STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
4601 N Monroe Street • Spokane, Washington 99205-1295 • (509)329-3400

September 24, 2015

Ms. Lisa Wood
SEPA/NEPA Coordinator
WDFW Regulatory Services Section
600 Capitol Way North
Olympia, WA 98501-1091

Re: Harding Channel Obstruction Removal Project, File # 15-048

Dear Ms. Wood:

Thank you for the opportunity to comment on the Determination of Nonsignificance regarding the removal of reed canary grass and the excavation of approximately 1,800 cubic yards of sediment along 2,200 linear feet of Sheep Creek to improve channel flows (Proponent-Terry Harding). The Department of Ecology (Ecology) has reviewed the documents and submits the following comments:

Shorelands & Environmental Assistance Program-Shorelines-David Moore (509) 329-3474

Based on our review of the application and after meeting with the applicant and Corps of Engineers staff on-site, state and federal laws do not require a state 401 Certification for the ditched section of Sheep Creek because it has been maintained as an agricultural drainage and will follow clean excavation practices as described below. The project will repair a breached section of Sheep Creek to restore flow to the creek.

While we understand the need for this project, it is important to carefully plan and perform the ditching in a manner that does not drain the farmed wetland or impact neighboring properties by flooding or discharging polluted water.

The following Best Management Practices (BMPs) should be used when planning and performing the ditched stream maintenance. The BMPs will help meet the necessary requirements so the project complies with the state Water Pollution Control Act (RCW 90.48).

Recommendations for Best Management Practices (BMPs)
The best long-term BMPs for agricultural ditched-stream maintenance should minimize and eliminate the source of sediment that creates the need for 'cleaning' them. We strongly recommend BMPs to retain sediment in the uplands, preventing it from entering the channel. Methods like direct seed, strip farming, and buffers along the channel work well in these instances. The local Conservation District and NRCS staff can work with you to find the best way to keep your valuable soil in place and out of the stream.

Using the BMPs listed below during and after ditching will help prevent soil loss from agricultural lands and make it less likely that the ditching will violate state water quality law.

Pre-planning
If it hasn't been done, Ecology suggests the applicant develop a plan or modify the farm plan by including the following information for the ditched-stream maintenance activity:

- Drawings (engineered if possible) of sufficient quality that show plan view and cross-sectional profile of the ditching section.
- Identify cubic yards of material to remove from ditched stream.
- List current and proposed channel elevations.
- Explain extent of wetlands (if present, both farmed and reverted) associated with the ditched stream.
- Identify vegetation that can be preserved such as native plants, shrubs and trees.
- Describe methods to move the sediments onto uplands without impacting farmed or reverted wetlands, if present. This includes methods to prevent runoff from spoil piles back into creek or wetlands (see information below on sediment management).
- Determine any loss of wetlands (if present) and amount of fill into wetlands (but avoid filling if possible).
- Schedule the work during the driest period of the summer so water levels in the ditched stream are reduced to their lowest point. This prevents muddy or turbid water from flowing downstream where it can impair water quality and fish habitat.

It will be most advantageous to perform the work at the lowest water level, typically in summer.

For any remaining water in the channel, try these suggestions:

- Temporarily bypass or exclude water from the area until you complete the work by using coffer dams and pumping water below the work area.
- Pump dirty water from the work around into an adjacent field or infiltration location, and prevent pumped water from re-entering the work area.
- Place check dams, silt curtains, coir logs, silt fences and other structures immediately downstream of the work site to capture suspended sediment.

Equipment use

- Establish staging areas (for parked vehicles, re-fueling, service equipment, etc.) in locations that prevent erosion or contamination from entering the channel.
- Use only a backhoe, excavator or clamshell bucket to scoop the material (do not use a bulldozer, dragline, or grader).
- Keep all machinery used on the site free of leaks, excess oil, and grease.

While performing the work

- Remove sediment build-up to the same depth and width as originally constructed and as defined in the ditching plan. Reshaping should not increase the capacity or expand the area drained. Do not straighten the ditched stream.
- Operate equipment from the top of the ditched stream section.
- Begin the work at the furthest point upstream and continue in a downstream direction.
- Retain existing native woody-stem vegetation. Mechanical removal of woody vegetation requires a permit from the US Army Corps of Engineers and Ecology for mechanized land clearing.

- When water flow increases; it may cause siltation during the project. You should temporarily stop and then resume work when the water level drops again.
- Preserve vegetation downstream of the ditched area to act as a filter. The further the excavated area stays away from flowing surface water, the better. Ecology suggests these recommendations:
  - Maintain 25 linear feet of vegetation at the downstream end of the newly ditched area when it discharges into another seasonal stream with no water and no fish.
  - Maintain 50 linear feet of vegetated area downstream of the newly ditched area when it discharges into another stream with water flow and fish. If water flow exists but no fish present, maintain 25 linear feet of vegetation.
  - Maintain a minimum of 300 linear feet of vegetated area downstream of the newly ditched area when it discharges into a flowing stream with known fish presence.
  - Suspend all water work if you notice a significant change in water clarity. You may resume work once the water returns to the same clarity as upstream.
  - Establish stream banks that slope between 2:1 and 4:1, in horizontal to vertical ratio. This will maintain stable watercourse banks and prevent erosion, sloughing, and the release of sediments to the channel.

Post Construction

- Upon completion of the work stabilize the banks by seeding or other methods such as straw wattles, mats, fabrics or mulch.
- Plant all disturbed areas with appropriate native plants. Stabilized banks will help reduce future erosion and reduce the frequency of ditching.
- Maintain and protect plantings to ensure survival and long-term bank stability.

What to do with sediment removed from ditches

Sediment must never build up (stockpile) along the top of the stream and allowed to drain or dewater into the excavated channel. To avoid this, do the following:

- Spread sediment on an upland location away from both farmed and jurisdictional wetlands (if present), and the stream so sediment will not erode into them. If spreading the material in a floodplain, spread it evenly in a thin layer (less than 6 inches).
- Obtain the proper floodplain permit from your local government if you place dredged material in the flood plain.
- Re-seed the sediment with an appropriate, fast-growing species to prevent runoff.

Following these BMPs can help avoid impacts to wetlands and water quality. Please contact David Moore at (509) 329-3474 or at david.moore@ecy.wa.gov for more information.

Shorelands and Environmental Assistance Program-Floodplains-Lynn Schmidt-(509) 329-3413

Based on information provided, Special Flood Hazard Areas are shown to be located within the project extent. If any part of the proposed project involves development within the Special Flood Hazard Area, a Floodplain Development Permit must be issued by the local jurisdiction. Development in the context of this permit means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the area of special flood hazard. Please contact Lincoln County for information about this permit.

State Environmental Policy Act (SEPA)-Terri Costello (509) 329-3550

Ecology's comments are based upon information submitted for review. As such, they do not constitute an exhaustive list of the various authorizations that must be obtained or legal requirements that must be fulfilled in order to carry out the proposed action.

If you have any questions or would like to respond to these comments, please contact the appropriate staff listed above.

Department of Ecology
Eastern Regional Office
(Ecology File #: 201504710)

cc: Terry Harding