

OWEB Local Innovation Fund (LIF) South Coast Cranberries Project

Over the past 3 years the South Coast Watershed Council has been working with cranberry growers on projects to improve water quality, economic stability, and generate knowledge in the farming community about watershed friendly practices. Beth Pietrzak served as the project manager. Over 24 projects have been completed. Project types range from tailwater recovery systems, replacing organophosphates with reduced-risk pesticides and organic solutions, irrigation efficiency improvements, organic & conventional grower knowledge exchange meetings, and water quality monitoring; among others. Several cranberry farms participating in these projects gained Salmon Safe certification, Watershed Friendly Stewardship Awards, and Food Alliance certification.



Cranberry bloom & bee in Spring



Cranberries in early fall



The Sixes River Watershed - Cranberry Farms



Tailwater Recovery System

Two tailwater recovery systems have created “closed-system” farms. Tailwater ponds are located at the end of the cranberry farm’s drainage system. Water used for irrigation is captured in the newly-constructed tailwater ponds, before the water has a chance to leave the farm, and pumped to the farms’ reservoirs for reuse. These designs significantly reduce surface water runoff, protecting streams from sediment, fertilizers, and pesticides.



Cranberry Farm Drainage Reconfiguration

The Cranberry Farm Drainage Reconfiguration project was a great success, thanks to the farm's generous contribution of equipment and labor. The purpose of the project was to eliminate a direct fluvial connection between the cranberry operation and a salmon bearing stream. The farm employees plugged or buried all pipes draining to the stream. They also replaced 12 undersized culverts with larger pipes in order to accommodate the additional flow from the reconfiguration. All farm runoff now drains away from the stream.

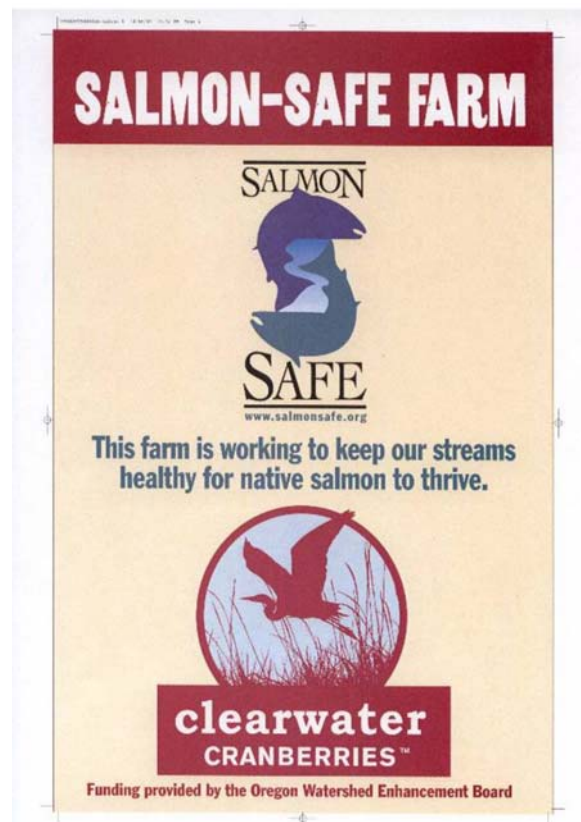


Reduced-Risk Pesticides & IPM

Reduced-risk pesticides are certified by the EPA to have low impact on human health, lower toxicity to non-target organisms (birds, fish, plants), low potential for groundwater contamination, low use rates, low pest resistance potential, and compatibility with Integrated

Pest Management practices. For this project, three growers replaced the use of Diazinon, an organophosphate, with reduced risk pesticides. We used bee friendly chemicals during the pollination season, and organically-derived chemicals for other applications. We monitored the pest populations with IPM (Intergrated Pest Management) traps & frequently performed visual inspections of the bogs for small larvae and cocoons.

The results of the reduced-risk pesticide trial include successful control of cranberry fireworm populations and a transition from Diazinon to less toxic pesticides on two South Coast cranberry farms. This trial alone, involving 25 acres, prevented 6.25-56.25 gallons per year from being used in the South Coast Watersheds. The transitional trial ran for two years, eliminating the use of 12.5-112.5 gallons of Diazinon. The growers have been thoroughly satisfied with the results. Given the efficacy of the products and monitoring techniques, the growers have solidly adopted these methods.



Salmon Safe Certification

As a result of funding provided by the OWEB LIF, two South Coast cranberry farms became the first ever Salmon Safe certified cranberry operations. To gain Salmon Safe status a farm's practices must not be harmful to salmon. The inspection process focuses on a farm's riparian area management, water use management, erosion and sediment control, chemical use management, animal management, and biodiversity conservation. The above sign was presented to the two certified farms & will hang on their farm gates to advertise their efforts and encourage other growers to be Salmon Safe.