

# Wood Creek Project

Wood Creek is a tributary of the North Fork of the Coquille River, which is habitat for Coho salmon and winter steelhead. The approximately 3400 foot section of Wood Creek, which intersects this property, had a riparian zone primarily dominated by invasive Himalayan Blackberry, with a few stands of myrtle trees shading predominately bare patches of earth beneath. Himalayan Blackberry thickets are a problem because they cannot provide significant shade for stream water except where streams are deeply entrenched beneath the thickets, and also cannot contribute to large woody debris in the stream. Overall plant and animal diversity is likely to be higher in areas with more diverse native vegetation. We received a grant in the amount of \$10,000 for this particular project. We used the funds for large wood placement, removed the Himalayan Blackberries, and replaced them with a mixture of native species. Approximately .3 miles of fencing was added, in addition to wildlife crossings to combat the problem of elk damaging fences.

Wildlife Crossing



Ready to plant



Large wood placement

## Offield Creek Riparian Restoration Project

This project partnered the Coos SWCD with Northwest Youth Corps Conservation Crew (NWYC) and local rancher and SWCD director Dan Pierce to construct 3000' of Fence in August/September of 2016 on the Pierce Ranch, located on North Bank road along the lower main stem Coquille River. Fencing setbacks varied from 15ft-60ft, ultimately resulting in a total riparian exclusion area of approximately 8 acres.

During the fence construction phase, our NWYC workers took a short break while Chris Claire, ODFW Habitat Protection and Conservation Biologist, provided an educational demonstration for the kids by backpack electro-shocking Offield Creek for juvenile salmonids. We found both a juvenile cutthroat and a Coho, and Chris gave a brief explanation of juvenile salmonid Identification. We also discussed the goal and purpose of the work we were doing (to improve riparian habitat and water quality) and what it's like to have a career in a natural resources-related field.

The planting phase of this project was completed later, in February 2017 by Coos SWCD, ODFW, and two volunteer workers. Plants used were primarily willow and cottonwood cuttings obtained from local sources, about half from onsite and the other half were taken from a stand further up North Bank road, near Winter Lake. As of fall, 2017, the planted trees are looking great and we expect a high survival rate. This project



## Rolfe & Steffensmeier Irrigation Efficiency Improvement Projects

These two projects addressed water quality and quantity issues by installing K-line sprinkler systems on a combined 145 acres of pasture. K-line systems have been developed and designed to provide for efficient watering of pasture lands. They also are easily moved on the pasture to the locations needing watered. The resultant saving in water use compared to traditional irrigation tactics, such as flood irrigation or traditional sprinkler irrigation, help to address the need to maintain stream flows while facilitating pasture production. Maintaining stream flows assists with keeping temperatures lower and providing more wetted area for fish production. Additionally, highly efficient K-Line systems allow for adequate watering, while preventing overland flow of water that would potentially bring animal wastes or agricultural fertilizers into the streams.

Components of the K-line system include a pump and pumping station mounted on a portable trailer, fish screen, buried PVC mainline, pod sprinkler system, as well as other materials. The system mainline will consist of 2"- 6" schedule 40 PVC pipe and will be permanently buried. This will reduce exposure to sun and livestock, as well as labor hours needed to assemble, disassemble and store the system seasonally. The above ground pod system is a series of small tough plastic pods protecting an impact sprinkler, connected by low density poly pipe. The system is designed to run on lower pressure. The small, flexible, strong, lightweight lines can be moved easily with a 4 wheeled ATV.

The major benefits of K-line Irrigation include low capital cost, ease of installation, use and shifting suits all types of terrain, and efficient use of available water supplies. A Farm Irrigation Index rating worksheet was conducted by NRCS for these fields, demonstrating the overall potential efficiency for the irrigation system at this project site will increase from 51% to 70%. The estimated amount of water that will be saved is 6.8 acre-inches of water per acre, resulting in an annual water savings of 26.7%.



## Myrtle Lane Dairy Manure Management

Myrtle Lane Dairy is an organic dairy operation with a calf barn, which at any given time houses an average of about 70 jersey calves. According to the USDA NRCS Agricultural Waste Management Handbook(1992), the average 1000 pound dairy cow produces about 80 lbs of manure per day, so if we estimate that the average calf produces 8-10 lbs per day, that is roughly 600 lbs of manure

produced daily at 18,000 lbs per month. Manure that is accumulated must be stored typically six months out of the year (Nov-April), until conditions are dry enough to spread on the fields as fertilizer.

The manure from the calf barn was being piled at the east or back end of the barn as stalls were cleaned, and stored uncovered on bare ground through the winter. Manure management was improved by covering a bare floor with a 6" base of sand and gravel foundation. A firm non-erodible surface was provided in order to store the

manure on a covered area that prevented run-off during the winter months.

