

City of Myrtle Point Drinking Source Water Protection Plan

The City of Myrtle Point is home to just over 2500 people, all of whom rely on the surface water from both the North Fork and East Fork of the Coquille River watersheds for their public water system. The North and East Fork watersheds are comprised of a combination of lands owned by the BLM, private timber corporations, residential / non-industrial timberland, agricultural, and Coquille Tribal Forest. This expansive multitude of land uses may have long and short-term effects on the water quality of Myrtle Point's drinking water. The proposed protection plan involves Coos SWCD working in correspondence with Oregon State University's (OSU) Institute for Natural Resources (INR) to assess areas of concern, water quality and quantity information, contaminant sources and land use, and to take inventory of regulations compliance. This project will also evaluate the effects of active forest management on drinking source water quality as supplemental research.

Randolph Slough Riparian Enhancement Project

This project funded 1020 ft. total of woven wire fencing, in order to completely exclude livestock from the riparian area of Randolph Slough. Along with exclusion fencing, a riparian planting plan was implemented for approximately 0.8 acres near the fenced pasture, plus an additional narrow strip of bank extending about 60 yards upstream of the pasture, between the county road and Randolph Slough.

These actions were designed to enhance the riparian habitat on Randolph Slough by eventually producing some degree of stream shade for the channel. We know from ongoing stream-temperature monitoring that water in Randolph Slough regularly reaches lethal temperatures for juvenile salmonids during the summer months. Construction of riparian fencing and planting at Randolph Slough will also help provide important habitat cover for small mammals, birds and fish. Establishment of a riparian area through planting will improve important ecological functions such as flood control, ground-water storage, and enhancements to water quality and erosion control. Excluding livestock from the riparian area will help to protect water quality and stream-bank integrity.



BEFORE



AFTER

Coos-Coquille Comprehensive Tidegate Outreach and Engagement Project

Through the OWEB-funded Tidegate Stakeholder Engagement Project, The Coos SWCD and Coos and Coquille Watershed Associations are teaming up to form a non-regulatory, “full-service” resource to help landowners navigate the challenges of replacing and maintaining tidegates. This is the first time all three of our organizations have worked together on a project of this scale, so we are putting a major emphasis on relationship-building, team meetings, communication trainings, and frequent check-ins on project goals and progress, especially during the first year, to ensure success over the multi-year project period.



Tidegates – what are they and how do they function?

Tide gates are structures that control the flow of water during high and low tides, and many are located throughout the lowlands of the Coquille and Coos Basins. Tidegates close during the period of high tide to protect farms, structures, and roads from inundation. When the tides recede, the gates open to allow for drainage.

Tidegates are critical elements of drainage infrastructure that have been used in Coos County for over 100 years. Historical tidal wetlands and floodplains were diked and tidegated to develop the pastures and infrastructure that we have today. As of 2019, existing inventories in both basins estimate that Coos County has 274 tide gates servicing over 18,000 acres of both public and private lands.

Tidegates have supported agricultural operations and families in Coos County for decades. However, older-style top-hinge tidegates have caused impacts to public resources including salmon, Pacific lamprey, waterfowl, and water quality. Specifically, tidegates restrict juvenile coho salmon access to critical floodplain rearing habitat during their winter outmigration to the ocean. These habitats are rich in food sources and provide slow moving refuge during high flow events. Over time, tidegates degrade and fail, requiring replacement. Replacement of tidegates can be challenging and expensive as fish passage regulations require upgraded infrastructure that meets the needs of public resources while maintaining the use and productivity of the site. Failing tide gates and associated drainage issues reduce the productivity of the land for ranchers *and* for fish and wildlife.

Tidegates contribute to a thriving coastal economy that includes the diverse industries of agriculture, commercial and recreational fishing, tourism, and forestry. Despite the challenges, it is possible to replace a tidegate with new ‘fish-friendly’ designs that meet regulatory requirements while sustaining and improving our local agricultural economy and maintaining our natural resource-based industries.

Vincent Fish Passage Project

The primary focus of this project was replacement of a perched 48" culvert located at stream mile 3.4 of South Twomile Creek. The road over this segment of stream serves as the primary route for livestock movements into the hill pasture lands upstream of that location. Livestock are dispersed into the upper South Two-mile lands using this route and gathered as well.

The Active Channel Width of the stream for this reach averaged 8.7ft. Though the culvert was functional, the landowner, Mitch. Vincent, was concerned with fish passage through the culvert as it was undersized by ~2.5x, had a slope >6%, and an outfall onto boulders without a jump pool. South Twomile Creek is considered fish bearing through the reach where the perched culvert is located. There is 1.35 miles of cutthroat habitat upstream of the perched culvert and 1.5 miles of coho habitat. The perched condition of the culvert resulted in complete blockage of anadromous and resident migratory fish movements up and through this segment of stream. OWEB small grant funds facilitated replacement of the pipe with an engineered active channel spanning bridge to enhance fish passage to the upper reaches of south Twomile Creek.

BEFORE



AFTER



Vincent Fish Passage Project cont.



Mitch Vincent

The Vincent family ranch is located on Two-mile and South Two-mile Creeks south of Bandon. Operations on the ranch include primarily sheep grazing and timber management. The Vincent's are very progressive in their land management; including actions such as planting turnips for forage to increase sheep productivity and leaving wider timber buffers when harvesting than required by Oregon State Forestry regulations.

The primary issue was a perched 48" culvert located at stream mile 3.4 on South Two-mile Creek. Though the culvert was functional, the landowner, Mitch Vincent, was concerned with fish passage through the culvert as it was undersized by ~2.5x, had a slope >6%, and an outfall onto boulders without a jump pool. The road over this segment of stream serves as the primary route for livestock movements into the hill pasture lands upstream of that location. Livestock are dispersed into the upper South Two-mile lands using this route and gathered as well. Additionally, there is a rock pit located near the end of this road network and timber harvest is facilitated by the road.

"What really made this effort outstanding was Mitch's interest in doing a project that was purely to improve conditions for fish. The culvert, though undersized, was not in danger of collapsing or the road failing. Often when landowners come to us it is because they have a problem that affects their operation and want to fix it in a responsible way. In Mitch's case, there really was no problem for the agricultural operation and his interest in improving the stream crossing was motivated purely by interest in being a good steward of the land."