Report as of FY2006 for 2006CA174B: "The Politics and Practice of Watershed Restoration: Insights from the Russian River Watershed, Northern California"

Publications

- Other Publications:
  - Bernhardt, E.S., M.A. Palmer, J.D. Allan, G. Alexander, K. Barnes, S. Brooks, J. Carr, S. Clayton, C. Dahm, J. Follsted-Shah, D. Galat, S. Gloss, P. Goodwin, D. Hart, B. Hassett, R. Jenkinson, S. Katz, G.M. Kondolf, P.S. Lake, R. Lave, J.L. Meyer, T.K. ODonnell, L. Pagano, B. Powell, and E. Sudduth, Synthesizing U.S. river restoration efforts, Science, 2005, 308:636-637.

Report Follows

Project Summary

In the last two decades, watershed restoration has dramatically increased in both popularity and practice. California has lead the way with multi-billion dollar bonds being approved by voters for environmental improvements and a plethora of public and private funding sources providing grants for restoration activities. Yet, the social and environmental outcomes of restoration remain ambiguous and critics charge that restoration has not fulfilled its promise. This research addresses three central questions: 1) What is watershed restoration accomplishing on-the-ground?, 2) Who and what primarily benefit from dominant restoration practices?, and 3) How is watershed restoration influenced by social factors, including the political economy of water use along with legal and institutional frameworks for water management?

Our main research objective is to enhance watershed management in California by improving our understanding of the coupled social – environmental systems. To do this, we integrate institutional analyses, archival research, document and literature reviews, interviews, post-project appraisals, and spatial data analysis in order to make explicit the broader webs of social relations that shape restoration and explore the consequences for different groups of people and organisms. Thus far, we have collected data on nearly 800 restoration projects in the Russian River watershed, creating a Geographic Information Systems (GIS) database of this data along with land use and demographic information. We are in the process of analyzing dominant practices and trends over time. Preliminary results suggest that restoration projects most often occur at a site-specific scale and the majority are characterized as riparian, in-stream, or road-related improvements. One of the co-PIs, G. Mathias Kondolf, co-authored an important article on restoration accomplishments nation-wide utilizing this data, which was recently published in the journal *Science*.

In addition, nearly 50 interviews have been completed with individuals involved in restoration in the Russian River watershed. These interviews have revealed the dynamic nature of restoration as a concept, signifying everything from the revival of a cultural connection to the land, to the restoration of particular ecosystem processes, to the creation of a new industry. Interestingly, one of the major issues absent from discussions of watershed restoration is the role of water management. California Senate Natural Resources and Water Committee Principal, Bill Craven, remarked that restoration has been limited in its impact by not addressing important issues like water use (California Watershed Day). Current research is examining why this disconnect has developed by analyzing the political economy and institutional framework of water management in the Russian River area and how it creates both opportunities and constraints for watershed restoration.