

Harts Creek Fish Presence/Absence Survey
July 11, 2011

Conducted by Larry Phillips, Adam Couto, and Gina Piazza of WDFW

Accompanied by Chris Wilcox of Wilcox Family Farm (property owner) and Mark Heckert of H&S Consulting

Survey participants met at the Wilcox Family Farm office at approximately 11:00 am and discussed the details of the proposed vegetation removal work. The proposal is to remove the reed canary grass from the outlet stream channel from approximately 1 mile of stream length immediately below the lake outlet. The lower end of the proposed work area, at approximately stream mile .8, is the site of an irrigation pump from which Wilcox Family Farms removes water from the outlet stream for agricultural irrigation. Concrete bulkheads have been placed along approximately 30' of both stream banks and along the downstream side of site to pool the outlet stream's flow, and the pump has been placed in the middle of this C-shaped concrete structure. It is unclear if this structure creates a barrier to fish passage. The upper end of the proposed work area is at the outlet from Harts Lake at approximately stream mile 1.8.

The stream channel throughout the proposed work site is highly channelized and straightened, and is effectively devoid of shading vegetation, either native or non-native. The channel is filled with reed canary grass and there is very little open water visible.

The survey began at the pump site. Fish were immediately visible in the pool, and several sweeps of a dip net, without the use of the electrofisher, produced two stickleback (*Gasterosteus* spp.) approximately 30 mm in length, one young-of-the-year largemouth bass (*Micropterus salmoides*) approximately 20 mm in length, and two young-of-the-year fish identified as either *Pomoxis* or *Lepomis*, approximately 15 mm in length. Due to extremely high water conductivity, electrofishing at this site proved ineffective.

From the pump site we moved downstream to find a more suitable environment in which to establish effective setting on the electrofisher. The stream in this location looked like a very natural, typical stream in the Pacific Northwest, with mature native trees providing shade and stabilizing the banks, and with a gravel substrate. In this location we successfully shocked numerous lamprey (most likely western brook lamprey, *Lampetra richardsoni*) and sculpin (*Cottus* spp.), both native taxa.

After establishing appropriate electrofisher settings, we moved to the county road crossing at approximately stream mile 1. There was very little open water at this site, and we were unsuccessful at collecting fish here, although it was noted that the stream bottom consisted of a gravel substrate.

The conclusion of the survey was that fish are present in the work site. Because the taxa found at the pump site, at the lower end of the proposed work area, are lacustrine species, it is reasonable to conclude that those fish originated in the lake and therefore the entire proposed work area is utilized by fish.