

MANURE MANAGEMENT

This project was a joint effort between Coos SWCD and a local boarding stables operator to improve manure management methods on the property. The landowner did not own any heavy equipment, and relied mainly on the boarders to clean out their horse's stalls and empty the bedding into a pile outside the barn where it could compost naturally. After some concerns arose that some of the old piled manure might be in a place where heavy rainfall could cause it to leach into a small perineal stream that was located at the bottom of a ravine behind the barn, the Coos SWCD worked with the landowner to devise an improved management strategy. We came up with a plan and design based off the average number of horses boarding at the facility at any given time, and applied for an OWEB small grant to construct this basic lean-to manure storage and composting facility. It is set up so the landowner can utilize an O2 aerated composting system which she already owned, and now it produces this horse boarding stable with a covered area and non-permeable surface on which to store manure until it can be used as fertilizer in the landowner's greenhouse.



RIPARIAN PROCESS & FUNCTION

This project is for a progressive farm plan in Coos County. The landowner is currently transitioning from stocking primarily cattle (formerly a herd of 60-100) to sheep. This transition will have less impact to the landscape and is better suited to the hillside pasture area. Water hoses were used from the barn to watering troughs so livestock no longer need to water directly from the stream and are completely excluded from the stream channel in these areas. Another issue facing this land was lack of riparian vegetation to provide stream shade and bank stability along the channel. Once riparian exclusion is achieved, the landowner, with technical assistance from Coos SWCD and ODFW, will plant the fenced area winter 2016 with willow cuttings taken from on-site and sources close to the site. Cottonwood, spruce and cedar will also be planted at the higher elevation. This site has also been chosen for a 3-day course titled “Grazing Management in Riparian, Wetland, and Other Sensitive Habitat Areas.”



IRRIGATION EFFICIENCY

This project, located on the South Fork of the Coquille River just downstream from Powers, funded the installation of a K-line pod irrigation system that increases efficiency and reduces water use. Efficient irrigation systems and water management in the Coquille Watershed have a significant positive effect on water quality. On this property, installation of the K-line system should increase the efficiency of the landowner's irrigation system from 51% to 70%, according to NRCS worksheet Water Savings Estimator for Irrigation System Planning and Ranking. This should result in an estimated annual water savings 6.8 acre-inches per acre.

K-line systems are custom designed to each particular field, applying precisely the correct amount of water necessary, eliminating wasteful overwatering and deep percolation. They do this by applying the water slowly and gently over a longer period of time, allowing the soil to absorb the maximum amount of moisture without surface runoff.

In context of the watershed as a whole, the general idea is that the need to use less water for irrigation should result in more water left in-stream. While the difference from one landowner's improvements in efficiency may not provide a measurable impact on the watershed; the cumulative effects of all of the improvements being made, as more and more landowners upgrade to the more efficient irrigation systems, will provide a noticeable impact on flow levels over time.

