LTWC Active Restoration Grants for FY '11

Atkinson Stream & Riparian Enhancement

Project end date: 12/31/2010

This project will stop headcutting, reduce bank erosion, and improve instream and riparian conditions on a tributary to Coyote Creek. The anticipated design will be bank sloping or stream terraces to provide added channel capacity and complexity, and a series of log weirs to control stream grade. Willows will also be used to stabilize the banks and enhance habitat. Blackberry will be removed in the riparian area. An undersized culvert will be replaced for fish passage. Project partners will be the landowner and Natural Resource Conservation Service. OWEB funds will be used for bank sloping, log weir installation, materials, and project management.

BLM Resource Advisory Council (RAC) Fish Passage Barrier Replacement - Round 1&2 *Project end date: 6/30/2015*

This project will remove three undersized fish barrier culverts and replace them with large, counter-sunk stream simulation pipe arch culverts or bridges depending on the best design solution determined by engineer. This will allow free passage of aquatic species and access to over 8 miles of high quality spawning and rearing aquatic habitat which is presently blocked to fish presence. In-stream enhancement projects include rock and log weirs, planting shrubs and trees and fencing to exclude livestock along riparian areas. This project will also result in survey and fish passage designs for two impassable culverts on Jones and a tributary of So. Fork Ferguson Cr. If funding remains after survey and design work are complete, one or more of the fish passage solutions may be implemented.

Deck Fish Passage and Riparian Restoration

Project end date: 3/31/2012

This project is located approximately seven miles west of Junction City on Owens & Turnbow Creeks, tributaries to Bear Creek in the Long Tom Watershed. Issues to be addressed include poor water quality (temperature, nutrient, & bacteria levels), altered riparian vegetation structure due to grazing, and an undersized culvert that is a fish passage barrier. Water quality will be improved by excluding livestock from 3000' of riparian areas, planting 4.8 acres of riparian area with native trees & shrubs, and installing a manure storage facility and two off-channel watering devices for livestock. The culvert will be replaced with a bridge to allow fish / amphibian passage and a "fish-friendly" intake will be installed on the property owners' irrigation system. OWEB funds will be used for the culvert replacement component, the irrigation intake, project management, fiscal administration for the project, and education & outreach.

Erickson – Lomatium Prairie & Floodplain Forest Restoration

Project end date: 12/31/2011

The project is located adjacent to the Long Tom River approximately .5 miles north of Fern Ridge dam. The site is comprised of 30 acres of wet prairie and 62 acres of hardwood floodplain forest. The wet prairie contains one of the largest known populations of Bradshaw's lomatium in Lane County. This threatened species is being encroached upon by trees, shrubs and nonnative, invasive speices. Lack of fire and altered hydrology have led to altered stand structure and plant diversity in the hardwood floodplain forest. Other watershed issues this project will address are loss of breeding habitat for native amphibians and overwintering waterfowl habitat. Restoration of wet prairie will include eradication of non-native plants and encroaching woody vegetation using mechanical and chemical methods. Restoration of the hardwood floodplain forest will include eradication of non-native plants and trees to increase diversity of herbaceous understory. Amphibian and waterfowl habitat will be improved by creating a seasonal emergent wetland connected to existing seasonal floodplain channels. In addition, an undersized culvert will be removed to improve aquatic passage on historic Coyote Creek.

Johnson-Sogge Upland & Wet Prairie, Oak Savannah, and Riparian Wildlife Habitat Restoration at Johnson-Sogge

End date: 12/31/2012

This project encompasses two sites within the Long Tom Watershed's core oak habitat conservation and restoration area, located in the southeast portion of the Long Tom Watershed. The Johnson site is strategically located within a multi-ownership, 1200 acre area bounded by Fern Ridge Reservoir to the south, Long Tom River to the west, and Coyote Creek to the east. There are a number of compelling ecological and social opportunities in this vicinity. Much of the land within this area has never been cleared or tilled, which has led to the preservation of a number of rare plant populations, including Bradshaw's lomatium, located on the Erickson and BLM parcels adjacent to the Johnson site. The historic channel of Coyote Creek runs through these properties, and although its hydrology has been altered because of Fern Ridge Dam and the levees along the Long Tom River, its channel form has not been changed. The Army Corps of Engineers owns the land on the southern end of this area that contains a breeding population of Western pond turtle. The McKenzie River Trust has purchased a conservation easement from the Ericksons and is currently developing one with the Johnsons. Several other neighboring private landowners are currently in conversations with the Trust about restoration and easement opportunities on their land.

The Sogge site is located at the far western edge of the ridgeline surrounding Eugene. The Sogge's own 64 acres, most of which they would like to restore to the oak woodland and savanna that was documented at the site by GLO surveyors in the 1850s. Lack of fire and possibly the deliberate introduction of firs have led to most of the site being closed canopy

forest. The north slope of the property is now dominated by fir with very few oak. The south slope still has remnant open grown oaks, which are being crowded out by younger oaks and understory firs. Three small openings, possibly where soil conditions are unfavorable for tree growth, still exist on the site. *Geranium lucidum*, a rapidly spreading non-native plant was observed in areas where there has been soil disturbance. Fortunately it has not spread across the entire site, and the landowner plans to begin eradicating it immediately. Blackberry and scotch broom are also present on parts of the site

Jordan Creek Fish Passage & Off-Channel Irrigation Project

Project end date: 5/31/2011

Four existing culverts and an irrigation dam currently block fish passage on Jordan Cr., a tributary to Coyote Creek. The proposed technical assistance activity is to 1) develop designs and specifications for passable crossings at three locations and culvert removal at one location; 2) develop a passage design and off-channel irrigation solution for the existing instream irrigation impoundment.

Murphy Wet Prairie & Stream Restoration

Project end date: 12/31/2010

This site contains 47 acres of former upland and wet prairie that was converted to agricultural and grazing use over 100 years ago. Remnant prairie species are still present on site and the area has excellent restoration potential. A seasonal tributary on the property was channelized in the early 1900s and past grazing kept riparian conditions poor. We are proposing to restore the pasture to prairie and enhance instream conditions with large wood and riparian plantings. Seasonal swales in the former tributary floodplain will be enhanced to restore some of the site's former hydrology. Project partners are the Natural Resource Conservation Service, US Fish & Wildlife Service & ODFW. OWEB funds will be used for monitoring, project management, and construction and material costs.

Stroda Fish Passage Analysis & Design

Project end date: 12/31/2010

The Corps of Engineers will conduct hydrologic and hydraulic analyses of several fish passage options at the Stroda dam on the Long Tom River. Based on these analyses, we will select the best option for adult and juvenile cutthroat trout passage, cost, and technical feasibility and develop a design and budget for the selected option. OWEB funds will be used for 1) preliminary cost and feasibility assessment of a fish ladder and 2) final project design specifications, drawings, and budget of selected fish passage option.

Wintergreen Farm Pond Enhancement & Invasive Species Control

Project end date: 12/31/2011

This restoration site is set within a 180-acre organic farm on Poodle Creek. The parcel was recently purchased by the landowners who would like to implement wildlife habitat enhancement on an 8-acre portion of the property that includes a 1-acre pond, seasonal tributary, riparian area along Poodle Creek, and several acres of former oak savanna above the pond. The pond area has potential for providing breeding habitat for red legged frog and other native amphibians and basking habitat for western pond turtle (not currently present, but may be in the area). Currently the pond attracts waterfowl, but is marginal habitat for amphibians and pond turtle due to its steep sides, lack of native aquatic plants and shrubs, and basking sites. Warm water game fish are present (largemouth bass, bluegill, sunfish, catfish) and the landowners would prefer to keep them as a potential food source and for recreational fishing for their CSA (Community Supported Agriculture) members. However, we would like to install a screen at the outlet of the pond to prevent future introductions of the fish into Poodle Creek.

The riparian area surrounding the pond and seasonal tributary is dominated by Reed canary grass. The riparian area along Poodle Creek has recently been planted with native trees, but would benefit from planting shrubs. The landowner has already fenced his cattle off of Poodle Creek and would like to fence off the restoration area. Several large, open-grown oaks flank the former savanna. However, this area has been heavily invaded by blackberry, which has also overgrown old compost piles left by the former landowner. This makes it impossible to mow the blackberry, which is the only option the farmer has because their farm is organic.

Wild Iris Ridge Upland Prairie & Oak Savanna Restoration – Phase 3 Project end date: 12/31/2011

This project is located along the ridgeline above Amazon and Spencer Cr. This project will address the loss of oak savanna and upland prairie, which have been reduced to less than 1% of their historic levels in the Willamette Valley. We will do initial treatment of non-native, invasive plant species on 58 acres and follow up treatment on 85 acres from phase 1 and 2 of this project. Weed eradication will include the removal of 5000 cu. yd. of slash piles that are currently a source of weed seeds. We will also restore oak savanna and prairie structure by removing woody material on 38 acres. OWEB funds will be used for project management, weed treatment, woody material and slash pile removal, travel, native seed, education, and fiscal management.