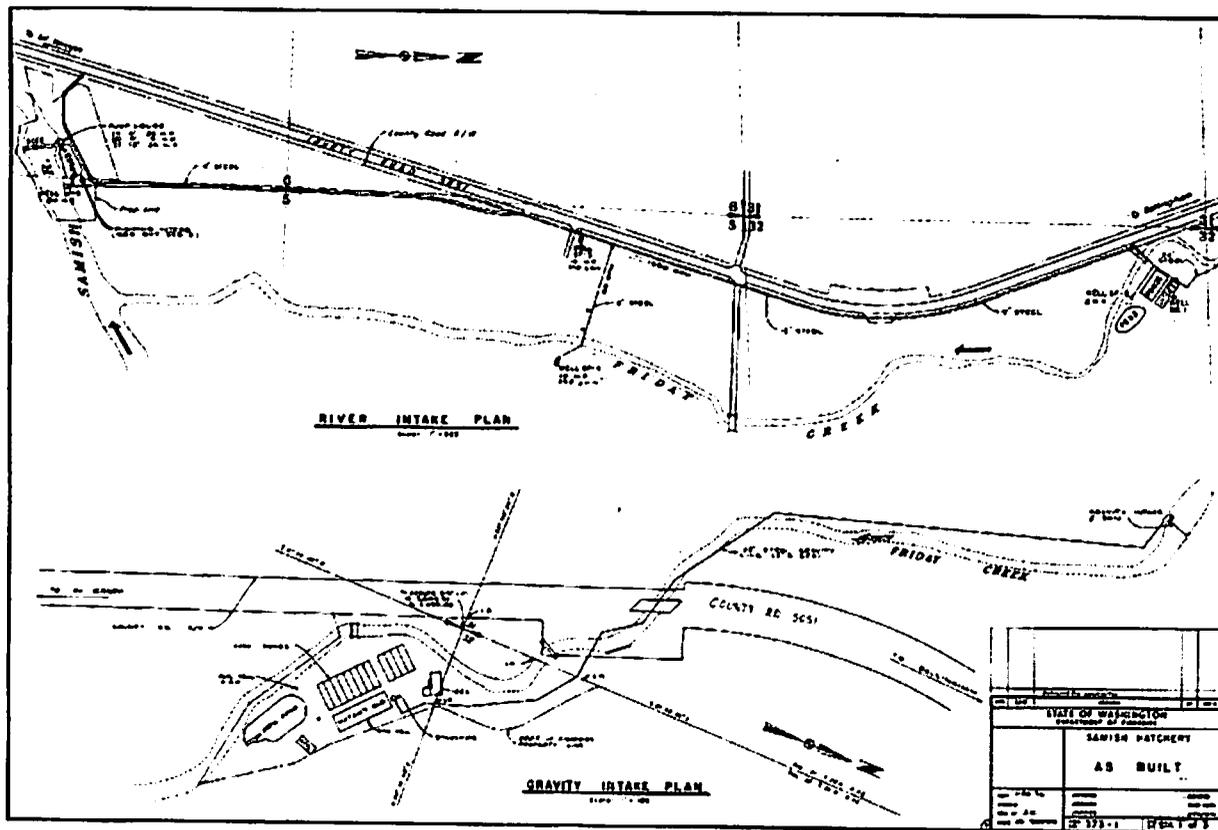
\*Conservation measures taken from FEMA Programmatic Biological Assessment for Fourteen Common Disaster Activities June 29, 2009 are included as Attachment 1.

30. – Roadside ditch grading does not involve the stream or the riparian zone.  
 i – This is not emergency work.  
 iv – WDFW are not part of RRMP.  
 xx – xxiii – Spotted Owls and Murrelets not found in the vicinity of these projects

<sup>1</sup> Provide Reason(s) why the CM was not used and how the PBA is applicable without the use of the CM.

Appendix A





## Appendix B

From: Wortman, Thomas R (DFW) [Thomas.Wortman@dfw.wa.gov]  
Sent: Thursday, October 29, 2009 3:16 PM  
To: Robel, Joe  
Subject: Sammish FEMA

Hi Joe,

The contact person from the US army Corps of Engineers for the Samish Hatchery job was

"Randel J Perry

206-764-6985

Randel.j.perry@usace.army.mil

He came out to the job after we had completed work.

I will get you the rest of the information for Samish on Monday. The rest of the information from the other hatchery FEMA work can be found @ Anthony.sanich@dfw.wa.gov. He is taking over for Sterling Jones.

TW

As Always if there any questions or concerns, Please contact me directly @ 360.701.6301  
Thanks!

Tom Wortman "fish haulin tom"  
Heavy Equipment Operator Supervisor  
Lacey Construction Shop  
office: 360.438.7693  
cell: 360.701.6301

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Picture on left is the parking lot at the intake. The rails in the background are parts of the chain link fencing. The picture on the right shows the jersey barriers to be reset.



SAMH 054 Exposed/un supported Intake Supply line



SAMH 055 Damaged Air Control Vault



SAMH 057 Restored Road Section

**Attachment 1  
Applicable Conservation Measures**

Timing	1	Schedule non-emergency activities and in-water work to abide by the approved work windows for all relevant species.
Timing	2	Work during dry or low-flow periods in freshwater and low tide in marine waters.
BMP	3	Design repairs consistent with Washington State Aquatic Habitat Guidelines Program – Integrated Streambank Protection Guidelines considering factors including: Setting/Stream Reach Roughness Features Vegetation Diversity
BMP	4	Check with WDFW Biologist to determine whether or not fish are present or likely to be present during the proposed in-water work. Select, implement, and monitor BMPs appropriate for species present.
BMP	5	Implement sound attenuation techniques, such as bubble curtains and/or sound attenuating wood blocks.
BMP	7	This action shall be covered for no more than once per structure, facility, stream reach, or site during the five-year span of the PBA.
BMP	10	All disturbed areas shall be protected from erosion using BMPs. Within the first planting season, the banks, including riprap areas, shall be revegetated with native or other approved woody species. Vegetative cuttings shall be planted at a maximum interval of three feet (on center) and maintained as necessary for three years to ensure 80 percent survival.
Material	15	Riprap shall be clean and durable, free from dirt, sand, clay and rock fines, and shall be installed to withstand the 100 year flow flood event.
BMP	ii	Obtain all required local, state, tribal, and Federal permits and/or authorizations prior to implementation of the proposed project and comply permit and authorization conditions.
BMP	iii	Select, implement, monitor, and maintain BMPs to control erosion and sediment, reduce spills and pollution, and provide habitat protection. BMPs must meet, at a minimum, the WDOE 2005 Stormwater Management Manual for Western Washington. <a href="http://www.ecy.wa.gov/programs/wq/stormwater/manual.html">http://www.ecy.wa.gov/programs/wq/stormwater/manual.html</a>
BMP	v	No disposal of construction materials or debris can occur in a wetland or floodplain.
BMP	vi	No storage of construction materials or debris can occur in a wetland.
BMP	vii	No storage of construction materials or debris can occur in a floodplain during “Flood Season” (Check with local Floodplain Administrator for Flood Season).
BMP	viii	Limit work to pre-disaster/design limits/footprint.
BMP	ix	No vegetation removal will occur.
Equipment	x	No staging (even temporarily) of construction materials, equipment, tools, buildings, trailers, or restroom facilities within a wetland. No staging (even temporarily) of construction materials, equipment, tools, buildings, trailers, or restroom facilities can occur in a floodplain during “Flood Season” (Check with

		local Floodplain Administrator for Flood Season).
Equipment	xi	Use biodegradable vegetable oil in equipment hydraulic systems.
Equipment	xii	Equipment shall be stationed on and operate from the top of the bank, bridge, or roadway, or other existing access. No new access points will be created.
Equipment	xiii	Machinery and equipment used during work shall be serviced, fueled, and maintained on uplands to prevent contamination to surface waters. Fueling equipment and vehicles will be more than 200 feet away from waters of the state. Exceptions to this requirement are allowed for large cranes, pile drivers, and drill rigs if they cannot be easily moved. Fueling areas shall be provided with adequate spill containment. The PBA Determination Form will provide the site specific information if an exception to the 200 foot buffer is to be implemented.
Equipment	xiv	Equipment used for a project shall be free of external petroleum-based products while working around the channel. Equipment shall be checked daily for leaks and any necessary repairs shall be completed prior to commencing work activities adjacent or over waterbodies.
BMP	xxiv	If any vegetation is removed, it will be replaced with native vegetation appropriate to the site upon the completion of the project. All replaced vegetation must have a guaranteed 100 percent survival within the first three years, and 80 percent survival within five years.