Racing to save a species:
NRCS habitat expertise provides critical link for turtle recovery

They were on the verge of extinction in Washington.

In 1990, when the Washington Department of Fish and Wildlife (WDFW) conducted its population survey, fewer than 60 healthy Columbia Gorge Western Pond Turtles were believed to be in existence. Once common in the Puget Sound region and the Columbia Gorge, the Western Pond Turtle's rapidly declining population – brought on by loss of habitat, disease and predation by non-native species such as bullfrogs – soon placed it on the state's endangered species list.

After millions of years of survival, researchers believed that this seven-inch reptile could well disappear from the state within a matter of a few years.

Responding to this alarming revelation, a flood of conservation agencies and organizations began the long, slow journey of species and habitat recovery for this native reptile. But its potential recovery would require an intense and sustained hatching and rearing effort – and, as importantly – it would require habitat restoration.

In 2005, the Natural Resources Conservation Service (NRCS) was asked to bring its technical expertise to bear in helping restore an important Western Pond Turtle site in Skamania County. According to NRCS Wildlife Biologist Rachel Maggi, the Skamania population of turtles is one of only two natural populations in Washington State where it has managed to survive predation from humans, bullfrog and warm water fishes, as well as habitat loss.
As part of the coordinated effort, the NRCS partnered with WDFW and the U.S. Forest Service to provide engineering technical assistance to design and install a new pond in Skamania County. The NRCS’ Conservation Technical Assistance Program provided funding for the planning and construction design.

“The pond has provided an additional site for the existing population and was colonized by new turtles over the past few years,” Ms. Maggi says.

“Because this highly aquatic turtle makes its home in streams, ponds, lakes, and permanent and ephemeral wetlands, this site provides ideal habitat,” she says. The small site consists of a series of shallow ponds that are located on over just a quarter-acre area of land. “But those ponds and shallow wetland habitats provide critical food sources, basking sites, and escape cover for these wary animals,” Ms. Maggi says.

Northwest zoo facilities joined in the partnership to recover this species, as well. Eggs continue to be collected from nests in the Columbia Gorge and are incubated at both the Oregon Zoo in Portland and the Woodland Park Zoo in Seattle.

Most of the eggs are collected from wild sites and nurtured at the zoo until they are large enough to prevent predators such as bullfrogs and largemouth bass from swallowing them whole.

“That strategy is called ‘head starting,’” Ms. Maggi says. “It has a simple goal: To raise them until they are bigger than a bullfrog’s mouth. At the zoo, that generally takes about 10 months,” she says. “In the wild, it can take two or three years – if they make it at all.”

Plus, by keeping turtles at warmer temperatures and feeding them throughout the winter, they grow much faster, making them less susceptible to predators, Ms. Maggi says. After a year of “turtle spa-treatment” and growing to the weight and size that allow them to evade predators, the juveniles are released back into the wild, she says.

“Now, every time I walk by the western pond turtle exhibit at the Oregon Zoo, I smile – and am happy to know that NRCS made a positive contribution to a place they will someday call home,” Ms. Maggi says.