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CONSERVATION EFFECTIVENESS PARTNERSHIP

PULLING TOGETHER TO IMPROVE NATURAL RESOURCE INVESTMENTS IN OREGON

Dive In! Tillamook's Wilson River now Clean Enough for Swimming

Tillamook, Ore.—The water in Wilson River is now clean enough for the general public to enjoy swimming or wading thanks to water quality improvement efforts and monitoring measures by cooperating public natural resource agencies, nonprofits and landowners.

Wilson River is the largest watershed feeding Tillamook Bay, a major water body on Oregon's northern coast. While the upper portion of the river is flanked by forestland, the lower 8.5 miles flows through dairy land and is affected by development pressures from the City of Tillamook.

THE PROBLEM

In 1997, the lower 8.5-mile segment of the Wilson River was found to have dangerously high bacteria levels, which moved the river on the 303(d) list of impaired waterways. That listing meant that recreational use was not advised.

Oregon's recreational use water quality standard has two requirements: first, that for 30 days water does not show a median of 126 or more *E. coli* organisms per 100 milliliters (mL) of water and second, that no single sample exceed 406 *E. coli* organisms per 100 mL. The Wilson River exceeded those limits.

COLLABORATION WAS KEY

Work began toward finding a solution to Wilson River's water woes by local citizens, dairy farms, nonprofits and natural resource agencies including the Tillamook Estuary Partnership, Oregon Watershed Enhancement Board (OWEB),

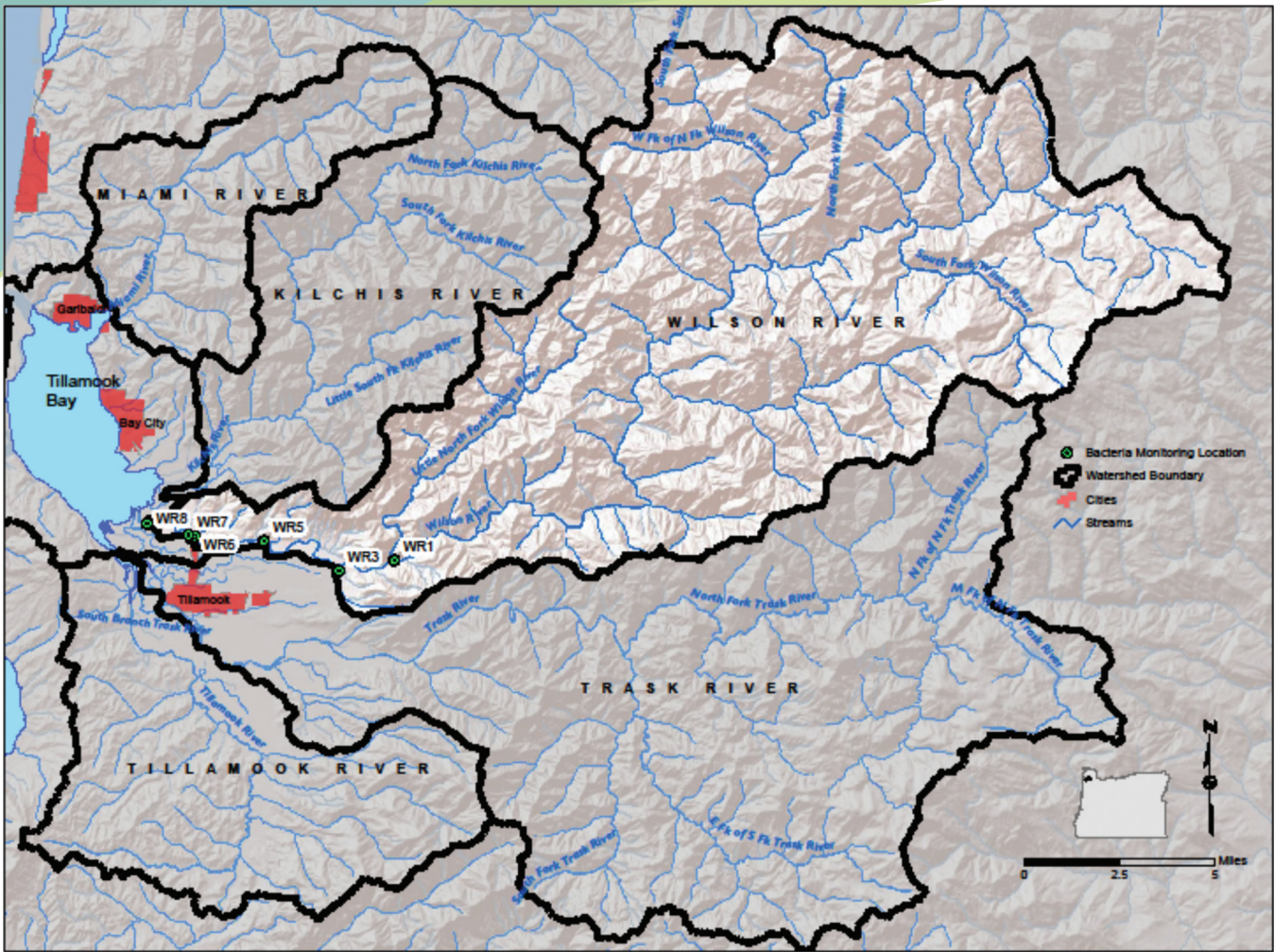
Oregon State University, USDA Natural Resources Conservation Service (NRCS), USDA Farm Service Agency, DEQ, Oregon Department of Agriculture (ODA), and the Tillamook Soil and Water Conservation District, which leveraged their investments in multiple conservation projects and water quality data monitoring intended to improve and measure the watershed's health.

MULTI-PRONGED EFFORT

Partners spent millions of dollars to restore and protect Tillamook Bay and its watershed. Projects included 20 riparian enhancements on private land that fostered planting, fencing and invasive species removal to stabilize streambanks and to keep livestock off a buffer of land along the river's edge; purchase of three wetland parcels and improvements to Tillamook County Creamery Association wastewater treatment system that discharges to the river. Farmers invested in additional improvements as well. They built covered manure-storage areas and improved the efficiency of sprinkler systems and fertilization programs to prevent runoff from entering waterways.

SCIENTIFIC MONITORING SHOWS SUCCESS OF INPUTS

Scientific monitoring gives water quality managers a starting point and a scientific, progressive measurement of success or failure in water quality improvement efforts. In the Wilson River, monitoring of pollutants began in 1997. At that time, *E. coli* organisms were present at nearly triple the levels considered safe for swimming and wading.



Wilson River water is checked regularly for bacteria at six monitoring locations along the lower 8.5 miles of the river.

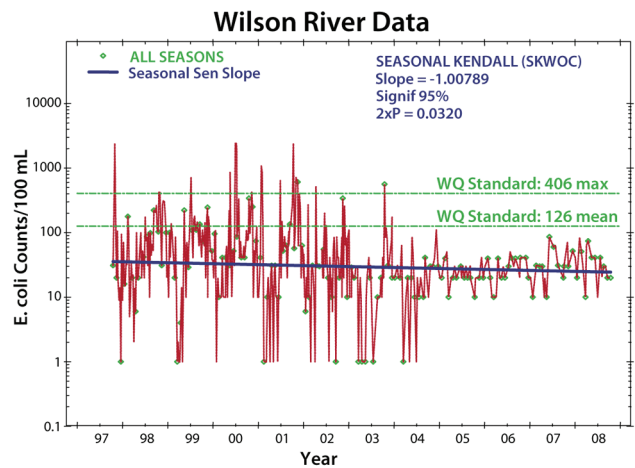
Special equipment measured water quality in the Wilson River over the long term. Six bacteria monitoring stations set up along the 8.5 mile stretch of Wilson River monitored the presence of *E. coli*. Data collected from those stations from 1997 through 2009 show that bacteria levels have steadily declined since 1997 and now consistently meet the recreational use water quality standard. The data is collected by The Tillamook Estuary Partnership and DEQ collect and review the data.

Monitoring has been in place long enough now for scientists to see patterns of improvement. They predict with confidence that conditions will continue to improve over the next 25 years. And that can only be good news for the Wilson River and to those who depend on and enjoy using it.

KEEPING THE WATCH

The Conservation Effectiveness Partnership (CEP) is a new collaboration of natural resource agencies that gives direction to conservation in Oregon. Partners include Oregon Watershed Enhancement Board, USDA Natural Resources Conservation Service, Oregon Department of Environmental Quality and the Oregon Department of Agriculture. The CEP works collectively

to understand, optimize and communicate the benefit of conservation funding investments in the Wilson River and other focused areas around Oregon.



Bacteria levels from each location are plotted on a graph.