



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: July 20, 2015
Project End Date: July 19, 2020

Permit Number: 2015-4-512+01
FPA/Public Notice Number: N/A
Application ID: 4357

PERMITTEE	AUTHORIZED AGENT OR CONTRACTOR
French Slough Flood Control District ATTENTION: Neil Wheeler 8222 Riverview Road Snohomish, WA 98290	Sound Ecological Endeavors, LLC ATTENTION: Rone Brewer 19325 32nd Ave NW Stanwood, WA 98292-9029

Project Name: French Slough Flood Control District Drainage Maintenance

Project Description: French Slough Flood Control District located between Snohomish and Monroe Washington operates and maintains a dike and drainage system including watercourses, culverts, bridges, one gravity flow flap-gated outlet from the system, flood storage and relief and a multi-stage pump system with a fish ladder allowing water level control within the district. The overall drainage maintenance project is to provide regular watercourse & system maintenance allowing proper drainage function. Silt accumulated from the surrounding hills/fields and vegetation needs to be removed from the drainage watercourse to maintain function. Beginning from the upstream extent of ditches an excavator with a smooth edge bucket will be used to excavate vegetation (primarily reed-canary grass) and accumulated sediment from agricultural drainage watercourses. Removed vegetation and sediment will be placed on and spread thinly over adjacent upland agricultural fields. Goal is to complete approximately one region in the district per dry season over five regions (years), with time remaining each year to address watercourses from other Regions that may require attention more often than every fifth year. Failed or failing culverts and bridges within the drainage system are replaced on an as-needed basis. Beaver dams are removed as they are discovered and present a problem to landowners. French Slough Flood Control District has maintained this system since the early 1900s. Without maintenance, agricultural activities would be curtailed or eliminated.

PROVISIONS

1. NOTIFICATION REQUIREMENT: The Area Habitat Biologist (AHB) listed below shall receive written notification (FAX or mail) from the person to whom this Hydraulic Project Approval (HPA) is issued (permittee) or the agent/contractor no less than three working days prior to the start of construction activities. The notification shall include the permittee's name, project location, starting date for work, and the control number for this HPA.

2. This Hydraulic Project Approval (HPA) is for the general maintenance of the watercourses within and under the jurisdiction of the French Slough Flood Control District (FSFCD). This HPA authorizes the general maintenance of ARTIFICIAL WATERCOURSES, MANAGED WATERCOURSES WITHOUT HEADWATERS, ARTIFICIAL WATERCOURSES WITH HIGH FLOWS and MANAGED WATERCOURSES WITHOUT HEADWATERS as defined below and shown in the FSFCD map submitted on MAY 27, 2015.

For the purposes of this HPA, ARTIFICIAL WATERCOURSES, MANAGED WATERCOURSES WITHOUT HEADWATERS, ARTIFICIAL WATERCOURSES WITH HIGH FLOWS and WATERCOURSES WITH HEADWATERS shall be DEFINED as follows:

A. ARTIFICIAL WATERCOURSES (YELLOW): Include wholly manmade watercourses constructed to convey water from a local surface or subsurface area for the purpose of improving the soil conditions for agriculture. Typically these



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watercourses did not exist prior to excavation are seasonal and do not have the habitat characteristics or natural processes necessary to support the rearing and spawning requirements of native cold water fishes.

B. WATERCOURSES WITHOUT HEADWATERS (MAGENTA):

Includes naturally occurring and intermittently flowing (i.e., less than seasonal) watercourses incapable of maintaining a continuous and connected channel but with potentially suitable rearing habitat and now connected to downstream fish habitat as a result of artificial channel creation and maintenance activities. Accessibility and suitability of this potential rearing habitat is highly dependent on intermittent flows and man-made conditions, Spawning habitat is typically not present in this watercourse type.

C. ARTIFICIAL WATERCOURSES WITH HIGH FLOW (TAN)

Includes wholly manmade watercourses, but with manmade seasonal to annual flow adequate to maintain suitable fish habitat and a continuous downstream-connected channel.

D. WATERCOURSES WITH HEADWATERS (GREEN):

Include streams and watercourses with suitable spawning, rearing and migration habitats for trout or other salmonid species. Spawning habitats typically occur in those reaches that have gradients between 1-3% and are fed by flowing water and a steady supply of suitable sediments. These reaches tend to be found between the lowest gradient reaches and steepest gradient headwater reaches of the system. Rearing habitats can be distributed throughout these watercourses but are primarily located where there is sufficient channel complexity, riparian canopy, water quality and invertebrate productivity (fish prey/forage). Though upstream and downstream fish migration typically occurs throughout these watercourses, both natural and manmade barriers can and do restrict or block fish passage. French Creek and Cripple Creek are the two WATERCOURSES WITH HEADWATERS within FSCD.

3. TIMING LIMITATIONS: The project, French Slough Flood Control District Drainage Maintenance, may begin July 1 and shall be completed by October 31 of each calendar year following the French Slough Flood Control District Tentative Schedule starting with Region 2 in 2015 followed by Region 3 in 2016, Region 4 in 2017, Region 5 in 2018 and ending with Region 1 in 2019.

4. PLANS: Work shall be accomplished per the French Creek Flood Control District Drainage Management Best Management Practices as approved by the Washington Department of Fish and Wildlife entitled Best Management Practices; Overview; Artificial Watercourses, Managed Watercourse without Headwaters (Magenta); Artificial Watercourses with High Flows (Tan); and Managed Watercourses with Headwaters (Green) and as shown in Figure 2. "Regions Within the District, Watercourse Location, and Type French Slough Flood Control District Snohomish, Washington" as submitted by the French Slough Flood Control District on May 27, 2015, except as modified by this Hydraulic Project Approval. A copy of these Best Management Practices shall be available on site during construction and maintenance activities.

5. If at any time, as a result of project activities, fish are observed in distress, a fish kill occurs, or water quality problems develop (including equipment leaks or spills), immediate notification shall be made to the Washington Military Department's Emergency Management Division at 1-800-258-5990, and to the Area Habitat Biologist listed below.

6. It is the intent of this HPA to identify and prescribe appropriate Best Management Practices (BMP's) for drainage maintenance activities for each category of watercourse located within the boundaries of French Slough Flood Control District (FSFCD), based on the need to convey water and protect fish and related habitats.

This HPA seeks to ensure that these BMP's are recognized and accepted as being reasonable, necessary and prudent for meeting their stipulated purpose and are not intended to constitute an infringement or impediment with regards to the ability of the duly elected Commissioners of FSFCD to exercise their lawful duties and responsibilities under Title 85 RCW or the ability of the Washington Department of Fish and Wildlife (WDFW) to exercise its lawful duties and responsibilities under the provisions of Title 77.55 RCW.



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Best Management Practices (BMP's) have been developed for use in conjunction with each of the drainage maintenance activities and watercourse categories outlined below. A detailed description of individual BMP's prescribed for each of the following maintenance activities and watercourses within FSFCD is provided separately.

- o General Practices
 - o Artificial Watercourse
 - o Managed Watercourse Without Headwaters
 - o Managed Watercourse With Headwaters and Artificial Watercourses with High Flows
- o Maintenance Watercourse Cleaning Practices
 - o Artificial Watercourse
 - o Managed Watercourse Without Headwaters
 - o Managed Watercourse With Headwaters and Artificial Watercourses with High Flows
- o Culvert Maintenance, Repair, or Replacement Practices
 - o Artificial Watercourse
 - o Managed Watercourse With Headwaters and Artificial Watercourses with High Flows
 - o Managed Watercourse Without Headwaters
- o Beaver Management Practices
 - o Artificial watercourse
 - o Managed Watercourse Without Headwaters
 - o Managed Watercourses with Headwaters and Artificial Watercourses with High Flows
- o Revegetation/Mitigation
 - Artificial Watercourse
 - Managed Watercourses without Headwaters
 - Managed Watercourse With Headwaters
- o Maintenance Out-of Water Channel Mowing Practices
 - o Managed Watercourse Without Headwaters
 - o Managed Watercourse With Headwaters and Artificial Watercourses with High Flows
- o Bridge Maintenance, Repair, or Replacement Practices
 - o Managed Watercourse Without Headwaters
 - o Managed Watercourse With Headwaters and Artificial Watercourses with High Flows
- o Cofferdam and Water Bypass Practices
 - o Managed Watercourses with Headwaters and Artificial Watercourses with High Flows
- o Salmonid Removal and Exclusion Practices
 - o Managed Watercourses with Headwaters and Artificial Watercourses with High Flows
- o Trash Rack Maintenance, Repair, or Replacement Practices
 - o Managed Watercourses with Headwaters
- o Pump Facility Maintenance, Repair, or Replacement Practices
 - o Managed Watercourse With Headwaters



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Deviation from the BMP's identified pursuant to this HPA requires the mutual consent of both Parties and will be reflected in writing as a modification to an Agreement and conditions associated with any related Hydraulic Project Approvals.

7. ARTIFICIAL WATERCOURSES

GENERAL

1. Drainage maintenance activities shall only occur with the equipment operated from the top of the channel bank.
2. Equipment shall not enter or cross the channel when water is present, except at culverted or bridged crossings, or an established ford.
3. Disturbance of the channel banks shall be held to the minimum necessary for access to the channel and to conduct the drainage maintenance activity.
4. Disturbed soils along the shoreline at risk of re-entering the watercourse shall be protected from erosion using vegetation and/or other means.
5. Dredged or excavated materials shall be deposited landward of the top of the channel bank.
6. Project activities shall be conducted to minimize the introduction of silt-laden water into the watercourse.
7. Pilings or lumber treated with creosote or pentachlorophenol shall not be used as in-water or over-water construction materials.
8. All treated wood (other than creosote or pentachlorophenol treated wood which shall not be used) shall be professionally treated and completely cured prior to installation below the high water line to minimize leaching into the water or substrate.
9. Wet concrete shall be prevented from entering the watercourse. Footings, foundations and/or super structures constructed with fresh concrete shall be sufficiently cured prior to contact with water to avoid leaching. Forms and impervious materials shall remain in place until the concrete is cured.
10. All debris or deleterious material resulting from drainage maintenance activities shall be removed from the watercourse and prevented from re-entering the channel.
11. No petroleum products or other deleterious materials shall purposefully be allowed to enter the surface waters in the channel. Emergency petroleum spill response procedures and materials shall be readily available during drainage maintenance activities.
12. Removal of trash and plant debris blocking culverts, bridges, trash racks, pump facilities, and floodgates is not be subject to a timing limitation.

MAINTENANCE WATERCOURSE CLEANING

1. Timing Limitations: Whenever water is flowing in the watercourse, maintenance dredging below the waterline and within 300 feet of the confluence with a natural watercourse, a managed watercourse with headwaters, or an artificial watercourse with high flow, shall only occur from July 1 through October 31 of any year for the protection of migrating



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juvenile salmon.

2. Each pass of the dragline or excavator bucket through the watercourse shall be complete.
3. Dredging shall be held to the minimum necessary to achieve the target channel width, depth, and gradient.
4. The channel banks shall be sloped such that the resulting channel banks are stable.

CULVERT MAINTENANCE, REPAIR, OR REPLACEMENT

1. The damaged culvert and associated fill shall be removed from the watercourse and deposited upland so that it cannot re-enter the watercourse.
2. New culverts shall be installed to pass the 100-year peak flow with consideration of the debris likely to be encountered.
3. Fill associated with the culvert installation and approach shall be structurally stable (e.g, crushed or otherwise angular) and be composed of material that, if eroded into other waters, shall not be detrimental to fish life.
4. Fill associated with the culvert installation and approach material shall be protected from erosion to the 100-year peak flow.
5. If an existing culvert is replaced by a bridge structure, then the existing culvert and associated fill shall be completely removed from the watercourse and the new bridge shall be subject to the bridge provisions of this HPA.

BRIDGE MAINTENANCE, REPAIR, OR REPLACEMENT

1. The damaged bridge elements shall be removed from within the banks of the watercourse and deposited upland so that they cannot re-enter the watercourse.
2. The new bridge (elements) shall be constructed to pass the 100-year peak flow with consideration for debris likely to be encountered.
3. Fill associated with the new bridge (elements) or water crossing structure installation shall be protected from erosion to the 100-year peak flow.
4. Approach material for the new bridge (elements) shall be structurally stable and be composed of material that, if eroded, shall not be detrimental to fish life.

BEAVER MANAGEMENT

1. The general practices for Artificial Watercourses shall apply.
2. For reoccurring or persistent beaver dams, the beaver(s) may be trapped by a professional licensed trapper and removed from the district.
3. Heavy equipment used to remove the beaver dam shall only be operated from the top of the channel bank and shall not cross the channel except at bridges, culverted crossings, or approved fords.
4. Under no circumstances shall explosives be used to remove the beaver dam.



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5. Impounded sediment behind the dam will be removed using the same slow continuous pass technique as for maintenance dredging, and time will be allowed for suspended sediment to settle upgradient of the dam prior to dam removal.

6. The beaver dam shall be removed or modified gradually in a stepwise manner to provide for a controlled, slow release of the impounded water, minimizing rushing water and the related potential for downstream turbidity.

7. Materials removed from the beaver dam shall be deposited landward of the top of the channel bank.

8. All beaver dam removal or modification activities shall be included in the FSFCD annual Drainage Maintenance Activity Report, including the following information for each beaver dam site: location, removal/modification dates, and removal/modification methods.

RE-VEGETATION/MITIGATION

1. Alteration or disturbance of bank vegetation shall be limited to that necessary to conduct the project. Mowing is preferred over full removal to allow more rapid regrowth and less soil disturbance.

2. Within one year of project completion, the banks, including riprap areas, shall be revegetated approximately 10 feet horizontally from top of bank and along the entire length of maintained watercourse. The primary goals are bank and overbank erosion control, and watercourse shading.

3. Any plantings shall be maintained as necessary for three years with 80 percent survival and evidence of natural propagation.

4. Where possible shade providing plantings should be on the southern and western banks of the watercourse to provide maximum shade-related cooling benefit.

5. Planting preference should be provided to plants that will regrow relatively rapidly following mowing or other disturbance.

8. MANAGED WATERCOURSE WITHOUT HEADWATERS

GENERAL

1. Drainage maintenance activities shall only occur with the equipment operated from the top of the channel bank.

2. Equipment shall not enter or cross the channel when water is present, except at culverted or bridged crossings, or an established ford.

3. Disturbance of the channel banks and woody stem riparian vegetation shall be held to the minimum necessary for access to the channel and to conduct the drainage maintenance activity.

4. Existing vegetation, particularly root mass, shall be retained on the sidewalls of the channel to the maximum extent possible.

5. Disturbed soils along the shoreline at risk of re-entering the watercourse shall be protected from erosion using vegetation and/or other means.

6. Dredged or excavated materials shall be deposited landward of the top of the channel bank.



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7. Project activities shall be conducted to minimize the introduction of silt-laden water into the watercourse.
 8. Pilings or lumber treated with creosote or pentachlorophenol shall not be used as in-water or over-water construction materials.
 9. All treated wood (other than creosote or pentachlorophenol treated wood which shall not be used) shall be professionally treated and completely cured prior to installation below the high water line to minimize leaching into the water or substrate.
 10. Wet concrete shall be prevented from entering the watercourse. Footings, foundations and/or super structures constructed with fresh concrete shall be sufficiently cured prior to contact with water to avoid leaching. Forms and impervious materials shall remain in place until the concrete is cured.
 11. All debris or deleterious material resulting from drainage maintenance activities shall be removed from the watercourse and prevented from re-entering the channel.
 12. No petroleum products or other deleterious materials shall purposefully be allowed to enter the surface waters in the channel. Emergency petroleum spill response procedures and materials shall be readily available during drainage maintenance activities.
 13. If a fish kill occurs or fish are observed in distress, in-water drainage maintenance activities shall immediately cease and the Habitat Biologist listed below shall be immediately contacted and fish exclusion and removal measures shall be conducted, prior to resumption of drainage maintenance activities.
 14. Removal of trash and plant debris blocking culverts, bridges, trash racks, pump facilities, and floodgates is not be subject to a timing limitation.

MAINTENANCE OUT-OF-WATER CHANNEL MOWING

1. Channel out of water mowing of woody stem vegetation shall be limited to the banks of the watercourse necessary for equipment access to the channel.

MAINTENANCE WATERCOURSE CLEANING

1. Timing Limitations: Whenever water is present in the channel, maintenance watercourse cleaning below the waterline or within 300 feet of the confluence with a natural watercourse, a managed watercourse with headwaters, or an artificial watercourse with high flow, shall only occur from July 1 through October 31 of any year for the protection of migrating juvenile salmon.
2. Each pass with the dragline or excavator bucket in the channel shall be complete.
3. Watercourse cleaning shall be held to the minimum necessary to achieve the target channel width, depth, and gradient.
4. The channel banks shall be sloped such that the resulting channel banks are stable. The need for channel bank slope adjustments should be minimized by retaining existing root mass and/or bank vegetation to the extent possible.

CULVERT MAINTENANCE, REPAIR OR REPLACEMENT



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1. Timing Limitations: When water is flowing in the channel, culvert maintenance below the waterline and within 300 feet of the confluence with a natural watercourse, a managed watercourse with headwaters, or an artificial watercourse with high flows, shall only occur from July 1 through October 31 of any year for the protection of migrating juvenile salmon.
2. The damaged culvert and associated fill shall be removed from the watercourse and deposited upland so that it cannot re-enter the watercourse.
3. New culverts shall be installed to pass the 100-year peak flow with consideration of the debris likely to be encountered.
4. Fill associated with the culvert installation and approach material shall be structurally stable (e.g., crushed or otherwise angular) and be composed of material that, if eroded into a marine water body, natural watercourse or managed watercourse with headwaters, shall not be detrimental to fish life.
5. Fill associated with the culvert installation and approach material shall be protected from erosion to the 100-year peak flow.
6. If an existing culvert is replaced by a bridge structure, then the existing culvert and associated fill shall be completely removed from the watercourse and the new bridge shall be subject to the bridge provisions of this HPA.

BRIDGE MAINTENANCE, REPAIR, OR REPLACEMENT

1. Timing Limitations: When water is present in the channel, bridge maintenance below the waterline and within 300 feet of the confluence with a marine water body, natural watercourse, a managed watercourse with headwaters, or artificial watercourses with high flow shall only occur from July 1 through October 31 of any year for the protection of migrating juvenile salmon.
2. The damaged bridge elements shall be removed from within the banks of the watercourse and deposited upland so that they cannot re-enter the watercourse.
3. The replacement bridge elements shall be constructed to pass the 100-year peak flow with consideration for debris likely to be encountered.
4. Fill associated with the replacement bridge elements or water crossing structure installation shall be protected from erosion to the 100-year peak flow.
5. Approach material for the replacement bridge shall be structurally stable and be composed of material that, if eroded, shall not be detrimental to fish life.

BEAVER MANAGEMENT

1. TIMING LIMITATIONS: When water is present in the channel, beaver dam removal or modification below the waterline and within 300 feet of a confluence with a marine water body, natural watercourse, managed watercourse with headwaters, or artificial watercourse with high flows, the removal or modification of a beaver dam shall only occur from July 1 through October 31 of any year for the protection of migrating juvenile and adult salmon.
2. Outside of the fish protection window of July 1 to October 31, when water is present in the channel and the removal or modification of a beaver dam within 300 feet of a confluence with a marine water body, natural watercourse or a managed watercourse with headwaters is necessary, fish exclusion and removal procedures shall be conducted prior



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to removal of a beaver dam.

3. The general HPA Provisions for a Managed Watercourse Without Headwaters shall apply.
4. Heavy equipment used to remove the beaver dam shall only be operated from the top of the channel bank and shall not cross the channel except at bridges, culverted crossings, or approved fords
5. Under no circumstances shall explosives be used to remove the beaver dam.
6. Impounded sediment behind the dam will be removed using the same slow continuous pass technique as for Watercourse cleaning, and time will be allowed for suspended sediment to settle upgradient of the dam prior to dam removal.
7. The beaver dam shall be removed or modified gradually in a stepwise manner to provide for a controlled, slow release of the impounded water, minimizing rushing water and the related potential for turbidity.
8. Materials removed from the beaver dam shall be deposited landward of the top of the channel bank.
9. The removal of and damage to existing woody stem riparian vegetation within 200 feet of the channel shall be held to the minimum necessary to remove the beaver dam
10. For reoccurring or persistent beaver(s) or beaver dams, the beaver(s) may be trapped by a professional licensed trapper and removed from the district.
11. All beaver dam removal or modification activities shall be included in the FSFCD annual Drainage Maintenance Activity Report, including the following information for each beaver dam site: location, reason for removal/modification, removal/modification dates, and methods.

RE-VEGETATION/MITIGATION

1. Alteration or disturbance of bank vegetation shall be limited to that necessary to conduct the project. Mowing is preferred over full removal to allow more rapid regrowth and less soil disturbance.
2. Within one year of project completion, the banks, including riprap areas, shall be revegetated approximately 10 feet horizontally from top of bank and along the entire length of maintained watercourse. The primary goals are bank and overbank erosion control, and watercourse shading.
3. Any plantings shall be maintained as necessary for three years with 80 percent survival and evidence of natural propagation.
4. Where possible shade providing plantings should be on the southern and western banks of the watercourse to provide maximum shade-related cooling benefit.
5. Planting preference should be provided to plants that will regrow relatively rapidly following mowing or other disturbance.

FISH EXCLUSION AND REMOVAL

1. The task of capturing and immediately relocating salmonids for the purpose of excluding them from an isolated ditch cleaning project area is covered by the district's Drainage Maintenance Hydraulic Project Approval (HPA) and as such



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does not require a separate Scientific Collection Permit from the Washington Department of Fish and Wildlife.

2. Until such time as the capture and relocation of salmonids becomes a standardized process, at least 10 working days prior to initiating a maintenance ditch cleaning project requiring fish exclusion and removal procedures, a FSFCD representative shall contact WDFW by phone or in writing to inform WDFW that the project is about to begin.

3. Until such time as the capture and relocation of salmonids becomes a standardized process, such capture and relocation shall be supervised at all times by a qualified biologist, experienced and/or trained in the capture and handling of salmonids.

4. To increase detection of salmonids and increase capture efficiency, site prep (mowing/brushing, debris removal from the waterway) may be required prior to initiating fish removal and ditch cleaning activities. The amount of site prep required will be established by a qualified biologist.

5. In all cases, if conditions are encountered that exceed the design capacity of fish exclusion and removal procedures, likely allowing juvenile salmonids to re-enter the project area, in-water project activities shall stop until the unacceptable conditions are abated and fish are again removed and excluded from the project area.

6. Project areas dewatered using cofferdams or bypasses shall be examined for standing water and fish shall be removed from the standing water areas using seines, dip nets, or electroshocking. Fish trapped shall be minimally handled (possibly to allow counting and identification of salmonids, and transfer to a holding bucket of clean water). Before the water quality in the holding bucket degrades to where the captured fish are stressed, they shall safely be transferred to either free-flowing water upstream or downstream of (preferably at least $\frac{1}{4}$ mile from) the project area or to a larger tote of clean cold water that also is equipped with adequate aeration. Ice may be used to keep the water at the appropriate cool temperature. If in question, water quality should be verified at the release site to assure water temperatures and dissolved oxygen are within acceptable levels for juvenile salmonids until their release to natural waters. As an alternative to dewatering, fish removal may occur as described below.

7. For projects not including coffer dams & dewatering, 0.25 inch maximum mesh size fish exclusion block nets or screens will be established at the upstream and downstream extent of the project area to prevent fish from entering. The downstream block net/screen shall become the upstream block net/screen for the next project area (unless project area moves to a different watercourse). Except that the project area may be subdivided into smaller areas with additional block nets/screens, to achieve a series of preferred-length project areas. The upstream block net/screen shall not be removed until maintenance activities have moved below the next downstream block net/screen.

8. After fish exclusion block nets/screens have been placed, fish will be captured from the ditch cleaning project area(s) using the best available fish removal methods and practices, including but not limited to seining, dip netting, or electrofishing. The following is a listing of possible collection techniques in order of least stressful to most stressful to salmonids.

a) Passive traps. Fyke Nets. Place passive traps into work area 1-2 days prior to salmonid removal effort. Requires a narrow watercourse where the water completely drains out.

b) Active Netting. Seine, Throw, and Dip nets. Dense in-water vegetation may make this method impractical. Seines are generally pulled/swept counter to water flow. A single pass is counted when the entire fish exclusion project area has been swept at least twice by active netting.

c) Electrofishing. Backpack Electrofisher. Use this method after other removal methods have been used or have been deemed impractical for the watercourse section. Electrofishing is performed by traveling upstream with the electrofishing unit. All electrofishing activities will be performed as described in Backpack Electrofisher Guidelines,



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NMFS, December 1998 or future amendments.

9. For each watercourse reach where salmonid removal is required, a minimum of two fish removal passes will occur. If depletion is not achieved during the second removal pass, salmonid removal efforts will continue until depletion is achieved.

a) For salmonid removal rates of 10 or more salmonids, depletion will be defined as a 90% reduction in the number of salmonids captured in subsequent efforts when compared to the first removal effort. Example given: 11 salmonids removed on pass one, then 2 salmonids removed on pass two, would not achieve depletion.

b) For salmonid removal rates of less than 10 salmonids on the primary pass; one or no salmonids on the secondary pass would achieve depletion.

10. Salmonid handling techniques will be implemented that result in the least amount of stress or damage to the captured salmonids. The time captured salmonids are physically handled will be limited to the time necessary to count the salmonids, identify the species of the salmonids, and transfer the salmonids to a holding bucket of clean water. Before the water quality in the holding bucket degrades to where the captured fish are stressed, they may safely be transferred to either free-flowing water upstream or downstream (at least $\frac{1}{4}$ mile) of the ditch cleaning project area or to a larger tote of clean cold water that also is equipped with adequate aeration. Ice may be used to keep the water at the appropriate cool temperature. If in question, water quality should be verified at the release site to assure water temperatures and dissolved oxygen are within acceptable levels for juvenile salmonids until their release.

11. It is preferred to release captured salmonids within a different tributary of the same system of watercourses. However, releasing captured salmonids upstream or downstream of the ditch cleaning project area is acceptable as long as the water quality at the release site does not, and is unlikely to, exceed acceptable state water quality standards. The farther away from the project action area that captured fish are released, the less likely it is that they will need to be removed from the next length of the watercourse to be maintained.

12. After fish have been cleared from a given project area, the next area may be blocked and cleared of fish. The upstream block net in a particular project area shall be removed following completion of all drainage maintenance activities within that area. Then maintenance activities shall move to the next downstream project area that also shall have fish removed.

13. Until such time as the fish removal and exclusion methods become standardized within the district, the approximate number of salmonids by species that are removed from the project area shall be reported to the WDFW Area Habitat Biologist and shall be included in the annual Drainage Maintenance Activity Report.

9. MANAGED WATERCOURSE WITH HEADWATERS and ARTIFICIAL WATERCOURSES WITH HIGH FLOWS

GENERAL

1. Drainage maintenance activities shall only occur with the equipment operated from the top of the watercourse bank.

2. Equipment shall not enter or cross the watercourse when water is present except at culverted or bridged crossings, or an established ford.

3. Existing vegetation, particularly root mass, shall be retained on the sidewalls of the watercourse to the maximum extent possible.

4. Disturbance of the watercourse banks and woody stem riparian vegetation shall be held to the minimum necessary



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for access to the watercourse and to conduct the drainage maintenance activity, primarily from one side of the watercourse.

5. Disturbed soils along the shoreline at risk of entering the watercourse shall be protected from erosion using vegetation and/or other means.
6. Dredged or excavated materials shall be deposited landward of the top of the watercourse bank.
7. Project activities shall be conducted to minimize the introduction of silt-laden water into the watercourse.
8. Piling(s) or lumber treated with creosote or pentachlorophenol shall not be used as in-water or over-water construction materials.
9. All treated wood (other than creosote or pentachlorophenol treated wood which shall not be used) shall be professionally treated and completely cured prior to installation below the high water line to minimize leaching into the water or substrate.
10. Wet concrete shall be prevented from entering the watercourse. Footings, foundations and/or super structures constructed with fresh concrete shall be sufficiently cured prior to contact with water to avoid leaching. Forms and impervious materials shall remain in place until the concrete is cured.
11. All debris or deleterious material resulting from drainage maintenance activities shall be removed from the watercourse and prevented from re-entering the watercourse.
12. No petroleum products or other deleterious materials shall purposefully be allowed to enter the surface waters in the watercourse. Emergency petroleum spill response procedures and materials shall be readily available during drainage maintenance activities.
13. If a fish kill occurs or fish are observed in distress, in-water drainage maintenance activities shall immediately cease, fish removal measures shall be conducted, prior to resumption of drainage maintenance activities, and the Area Habitat Biologist shall be contacted.
14. Removal of trash and plant debris blocking culverts, bridges, trash racks, pump facilities, and floodgates shall not be subject to a timing limitation.
15. Disturbance of woody stem scrub-shrub riparian vegetation shall be limited to one side of the watercourse at any given location along the watercourse, except as necessary to effectively maintain the watercourse.
16. Whenever rock is used to armor the watercourse bank in the immediate vicinity of a drainage structure (culvert, floodgate, bridge, pump facility), the rock shall be composed of clean, angular material of a sufficient durability and size to prevent its being broken up or washed away by high water.
17. During maintenance activities the footprint of a maintained, repaired, or replaced drainage structure (culvert, floodgate, bridge, pump facility, trash rack) below the ordinary high water line shall not exceed the footprint of the original drainage structure below the ordinary high water line.

MAINTENANCE OUT-OF-WATER MOWING

1. Out-of-water mowing of woody stem riparian vegetation shall be limited to the banks of the watercourse necessary for equipment access to the watercourse.



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MAINTENANCE WATERCOURSE CLEANING

1. Timing Limitations: Whenever water is present in the watercourse, maintenance watercourse cleaning below the waterline shall only occur from July 1 through October 15 of any year for the protection of migrating juvenile and adult salmon.
2. NOTIFICATION REQUIREMENT: A representative of the FSFCD or the contractor shall notify the Habitat Biologist (HB) listed below of the project start date. Notification shall be received by the HB prior to the start of ditch cleaning activities.
3. Except for French Slough (see practice 4 below), maintenance ditch cleaning in or within 100 feet of watercourse reaches that have been identified as juvenile salmonid rearing habitat, when water is present in the watercourse, fish exclusion and removal procedures shall be implemented prior to initiating maintenance ditch cleaning activities. Cofferdam procedures also may be implemented where feasible. Bypass procedures shall be an option when projects will last for more than five consecutive days within the same location.
4. Within the wide portions of the drainage (i.e., French Slough) the water is anoxic from before July 1 until after October 15, and there very little to no visible current within the slough. Therefore fish are not present in this portion of the district and turbidity will not travel. The width also makes it very difficult to apply coffer dams, bypasses, or fish exclusion and removal. Therefore, within this portion of the district, no fish protection measures are necessary between July 1 and October 15.
5. Each pass with the dragline or excavator bucket in the watercourse shall be complete.
6. Watercourse cleaning shall be held to the minimum necessary to achieve the target watercourse width, depth, and gradient.
7. The watercourse banks shall be sloped such that the resulting watercourse banks are stable.
8. Maintenance ditch cleaning shall not straighten or shorten the existing watercourse alignment in Managed Watercourses with Headwaters.

CULVERT MAINTENANCE, REPAIR AND REPLACEMENT

1. Timing Limitations: When water is present in the watercourse, culvert maintenance below the waterline shall only occur from July 1 through October 15 of any year for the protection of migrating juvenile and adult salmon.
2. When water is present in the watercourse, fish exclusion and removal procedures shall be implemented prior to initiating culvert replacement activities in or within 100 feet of a watercourse reach that has been identified as juvenile salmonid rearing habitat. Cofferdam procedures also may be implemented where feasible. Bypass procedures shall be an option when projects will last for more than five consecutive days within the same location.
3. The damaged culvert and associated fill shall be removed from the watercourse and deposited upland so that it cannot re-enter the watercourse
4. New culverts shall be placed on a flat gradient with the bottom of the culvert placed below the level of the streambed a minimum of 20 percent of the culvert diameter for a round culvert, and 20 percent of the culvert's rise for an elliptical culvert. The 20 percent placement below the streambed shall be measured at the culvert outlet.



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5. New culverts shall be constructed to pass the 100-year peak flow with consideration of the debris likely to be encountered
6. The culvert shall be maintained free of debris to ensure unimpeded drainage and fish passage.
7. Fill associated with the culvert installation and approach material shall be structurally stable and shall be composed of material that, if eroded into the watercourse, shall not be detrimental to fish life.
8. Fill associated with the culvert installation and approach material shall be protected from erosion to the 100-year peak flow.
9. If an existing culvert is replaced by a bridge structure, then the existing culvert and associated fill shall be completely removed from the watercourse and the new bridge shall be subject to the bridge provisions of this HPA.

BRIDGE MAINTENANCE, REPAIR AND REPLACEMENT

1. Timing Limitations: When water is present in the watercourse, the bridge maintenance below the waterline shall only occur from July 1 through October 15 of any year for the protection of migrating juvenile and adult salmon.
2. The damaged bridge elements shall be removed from within the banks of the watercourse and deposited upland so that they cannot re-enter the watercourse.
3. Excavation for footings or foundations and new bridge footings or foundations shall be landward of the watercourse high waterline at the project site.
4. The bridge shall be constructed to pass the 100-year peak flow with consideration for debris likely to be encountered.
5. Fill associated with the bridge or water crossing structure installation shall be protected from erosion to the 100-year peak flow.
6. Armoring of the watercourse banks to protect the bridge footings or foundations with rock materials shall be limited to the bank area immediately under the footprint of the bridge.
7. Approach material for the bridge shall be structurally stable and be composed of material that, if eroded into the watercourse, shall not be detrimental to fish life.

BEAVER MANAGEMENT

1. The general HPA Provisions for a Managed Watercourse With Headwaters shall apply. The general HPA practices for a Managed Watercourse With Headwaters shall apply.
2. Heavy equipment used to remove the beaver dam shall only be operated from the top of the watercourse bank and shall not cross the watercourse except at bridges, culverted crossings, or approved fords.
3. Under no circumstances shall explosives be used to remove the beaver dam.
4. Impounded sediment behind the dam will be removed using the same slow continuous pass technique as for watercourse cleaning, and time will be allowed for suspended sediment to settle upgradient of the dam prior to dam removal.



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5. The beaver dam shall be removed or modified gradually in a stepwise manner to provide for a controlled, slow release of the impounded water, minimizing rushing water and the related potential for turbidity.
6. Materials removed from the beaver dam shall be deposited landward of the top of the watercourse bank.
7. The removal of and damage to existing woody stem riparian vegetation within 200 feet of the watercourse shall be held to the minimum necessary to remove the beaver dam.
8. For reoccurring or persistent beaver dams, the beaver(s) will be trapped by a professional licensed trapper and removed from the district.
9. All beaver dam removal or modification activities shall be included in the FSFCD' annual Drainage Maintenance Activity Report, including the following information for each beaver dam site: location, reason for removal/modification, removal/modification dates, and methods

RE-VEGETATION/MITIGATION

1. Alteration or disturbance of bank vegetation shall be limited to that necessary to conduct the project. Mowing is preferred over full removal to allow more rapid regrowth and less soil disturbance.
2. Within one year of project completion, the banks, including riprap areas, shall be revegetated along the entire length of maintained watercourse. The primary goals are bank and overbank erosion control, and watercourse shading.
3. One bank shall be planted with approved shrubs and/or trees such that the plantings provide at least partial shade to the watercourse as mitigation for drainage maintenance impacts to fish life. Plantings shall be installed at intervals such that a nearly continuous hedgerow developed providing shade to the watercourse during a substantial portion of the day.
4. Plantings shall be maintained as necessary for three years with 80 percent survival and evidence of natural propagation.
5. Where possible plantings should be on the southern and western banks of the watercourse to provide maximum shade-related cooling benefit.
6. Preference should be provided to plants that will regrow relatively rapidly following mowing or other disturbance.

TRASH RACK MAINTENANCE, REPAIR, AND REPLACEMENT

1. Damaged elements of the trash rack shall be removed from the watercourse and deposited upland so that it cannot re-enter the watercourse. When a trash rack is replaced, the vertical bars shall have a minimum spacing of 5 inches.
2. The trash rack shall be constructed to maintain structural integrity to the 100-year peak flow with consideration of the debris likely to be encountered.

PUMP FACILITY MAINTENANCE, REPAIR AND REPLACEMENT

1. Planned pump facility renovations involving in-water work will be scheduled for completion between July 1 and October 15, except when requirements of the work exclude working during this time period.



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2. Damaged elements of the pump facility shall be removed from the watercourse whenever possible, and deposited upland so that it cannot re-enter the watercourse.

3. Repairs or renovations to the pump facility shall be constructed to maintain structural integrity to the 100-year peak flow with consideration of the debris likely to be encountered.

4. The primary pump facility intake(s) shall: 1) be enclosed with screen material in which the screen openings do not exceed 0.25 inch, preventing juvenile fish from entering the pump system; and 2) have enough screen surface area to ensure that the water velocity through the screen does not trap juvenile salmonids on the screen surface. Under normal pumping circumstances, such a fish screen (or screens) shall remain in place whenever water is withdrawn from the watercourse through the primary pump intake(s) unless otherwise approved by WDFW per the following provision: In the event established screen criteria cannot be met, the Drainage Maintenance Plan shall identify an alternative technology that meets or exceeds these criteria and will identify a mutually acceptable strategy and timeline for implementation.

COFFERDAMS AND WATER BYPASS

1. Where water flow will not overtop an upstream cofferdam during the daily work effort, a temporary cofferdam may be installed upstream of dredging or culvert replacement project sites prior to initiating project activities, in order to isolate the project site from the watercourse. A downstream cofferdam shall also be installed if downstream water may flow upstream into the project area after the upstream cofferdam is in place and functioning properly.

2. Cofferdams may be constructed of sandbags or sheet piles, and for smaller watercourses may also include earth plugs, straw bales, or impermeable fabric fences. If impermeable fences are used, they shall be installed with sufficient subsurface footing to seal the watercourse.

3. Cofferdams that may be overtopped should have screened (0.25 inch maximum opening length, width, or diameter) overflow area at their tops such that water is allowed over the cofferdam before flowing out of the watercourse, but fish will remain excluded by the screen.

4. For watercourses that have too high a flow or are too wide for cofferdams, fish exclusion and removal procedures will be conducted to remove fish from the project area prior to initiation of project in-water work. Also in this case, a downstream silt screen, or series of screens, shall be placed within 100 ft of project work, to reduce the downstream flow of turbidity.

5. Bypassing water around a project site shall be considered for in-water projects longer than five days in one location. In this case, a bypass inlet or a pump system that diverts the entire watercourse flow around the project site will be used. The bypass pipe or pumps shall be of sufficient size to pass all flows and debris for the duration of the project.

6. If a pump is used to divert water around the project area, the pump intake shall be enclosed with a screen material where the narrow dimension of the rectangular slots or mesh does not exceed 0.25 inch to prevent juvenile fish from entering the pump system. The screened area shall have enough surface area to ensure that the velocity through the screen does not trap fish on the screen surface. The screen shall remain in place whenever water is withdrawn from the watercourse through the pump intake. Alternative to the fish screen, a seine may be dragged upstream from the upstream cofferdam and anchored in place to exclude fish from a stream length of 10 meters upstream of the upstream coffer dam. The pump intake can then be placed within the fish exclusion zone.

7. Following coffer dam placement, fish exclusion and removal procedures shall be conducted below the upstream coffer dam to remove any fish from the project area.



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8. Following fish exclusion and removal procedures, water needing to be removed from within the project area shall be pumped and routed to an area landward of the top of the watercourse bank and shall not be allowed to re-enter the watercourse.

9. Upon completion of the project, all material used to construct the cofferdams and the bypass shall be removed from the site and the site returned to pre-project or improved conditions.

FISH EXCLUSION AND REMOVAL

1. The task of capturing and immediately relocating salmonids for the purpose of excluding them from an isolated ditch cleaning project area is covered by the district's Drainage Maintenance Hydraulic Project Approval (HPA) and as such does not require a separate Scientific Collection Permit from the Washington Department of Fish and Wildlife.

2. Until such time as the capture and relocation of salmonids becomes a standardized process, at least 10 working days prior to initiating a maintenance ditch cleaning project requiring fish exclusion and removal procedures, a FSFCD representative shall contact WDFW by phone or in writing to inform WDFW that the project is about to begin.

3. Until such time as the capture and relocation of salmonids becomes a standardized process, such capture and relocation shall be supervised at all times by a qualified biologist, experienced and/or trained in the capture and handling of salmonids.

4. To increase detection of salmonids and increase capture efficiency, site prep (mowing/brushing, debris removal from the waterway) may be required prior to initiating fish removal and ditch cleaning activities. The amount of site prep required will be established by the qualified biologist.

5. In all cases, if conditions are encountered that exceed the design capacity of fish exclusion and removal procedures, likely allowing juvenile salmonids to re-enter the project area, in-water project activities shall stop until the unacceptable conditions are abated and fish are again removed and excluded from the project area.

6. Project areas dewatered using cofferdams or bypasses shall be examined for standing water and fish shall be removed from the standing water areas using seines or dip nets. Fish trapped shall be minimally handled (possibly to allow counting and identification of salmonids, and transfer to a holding bucket of clean water). Before the water quality in the holding bucket degrades to where the captured fish are stressed, they may safely be transferred to either free-flowing water upstream or downstream (at least $\frac{1}{4}$ mile) of the project area or to a larger tote of clean cold water that also is equipped with adequate aeration. Ice may be used to keep the water at the appropriate cool temperature. If in question, water quality should be verified at the release site to assure water temperatures and dissolved oxygen are within acceptable levels for juvenile salmonids until their release to natural waters. As an alternative to dewatering, fish removal may occur as described below.

7. For projects not including dewatering, 0.25 inch maximum mesh size fish exclusion block nets or screens will be established at the upstream and downstream extent of the project area to prevent fish from entering. The downstream block net/screen shall become the upstream block net/screen for the next project area (unless project area moves to a different watercourse). Except that the project area may be subdivided into smaller areas with additional block nets/screens, to achieve a series of preferred-length project areas. The upstream block net/screen shall not be removed until maintenance activities have moved below the next downstream block net/screen.

8. After fish exclusion block nets/screens have been placed, fish will be captured from the ditch cleaning project area(s) using the best available fish removal methods and practices, including but not limited to seining, dip netting, electrofishing, etc. The following is a listing of possible collection techniques in order of least stressful too most



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stressful to salmonids.

a) Passive traps. Fyke Nets. Place passive traps into work area 1-2 days prior to salmonid removal effort. Requires a narrow watercourse where the water completely drains out.

b) Active Netting. Seine, Throw, and Dip nets. Dense in-water vegetation may make this method impractical. Seines are generally pulled/swept counter to water flow. A single pass is counted when the entire fish exclusion project area has been swept at least twice by active netting.

c) Electrofishing. Backpack Electrofisher. Use this method after other removal methods have been used or have been deemed impractical for the watercourse section. Electrofishing is performed by traveling upstream with the electrofishing unit. All electrofishing activities will be performed as described in "Backpack Electrofisher Guidelines, NMFS, December 1998" or future amendments.

9. For each watercourse reach where salmonid removal is required, a minimum of two fish removal passes will occur. If depletion is not achieved during the second removal pass, salmonid removal efforts will continue until depletion is achieved.

a) For salmonid removal rates of 10 or more salmonids, depletion will be defined as a 90% reduction in the number of salmonids captured in subsequent efforts when compared to the first removal effort. Example given: 11 salmonids removed on pass one, then 2 salmonids removed on pass two, would not achieve depletion.

b) For salmonid removal rates of less than 10 salmonids on the primary pass; one or no salmonids on the secondary pass would achieve depletion.

10. Salmonid handling techniques will be implemented that result in the least amount of stress or damage to the captured salmonids. The time captured salmonids are physically handled will be limited to the time necessary to count the salmonids, identify the species of the salmonids, and transfer the salmonids to a holding bucket of clean water. Before the water quality in the holding bucket degrades to where the captured fish are stressed, they may safely be transferred to either free-flowing water upstream or downstream (at least $\frac{1}{4}$ mile) of the ditch cleaning project area or to a larger tote of clean cold water that also is equipped with adequate aeration. Ice may be used to keep the water at the appropriate cool temperature. If in question, water quality should be verified at the release site to assure water temperatures and dissolved oxygen are within acceptable levels for juvenile salmonids until their release.

11. It is preferred to release captured salmonids upstream of the ditch cleaning project area. However, releasing captured salmonids downstream of the ditch cleaning project area is acceptable as long as the water turbidity downstream of the ditch cleaning project does not exceed acceptable state water quality standards. The farther downstream captured fish are released, the less likely it is that they will need to be removed from the next length of the watercourse to be maintained.

12. After fish have been cleared from a given project area, the next area may be blocked and cleared of fish. The upstream block net in a particular project area may be removed following completion of all drainage maintenance activities within that area. Then maintenance activities shall move to the next downstream project area that also shall have fish removed.

13. Until such time as the fish removal and exclusion methods become standardized within the district, the number of salmonids by species that are removed from the project area shall be reported to the WDFW Area Habitat Biologist and shall be included in the annual Drainage Maintenance Activity Report.

CULVERTS (GENERAL)

10. Culverts shall be installed and maintained to ensure unimpeded fish passage.



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11. Culverts shall be placed on a flat gradient with the bottom of the culvert placed below the level of the streambed a minimum of 20 percent of the culvert diameter for a round culvert, and 20 percent of the culvert's rise for an elliptical culvert. The 20 percent placement below the streambed shall be measured at the culvert outlet.

12. Culvert facilities shall be maintained by the owner(s) per RCW 77.57.030 to ensure continued, unimpeded fish passage. If the structure becomes a hindrance to fish passage, the owner(s) shall be responsible for obtaining an Hydraulic Project Approval and providing prompt repair. Financial responsibility for maintenance and repairs shall be that of the owner(s).

13. Culvert widths at the streambed shall be equal to or greater than the average width of the watercourse or streambed.

BRIDGES (GENERAL)

14. Excavation for and placement of the foundation and superstructure shall be outside the ordinary high water line.

15. Riprap materials used for structure protection shall be clean, angular rock, which shall be installed to withstand the 100-year peak flow.

16. Replacement of culverts and bridges may be conducted under this HPA. Detailed design drawings and specifications shall be submitted to the AHB listed below a minimum of 30 days prior to construction beginning. The AHB must provide written approval of submitted plans prior to construction beginning.

WATER QUALITY RELATED (GENERAL)

17. General Water Quality Related Provisions:

1. If high flow conditions that may cause siltation are encountered during this project, work shall stop until the flow subsides.

2. Extreme care shall be taken to ensure that no petroleum products, hydraulic fluid, fresh cement, sediments, sediment-laden water, chemicals, or any other toxic or deleterious materials are allowed to enter or leach into the stream.

3. If at any time, as a result of project activities, fish are observed in distress, a fish kill occurs, or water quality problems develop (including equipment leaks or spills), immediate notification shall be made to the Washington Department's Emergency Management Division at 1-800-258-5990, and to the Area Habitat Biologist listed below.

LOCATION #1:		Site Name: French Slough Flood Control District Region 1 16109 Old Snohomish Monroe Road, Snohomish, WA 98290				
WORK START:		July 20, 2015		WORK END:		July 19, 2020
<u>WRIA</u>		<u>Waterbody:</u>			<u>Tributary to:</u>	
07 - Snohomish		French Creek			Snohomish River	
<u>1/4 SEC:</u>	<u>Section:</u>	<u>Township:</u>	<u>Range:</u>	<u>Latitude:</u>	<u>Longitude:</u>	<u>County:</u>
SE 1/4	22	28 N	06 E	47.8627	-122.0278	Snohomish
<u>Location #1 Driving Directions</u>						



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I-5 to State Route 2 eastbound toward Monroe, south on Frylands Blvd., northwest on Old Snohomish-Monroe Road to Access Point.

LOCATION #2:		Site Name: French Slough Flood Control District Region 2 12525 Old Snohomish-Monroe Road, Snohomish, WA 98290				
WORK START:		July 20, 2015		WORK END:		July 19, 2020
<u>WRIA</u>		<u>Waterbody:</u>		<u>Tributary to:</u>		
07 - Snohomish		French Creek		Snohomish River		
<u>1/4 SEC:</u>	<u>Section:</u>	<u>Township:</u>	<u>Range:</u>	<u>Latitude:</u>	<u>Longitude:</u>	<u>County:</u>
SW 1/4	29	28 N	06 E	47.8843	-122.0555	Snohomish
<u>Location #2 Driving Directions</u>						

I-5 to State Route 2 eastbound, south on Frylands Blvd., northwest on Old Snohomish-Monroe Road; Access FSFCD Region 2 at 12525 Old Snohomish-Monroe Road, north of Old Snohomish-Monroe Road.

LOCATION #3:		Site Name: French Slough Flood Control District Region 3 12414 92nd Street SE, Snohomish, WA 98292				
WORK START:		July 20, 2015		WORK END:		July 19, 2020
<u>WRIA</u>		<u>Waterbody:</u>		<u>Tributary to:</u>		
07 - Snohomish		French Creek		Snohomish River		
<u>1/4 SEC:</u>	<u>Section:</u>	<u>Township:</u>	<u>Range:</u>	<u>Latitude:</u>	<u>Longitude:</u>	<u>County:</u>
SE 1/4	17	28 N	06 E	47.9123	-122.0617	Snohomish
<u>Location #3 Driving Directions</u>						

I-5 to State Route 2 eastbound; FSFCD Region 3 is located south of Hwy 2 at approximately Mile Marker 9; Exit at onto 88th Street SE, Snohomish; proceed west off of exit ramp; take immediate left onto 92nd Street SE. ; proceed to 12414 92nd Street SE.

LOCATION #4:		Site Name: French Slough Flood Control District Region 4 11128 Old Snohomish-Monroe Road, Snohomish, WA 98292				
WORK START:		July 20, 2015		WORK END:		July 19, 2020
<u>WRIA</u>		<u>Waterbody:</u>		<u>Tributary to:</u>		
07 - Snohomish		French Creek		Snohomish River		
<u>1/4 SEC:</u>	<u>Section:</u>	<u>Township:</u>	<u>Range:</u>	<u>Latitude:</u>	<u>Longitude:</u>	<u>County:</u>
SE 1/4	20	28 N	06 E	47.8943	-122.0753	Snohomish



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<u>Location #4 Driving Directions</u>						
I-5 to State Route 2 eastbound; Exit @ 88th Street S.E., Snohomish; Proceed west off exit ramp, road becomes 92nd Street S.E. into town of Snohomish. Turn left (south) onto Lincoln Avenue; proceed approximately 1.5 miles to Project Region 4 area.						
LOCATION #5:	Site Name: French Slough Flood Control District Region 5 13415 Short School Road, Snohomish, WA 98292					
WORK START:	July 20, 2015			WORK END:	July 19, 2020	
<u>WRIA</u>		<u>Waterbody:</u>		<u>Tributary to:</u>		
07 - Snohomish		French Creek		Snohomish River		
<u>1/4 SEC:</u>	<u>Section:</u>	<u>Township:</u>	<u>Range:</u>	<u>Latitude:</u>	<u>Longitude:</u>	<u>County:</u>
SE 1/4	32	28 N	06 E	47.8681	-122.0755	Snohomish
<u>Location #5 Driving Directions</u>						
I-5 to State Route 2 eastbound, south on Frylands Blvd., west/northwest on Old Snohomish-Monroe Road; Access FSFCD Region 1 at 16109 Old Snohomish-Monroe Road, north of Old Snohomish-Monroe Road (Figure 2). See Appendices B1, B2, B3, and B4 for access to other Regions.						

APPLY TO ALL HYDRAULIC PROJECT APPROVALS

This Hydraulic Project Approval pertains only to those requirements of the Washington State Hydraulic Code, specifically Chapter 77.55 RCW. Additional authorization from other public agencies may be necessary for this project. The person(s) to whom this Hydraulic Project Approval is issued is responsible for applying for and obtaining any additional authorization from other public agencies (local, state and/or federal) that may be necessary for this project.

This Hydraulic Project Approval shall be available on the job site at all times and all its provisions followed by the person(s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work.

This Hydraulic Project Approval does not authorize trespass.

The person(s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work may be held liable for any loss or damage to fish life or fish habitat that results from failure to comply with the provisions of this Hydraulic Project Approval.

Failure to comply with the provisions of this Hydraulic Project Approval could result in a civil penalty of up to one hundred dollars per day and/or a gross misdemeanor charge, possibly punishable by fine and/or imprisonment.

All Hydraulic Project Approvals issued under RCW 77.55.021 are subject to additional restrictions, conditions, or revocation if the Department of Fish and Wildlife determines that changed conditions require such action. The person(s) to whom this Hydraulic Project Approval is issued has the right to appeal those decisions. Procedures for filing appeals are listed below.



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: July 20, 2015
Project End Date: July 19, 2020

Permit Number: 2015-4-512+01
FPA/Public Notice Number: N/A
Application ID: 4357

MINOR MODIFICATIONS TO THIS HPA: You may request approval of minor modifications to the required work timing or to the plans and specifications approved in this HPA. Any approved minor modification will require issuance of a letter documenting the approval. A minor modification to the required work timing means any change to the work start or end dates of the current work season to enable project or work phase completion. Minor modifications will be approved only if spawning or incubating fish are not present within the vicinity of the project. You may request subsequent minor modifications to the required work timing. A minor modification of the plans and specifications means any changes in the materials, characteristics or construction of your project that does not alter the project's impact to fish life or habitat and does not require a change in the provisions of the HPA to mitigate the impacts of the modification. Minor modifications do not require you to pay additional application fees or be issued a new HPA. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a minor modification through APPS. A link to APPS is at <http://wdfw.wa.gov/licensing/hpa/>. If you do not use APPS you must submit a written request that clearly indicates you are seeking a minor modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the control number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234, or by email to HPAapplications@dfw.wa.gov. Do not include payment with your request. You should allow up to 45 days for the department to process your request.

MAJOR MODIFICATIONS TO THIS HPA: You may request approval of major modifications to any aspect of your HPA. Any approved change other than a minor modification to your HPA will require issuance of a new HPA. If you paid an application fee for your original HPA you must pay an additional \$150 for the major modification. If you did not pay an application fee for the original HPA, no fee is required for a change to it. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a major modification through APPS. A link to APPS is at <http://wdfw.wa.gov/licensing/hpa/>. If you do not use APPS you must submit a written request that clearly indicates you are requesting a major modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the control number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, payment of the application the original application was subject to an application fee, and the requestor's signature. Send your written request and payment, if applicable, by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234. You should allow up to 45 days for the department to process your request.

APPEALS INFORMATION

If you wish to appeal the issuance, denial, conditioning, or modification of a Hydraulic Project Approval (HPA), Washington Department of Fish and Wildlife (WDFW) recommends that you first contact the department employee who issued or denied the HPA to discuss your concerns. Such a discussion may resolve your concerns without the need for further appeal action. If you proceed with an appeal, you may request an informal or formal appeal. WDFW encourages you to take advantage of the informal appeal process before initiating a formal appeal. The informal appeal process includes a review by department management of the HPA or denial and often resolves issues faster and with less legal complexity than the formal appeal process. If the informal appeal process does not resolve your concerns, you may advance your appeal to the formal process. You may contact the HPA Appeals Coordinator at (360) 902-2534 for more information.



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: July 20, 2015

Project End Date: July 19, 2020

Permit Number: 2015-4-512+01

FPA/Public Notice Number: N/A

Application ID: 4357

A. INFORMAL APPEALS: WAC 220-660-460 is the rule describing how to request an informal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete informal appeal procedures. The following information summarizes that rule.

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request an informal appeal of that action. You must send your request to WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, 600 Capitol Way North, Olympia, Washington 98501-1091; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. WDFW must receive your request within 30 days from the date you receive notice of the decision. If you agree, and you applied for the HPA, resolution of the appeal may be facilitated through an informal conference with the WDFW employee responsible for the decision and a supervisor. If a resolution is not reached through the informal conference, or you are not the person who applied for the HPA, the HPA Appeals Coordinator or designee will conduct an informal hearing and recommend a decision to the Director or designee. If you are not satisfied with the results of the informal appeal, you may file a request for a formal appeal.

B. FORMAL APPEALS: WAC 220-660-470 is the rule describing how to request a formal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete formal appeal procedures. The following information summarizes that rule.

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request a formal appeal of that action. You must send your request for a formal appeal to the clerk of the Pollution Control Hearings Boards and serve a copy on WDFW within 30 days from the date you receive notice of the decision. You may serve WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, 600 Capitol Way North, Olympia, Washington 98501-1091; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. The time period for requesting a formal appeal is suspended during consideration of a timely informal appeal. If there has been an informal appeal, you may request a formal appeal within 30 days from the date you receive the Director's or designee's written decision in response to the informal appeal.

C. FAILURE TO APPEAL WITHIN THE REQUIRED TIME PERIODS: If there is no timely request for an appeal, the WDFW action shall be final and unappealable.

Habitat Biologist

Kirk.Lakey@dfw.wa.gov

Kirk Lakey

425-313-5673

for Director

WDFW