

## Executive Summary

This study describes the restoration sector in Humboldt County, California and its contribution to the North Coast regional economy. It shows that Humboldt County is at the leading edge of restoration practices and serves as a model for how restoration work can be accomplished. Already, the standardized and codified restoration methodologies that have been developed out of the rich experience with restoration over the last three decades have been used to guide restoration work in other parts of the state and country.

Building on prior attempts to understand the socioeconomic character of the restoration sector, this report describes the size of Humboldt County's restoration sector, in terms of total annual investments in restoration and numbers of restoration-related jobs, and it portrays the institutional infrastructure that has developed to accomplish restoration goals and objectives.

For the purposes of this study, restoration includes 1) upslope watershed restoration activities such as road decommissioning and upgrades/storm proofing, removal/stabilization of landings, landslide stabilization, and other upslope erosion control projects, 2) riparian and instream fisheries habitat improvement projects, 3) invasive exotic species control and removal activities, and revegetation efforts in forest, meadow, dune and estuary ecosystems, 4) restoration of hydrologic flow regimes in stream and estuary ecosystems, and 5) fuels reduction efforts. It also includes the watershed assessments, planning processes, inventories, and monitoring efforts that precede and accompany these efforts. And it includes activities such as training workshops, organizational and business management workshops, and educational outreach and school programs whose goal is to enhance restoration capacity and support.

While the definition of restoration this study employs may appear to be expansive, it becomes less so when we consider what this definition excludes. This study does not consider restoration activities

that are embedded within more traditional resource management and extraction regimes, such as road upgrades, stormproofing, and decommissioning associated with the operation of timber harvest plans on industrial timberland ownerships. Nor does it consider activities such as dairy waste management improvements and scientific studies of watershed and ecological processes that are not directly related to restoration project implementation. Inclusion of these activities and investments, while certainly restoration related, would have diluted this study's narrow focus on natural resources restoration as an independent and autonomous field of economic, social, and institutional activity.

Natural resources restoration in Humboldt County is a tightly coordinated, internally coherent, well organized, and complex network of relationships that bind together extremely diverse groups and organizations around the common goal of reinvesting in ecosystem health. This "system" of relationships is comprised of 1) diverse entities linked together within a restoration network, united in their shared commitment to the goals of restoration, 2) explicit and formalized linkages between science and restoration practice and a commitment to an adaptive management learning process, 3) the development and codification of standardized restoration methodologies and the export of specialized restoration knowledge and expertise, and 4) a complex institutional infrastructure (including both "node" organizations as well as higher level "network organizations") that facilitates collective learning and constitutes an effective vehicle for advancing restoration efforts.

The entities within the restoration system include federal, state, and local government agencies, tribes, public and private landowners and managers, restoration nonprofits and watershed groups, private contractors and workers, consulting firms, businesses, and applied research scientists. A complex web of relationships has evolved that links these entities together in a coherent fashion to enable restoration work to take place.