

Nature Conservancy buys Calif. ranchland in hopes of restoring salmon run

March 17 2009, By Chris Bowman

The Nature Conservancy has bought ranchland near Mount Shasta to repair a cow-ravaged tributary of Shasta River, historically one of the most productive salmon streams in California.

Restoring Big Springs Creek could be "a silver bullet" in reviving runs of [salmon](#), steelhead and other [fish](#) throughout the Klamath Basin, said Henry Little, project director for the conservancy in California.

The conservation organization bought all but 407 acres of the 4,543-acre Shasta Big Springs Ranch in Siskiyou County, Calif., according to an announcement.

The conservancy has been eyeing the creek for decades because of its potential to provide ideal spawning grounds year-round, said Peter Moyle, a University of California Davis professor of fish biology.

"It has got everything a salmon could want: a year-round cold water supply, steady flows and incredible amounts of food," Moyle said.

The creek is fed by the only glaciers in the continental United States known to be growing in the face of global warming.

While warmer temperatures have caused the retreat of glaciers in the Sierra Nevada and the Rocky Mountains, those flanking [Mount Shasta](#) have advanced as a result of changing weather patterns over the Pacific Ocean, glaciologists say.

A warmer Pacific means more moisture sweeping over Northern California, falling as snow on Mount Shasta, which reaches 14,162 feet above sea level at the southern end of the Cascade Range.

Most of the snowmelt runs below ground through [porous volcanic rock](#), rather than running off in streams. The water then bubbles up from the creek bottom at about 55 degrees, just right for salmon, Moyle said.

The special hydrology makes Big Springs Creek exceptionally resilient during climate change. As other streams turn warmer and less suitable for salmon, the springs feeding the creek will remain cold in the summer, Moyle said.

The creek has warmed up, though, as cows trampled its banks and stripped streamside vegetation. The resulting erosion widened the channel, and diversions for irrigation lowered water levels.

"It's like a toaster in the summer," Little said.

All 2.2 miles of the stream flows within the ranch, which has been operating for more than a century.

The conservancy is fencing off the creek and plans to lease the land for cattle grazing so long as it's compatible with the fish restoration.

The ranch acquisition comes as Indian tribes, environmentalists and fishing interests negotiate to remove four of the Klamath's six dams.

If they succeed, the ranch also could become a natural nursery for repopulating the river system with coho and other salmon, conservancy officials said. The Klamath once produced the third largest salmon run in the continental United States, behind the Columbia and Sacramento rivers.

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