## The Oregonian

## Western pond turtles get federal review for possible protection under Endangered Species Act -- science



Western pond turtles are native to Oregon and other parts of the West Coast. The U.S. Fish and Wildlife Service announced April 9, 2015, that it would review the turtles' status for possible protection under the Endangered Species Act. (Oregon Zoo)

By Susannah L. Bodman - April 13, 2015

The western pond turtle, one of two nonmarine turtle species native to Oregon, will undergo a one-year review by the U.S. Fish and Wildlife Service to determine whether the species should be given protection under the Endangered Species Act.

Currently, the western pond turtle is considered a sensitive/ critical species under Oregon's Conservation Strategy because of declining numbers. Only two populations remain in the Columbia Gorge, and numbers in the Willamette Valley have dropped to a point that's at 1 percent of historic levels, according to the Center for Biological Diversity, a nonprofit organization that aims to protect endangered species and habitat.

A recent two-year, biologist-led survey in Clackamas County found no sign of native western pond turtles in the county. As reported in the Jan. 25 science roundup, 15 sites were searched in the county, including the remnants of natural wetlands and storm-water ponds behind big-box stores. Not a single turtle representing the species was found at any of the 15 sites, something that state Department of Fish and Wildlife conservation biologist Susan Barnes has called "moderately alarming."

As for the federal wildlife agency, it announced April 9 that it would review the species' status in response to a petition submitted in 2012 by the Center for Biological Diversity and several scientists, who are seeking to have the turtle listed under the species act.

Western pond turtles now range from western Washington to Baja California but have undergone steep declines in some areas -- up to 99 percent, according to CBD. Besides Oregon, the turtles are listed as endangered by the state of Washington and identified as a species of special concern in California.

Although their common name includes "pond," the turtles more often live in rivers and spend time in terrestrial habitats, and it is destruction of those habitats that pose one of the biggest concerns for the species.

"Threats like habitat destruction from urbanization and agriculture are driving western pond turtles toward extinction. Muchneeded federal protection of these turtles would help ensure that rivers and wetlands across the West Coast are protected, both for the turtles and for people," Collette Adkins, a biologist and lawyer with CBD, said in a statement.

In addition, the western pond turtles may face competition from other turtle species. While the Clackamas County survey found no pond turtles, it did find two other species: the native western painted turtle and the invasive redeared slider. The sliders often get released as unwanted pets and proceed to compete with native turtles for food and nesting and basking sites. They also often carrying pathogens that can wipe out native turtles.

And pathogens have wreaked havoc on western pond turtle populations in the past, such as in Washington in 1990, when an upper respiratory disease epidemic left the state with only 100 individuals of that species.

Conservation efforts, however, are underway in Oregon and Washington to try to keep the turtles from the brink of extinction.

Even so, new research into the turtles' genes could escalate concerns about extinction. The CBD in 2014 notified federal Fish and Wildlife of a genomic study that would reclassify western pond turtles not in one but in two species: Emys marmorata (including all populations north of San Francisco Bay and populations from California's northern Central Valley) and Emys pallida (including populations in California's central coast range south of San Francisco Bay; around California's Mojave River; and in Baja California, although further analysis is pending on the latter that could yield a third possible species).

If the two-species split gains acceptance, it would mean a single, at-risk species' with declining numbers would be divided into two species with even fewer individuals each and more precarious positions in terms of extinction risk.