

Response to Collay. 2010. "A Community Conversation About a Watershed"

Trust: the Critical Element for Successful Watershed Management

<u>Rebecca Flitcroft</u>¹, <u>Dana C. Dedrick</u>², <u>Courtland L. Smith</u>³, <u>Cynthia A. Thieman</u>⁴, and <u>John P. Bolte</u>⁵

Key Words: community; management;; social structure; watersheds

Re: ES-2010-3497 Comment: "A Community Conversation About a Watershed"

INTRODUCTION

We appreciate the response to our article titled "A Community Conversation About a Watershed". Dialogue that continues the exchange of ideas about how to create and then grow a watershed restoration organization that effectively engages stakeholders in scientifically supportable ecological restoration contributes to the body of knowledge that is necessary to put science into practice. The comment highlighted two important principles about putting scientific knowledge into practice. The first was the importance of trust and communication between an organization and watershed stakeholders. The second addresses the complex relationship between public policy and private welfare. We would like to briefly address both of these complex topics.

TRUST AND A COMMON LANGUAGE

Trust is fundamental to relationships. The comment emphasized trust as part of the "power factor" that essentially describes the willingness of individuals to believe the source of information. Smith et al. (1997) described the perception by Oregon citizens that government agencies were a less reliable and believable source of information than their neighbors. In that study, Smith et al. (1997) was able to identify the levels of trust in different sources of information, with the most trust found in personal relationships. In watershed conservation, trust is required before scientifically viable information will be accepted by stakeholders. Gaining trust was successful for the Long Tom Watershed Council (LTWC) through the iterative process between the Council and watershed residents that we described in Flitcroft et al. (2009). Trust and common language are more readily available in situations where people know one another. Thus, personalness is a key attribute in communication to get scientific information to potential users. The LTWC's subwatershed enhancement process (Flitcroft et al. 2009) promotes personalness where watershed council leaders convene meetings in the living rooms of neighbors where watershed assessment suggests a restoration activity is desirable.

Trust and personal relationship with a watershed organization also identifies the importance of scale. An organization that is large will not feel as accessible as one that reflects a more neighborhood approach (Lamberson 2002). Organized watershed restoration requires a relationship between stakeholders and a management group. This is particularly important in the United States, where public policy continually wrestles with the balance between public good and private welfare, and private welfare often has priority. This means that trust and language in transferring scientific knowledge is especially critical because much action has to be individually initiated rather than policy directed. This was the issue that Governor Kitzhaber tried to address with the Oregon Plan for Salmon and Watersheds (http://www.oregon.gov/O PSW/). When policy makers began looking at watersheds as a way of generating community action to restore landscapes, the proposal for watershed organizations was at a much larger scale. In the early 1990s, for example, 11 subbasins in the

¹USDA Forest Service Research Lab, ²Long Tom Watershed Council Executive Director, ³Department of Anthropology, Oregon State University, ⁴Long Tom Watershed Council Restoration Director, ⁵Department of Biological and Ecological Engineering

Willamette Valley were envisioned (Smith 1994:24) as the basic units for watershed restoration. While the Long Tom was one of the subbasins and most have watershed councils, the subwatershed enhancement process has found that stream reaches are the unit for getting cooperative restoration. Further, watershed organizations for basins smaller than these 11 larger subbasins have been created. This microscoping of scale occurs because of the need to create personal relations that gain trust, find a common language, develop community, and build a culture for protecting and restoring landscape, which the comment emphasizes.

PUBLIC POLICY AND PRIVATE WELFARE

The second principle is the relationship between public policy and private welfare. While this is only speculative, the U.S. shifts the balance of its policy initiatives to private welfare as the driver of change. An advantage of this is greater innovation. A disadvantage is often slower progress toward changing societal goals, higher costs of change, and greater difficulty in getting landscape-level restoration. Working with subwatershed enhancement, stream reaches, and willing landowners takes time. It took the Long Tom Watershed Council five years before it had achieved the community, culture, common language, and trust to start making a difference with projects. We encourage more study of the relationship between public policy drivers and the initiative that promotes private welfare in changing landscapes. Simulation modeling suggests that public policy is a more significant driver of action than people's values. Guzy et al. (2008: Appendix 1) conclude "A sensitivity analysis clearly showed that the effects of differing policy sets between the conservation and development scenarios caused more variation in the results than variation in initial agent values and concluded that policy should be considered the more significant driver of the system."

LOOKING FORWARD

The long-term effectiveness of organizations designed to respond to environmental concerns requires patience, funding, and consistency. We hope that as more social experiments (such as Oregon watershed councils) mature, the effectiveness of different approaches to resource conservation and ecological restoration will become clear. The

importance of the human dimension in terms of relationship cannot be underestimated in changing the course of environmental degradation. Individuals working on their own, in groups, or through public policy will be the drivers of future restoration success. It is the job of the scientific community to continue the conversation about techniques, effectiveness, and success.

Responses to this article can be read online at: http://www.ecologyandsociety.org/vol15/iss3/resp3/ responses/

LITERATURE CITED

Flitcroft, R. L., D. C. Dedrick, C. L. Smith, C. A. Thieman, and J. P. Bolte. 2009. Social infrastructure to integrate science and practice: the experience of the Long Tom Watershed Council. *Ecology and Society* 14(2):36. [online] URL: <u>http://www.ecologyandsociety.org/vol14/iss2/art36/</u>.

Guzy, M. R., C. L. Smith, J. P. Bolte, D. W. Hulse, and S. V. Gregory. 2008. Policy research using agent-based modeling to assess future impacts of urban expansion into farmlands and forests. *Ecology and Society* **13**(1):37.

Lamberson, R. H. 2002. Natural resource modeling special issue on individual-based models. *Natural Resource Modeling* **15**(1).

Smith, C. L. 1994. Connecting cultural and biological diversity in restoring northwest salmon. *Fisheries* 19(2):20–26.

Smith, C. L., J. D. Gilden, J. S. Cone, and B. S. Steel. 1997. Contrasting views of coastal residents and coastal coho restoration planners. *Fisheries* 22 (12):8–15.