



**Case Study** 

## INFORMAL, NON-LEGAL AND HIGHLY PROFESSIONAL: THE SHASTA RIVER CONSERVATION SCIENCE CONSORTIUM CALIFORNIA, U.S.A.

Restoring salmon populations to the Shasta River requires volumes of data, large multi-disciplinary teams, a regulatory perspective in a rural area, and years of sophisticated cooperation – with no formal agreement.

The Shasta River is the fourth-largest tributary to the Klamath River, and historically, the Shasta had more salmon than any other river of its size. Experts believe that alterations in both freshwater and ocean habitats has hurt salmon numbers -- there are now 5,000 where once there were 50,000.

A vast consortium of academic, agency and private entities are working to restore salmon in California's Shasta River Basin. Trust between the groups has increased over time due to both the character of the individuals involved but also to the institutional heft of the institutions, which include the University of California at Davis, The Nature Conservancy, the California Department of Fish and Game, the Bureau of Reclamation, The Shasta Valley Resource Conservation District and Siskiyou County and many others.

Coho salmon in Southern Oregon/Northern California were listed as federally threatened in 1997 and endangered by the State of California in 2004. Water is needed for crops and for fish in the rural Shasta Valley. This regulatory environment has created a delicate balance of supporting rural ranching economies while working for fisheries restoration..

The precise alignment between all groups in the consortium about their shared goal – to restore the Shasta River to maximum salmon-friendly conditions – allows them to work without formalizing, or documenting, the relationship. This lack of formalization also enables the group's action to focus on opportunities that are available to restore salmon, rather than on the structure of the partnership. Nevertheless, all of the participating institutions, both public and private, still answer to their individual institutions' formal ethical and fiduciary accounting structures.

The purchase of Nelson Ranch in 2005 kicked off a powerful opportunity for onsite scientific research and collaboration for the consortium. In 2009, the consortium was able to take their work to a new level after the Conservancy purchased the 4,000-acre Shasta Big Springs Ranch. The ranch is complex of springs located at the headwaters of the Shasta River. Here, the Conservancy and its partners are embarking on high-level, adaptive management. The group works with irrigators to deliver water to salmon at the right temperature for the right stage of their life cycle

while helping farmers water their crops. The effort requires close communication and highly coordinated protocols – still accomplished as informally as possible.

Salmon recovery in California is one of the most difficult global environmental challenges. The Shasta River Science Consortium is an example of how the power of partnership can be maximized through informal, non-legal approaches when partner goals and capacity are well aligned.