

Recovery Potential Metrics Summary Form

Indicator Name: WATERSHED ORGANIZATIONAL LEADERSHIP

Type: Social Context

Rationale/Relevance to Recovery Potential: Organizations at the level of the specific watershed have been shown to have a key influence on restoration success through building legitimacy through local representation, fostering conflict resolution, and clarifying multiple interests and ideas. Some sources (e.g. states) of restoration assistance will not generally implement restoration efforts without active groups that indicate community support and interest. Other related metrics associated with restoration success include organizational persistence, existence of a funded watershed leadership position, and individual leader performance.

How Measured: Measured as a numeric indicator of the number of watershed groups located within each 303(d) watershed. EPA provides an online database that catalogues watershed groups by 8-digit HUC (EPA-ADOPT). EPA's ADOPT database (See: <http://cfpub.epa.gov/surf/locate/index.cfm>) provides organization information for watersheds. Users can download the list of watershed groups and create a table that cross-references watershed groups by HUCs for use in GIS. Intersect the watershed coverage by the statewide HUC coverage and link the watershed groups to the corresponding watersheds.

Data Source: EPA's ADOPT database (See: <http://cfpub.epa.gov/surf/locate/index.cfm>) provides organization information for watersheds. . National Fish Habitat Action Plan (NFHAP) mapping tool provides access to the boundaries of Fish Habitat Partnerships nationwide (See: <http://www.nbii.gov/far/nfhap/>) that may include more local-scale watershed organizations

Indicator Status (check one or more)

- Developmental concept.
 Plausible relationship to recovery.
 Single documentation in literature or practice.
 Multiple documentation in literature or practice.
 Quantification

Examples from Supporting Literature (abbrev. citations and points made):

- (Sabatier 2005) p. 14 Causally prior factors [affecting collab wshed mgt success] are socioeconomic, ecological, civic and institutional conditions predating the effort. This context heavily affects the approach and probability of success. [Process as used here implies institutions for the actions being discussed]
- (Leach and Pelkey 2001) themes relating to watershed partnership success include [note that **bolded ones** are spatially representable for recovery screening with existing data while others are usually not available as spatially explicit data]: **funding, broad and inclusive membership**, committed participants, **effective leadership**, **bottom-up leadership vs balanced among levels**, trust, low or moderate conflict (vs none), geographic scope, limited scope of activities, adequate time, well-defined process rules, consensus rules, **formal enforcement mechanisms**, **effective communication**, **adequate sci-tech info**, monitoring data on outcomes, training in collaboration, **agency support and participation**, **legislative encouragement**, **community resources**.
- (EPA 1997) As for common characteristics of successful watershed leaders, they tend to reflect the values of the community and to know what works there. They generally are good communicators, have the ability to bring about change and set things in motion, and are committed to making their (or a group's) vision a reality. They also tend to know how

to engage, respect, and empower others and are able to find new or leverage existing resources.

- (EPA 1997) Having a coordinator based within the watershed is important because it provides a focal point for the watershed effort and helps to ensure that someone is paying attention to moving group activities along. The coordinator's role varies depending on the needs of the watershed, but generally it includes maintaining contact with members of the watershed group; performing liaison with interested parties beyond the group; celebrating success; calling, facilitating, and summarizing meetings; helping to secure funding and training; and ensuring that watershed plans are developed, implemented, and effective in achieving the desired outcomes.
- (Jones and Colby 2001) There are more than thirty-six hundred watershed groups in this country¹⁰, each organized for the purpose of improving the quality of its local rivers and lakes. Very few of these organizations work under the auspices of state or federal environmental agencies, and their actions are generally not dictated by state or federal statute. In most cases, these groups are seeking collaborative, watershed-based approaches to improving water quality.
- (Lurie and Hibbard 2008) Community-based natural resource management (CBNRM) has emerged as an alternative to conventional, top-down approaches to public management. CBNRM entails local, place-based projects, programs, and policies that have the goal of advancing healthy environments and human communities. Its collaborative, comanagement characteristics exemplify two trends in governance: (1) that toward ecosystem management, the integration of science with social and political institutions for natural systems management utilizing adaptive, dynamic decision processes (Cortner and Moote 1999; Lee 1993; Gunderson et al. 1995); and (2) that toward devolution of authority and responsibility to lower levels of government and non-governmental organizations(see, e.g., Agranoff 2003; Goldsmith and Eggers 2004; Kettl 2002; Weber 2003).
- (Lurie and Hibbard 2008) Contemporary natural resource governance necessitates flexible, adaptive institutions and networks of organizations and interests with fluid boundaries between authoritative decision makers and the communities in which they are imbedded in order to respond to changing knowledge and issues over time. Network characteristics requiring dynamic rather than rigid institutions include self-organization, horizontal structure, and voluntary participation (Scott 2003; Wilson 1989; Weber 2003; Agranoff 2003; Kickert et al. 1997) in order to respond to "increasingly complex mixes of public and private activities that must be incorporated into frameworks of understanding" (Agranoff and McGuire 2003, 21).
- (Smit 1998) Over recent years during which **community-based watershed** groups have been working on this particular water degradation issue in the West, a variety of "lessons learned" are of note.
 - Local involvement is important to provide continuity in moving forward to solutions on this issue while agency staff and government programs may come and go.
 - Funding from a diversity of sources, from the local level up to the federal level, helps keep everyone at the table and reduces dependency on one funding source or agency.
 - It takes time--to build trust within the group, to gain scientific understanding of the key pollution sources in a **watershed** and to develop the means and funding to conduct cleanup. Therefore the commitment of a core group is essential to stay with the process.
 - A diversity of group members coordinating their activities furthers a more comprehensive approach. For example, biologists and hydrologists can be gaining an understanding of the quality of the habitat for aquatic life, while chemists are gathering water chemistry data on those same reaches of the stream.
 - In the early life of a **watershed** group, a neutral facilitator can help assure key interests are represented, coordinate group activities, and facilitate meetings.

Once the group has established a level of trust and clarity of purpose a local coordinator can take over these roles.

- Finally, the **community-based watershed** group can provide a voice for policy and regulatory reform at the state and national levels in order to improve the way this problem is handled across the West.
- (Zanetell and Knuth 2002) By partnering local knowledge with expert opinion, new knowledge is created that exceeds the limits of either type of knowledge alone. This partnership melds the relevant sociological, cultural, ecological, political, and historical facets about a particular natural resource and community of concern into a comprehensive knowledge base for environmental decision making and action.
- (Constantz 2000) Local leadership is one of the most crucial ingredients for the long-term sustainability of a watershed group.