

## South Fork Diversion Replacement Project

The existing diversion structure on the South Fork of the Klaskanine River that provides water to an earthen pond used for grow out of juvenile salmon was installed as a community project in 1980. The structure included a screening system that prevents debris and juvenile salmon from getting into the water supply to the pond. The entire structure was designed by Oregon Department of Fish and Wildlife (ODFW) engineering staff and at the time met the state and federal requirements for screening and fish passage. Those standards have changed dramatically. The system blocks adult and juvenile migration up river and may have impinged salmon and trout fry on its screens during the time wild fry are in the system.



South Fork Klaskanine Concrete Dam with deteriorating apron and inadequate fish passage and screening

Two years ago in an attempt to correct the blockage problem and to address issues of maintenance on the apron of the dam, a request to install a fish ladder and widen the structure was submitted to the Corps of Engineers and the State of Oregon. This triggered a review of the functionality of the entire structure and it was determined that any work on the structure would require addressing the improper screening as well as fish passage. Through consultation with the local ODFW biologist and the Natural Resource Conservation Service (NRCS) engineer it was determined that another option existed, that of removing the dam entirely and replacing it with a “low-head” diversion system and newly designed screening structure.



Typical self-cleaning screening structure designed by ODFW Screening and Passage Center

The Youngs Bay Watershed Council and Columbia River Estuary Study Taskforce (CREST) took interest in the project and offered to collaborate on the project with us. Since early 2006, CREST has secured a grant from ODFW Screening and Passage Center for sixty per cent of the cost of a new self-cleaning screening structure, which would also include site plans, a \$50,000 value. They have also secured a grant of \$25,000 from American Rivers, Inc. for expenses incurred to remove the existing concrete dam and screen system and \$5,500 from Oregon Watershed Enhancement Board. NRCS has already performed three site surveys and will and will provide the technical support for designing the stream stabilization necessary once the dam is removed. NRCS will also fund the half of actual cost to accomplish the stabilization work. US Fish and Wildlife Service has committed \$25,000 for the project and is also providing technical support and coordinating the permitting with the COE, Oregon Division of State lands and ODFW. CEDC has contracted with a private environmental contractor to design the diversion structure. That design has been completed and shared with NRCS, USFWS and ODFW for incorporation into the over-all site plan. That contract was for \$5000 and came from “special projects” account in our 2007 budget.

Local contributions include four hundred cubic yards of large rock for in-stream diversion and stabilization work from Hampton Logging, three weeks of excavator time from a local contractor and construction labor by Tongue Point Job Corps Center. The labor contribution may or may not be compatible with our time frame for site work, so it is under consideration by the instructors at this time. Additional funding and materials donations have been secured from other local businesses local businesses interested in seeing the continuation of fish production at our facility.

The project is scheduled to begin this spring with staging the donated rock on site and a portion of the excavator work being done sufficient to install the new screening structure and side channel. On August 1, once all fish are released from the earthen pond, work will begin on the new diversion system and connection of the side ditch from the screening structure to our existing service line. Upon completion, all water will be diverted through the new diversion while work on removing the existing dam and re-contouring the stream is completed. A re-vegetation plan will be provided by NRCS and will be instituted.

Monitoring of the project will be on-going for several years with CEDC maintaining the diversion and ODFW doing annual maintenance on the screening structures.

The Fisheries Project is seeking additional funds from the Oregon Restoration and Enhancement Board in the amount of \$50,000. The Board of Commissioners in its last meeting identified \$25,000 in lottery revenues that it has ear-marked for the project.

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