

## Watershed association

This is a nonprofit civic association, typically utilizing a holistic and ecological watershed approach, to protect and restore rivers, streams, and larger watersheds, such as a river system or an estuary. These sometimes have other nomenclature, such as watershed alliance and watershed council, which may signify a different structure.

### History

- *pre-1980s*: some go back to the 1960s and 1970s, and a few even earlier.
- *1980s*: a period of significant and sustained growth begins. The limits of command-and-control regulation, pollutant by pollutant, become more evident to civic groups, scientists, and regulators. Watershed associations utilize the regulatory structures of the Clean Water Act of 1972 and other laws, but seek to complement and supplement them with more holistic approaches that leave room for collaborative action and hands-on restoration among local watershed and stream groups, as well as other stakeholders.
- *1990s and beyond*: significant growth, accompanied by ambitious and largely complementary strategies of the River Network (1988), Restore America's Estuaries (1995), and the EPA's Office of Wetlands, Oceans, and Watersheds (1991)

#### References:

Peter Lavigne, "Watershed Councils East and West: Advocacy, Consensus and Environmental Progress," *UCLA Journal of Environmental Law and Policy* 22 (2004): 301-319.

Elizabeth A. Moore and Tomas M. Koontz, "A Typology of Collaborative Watershed Groups: Citizen-Based, Agency-Based, and Mixed Partnerships," *Society and Natural Resources* 16 (2003): 451-60.

### Watershed frame

The watershed frame holds that most if not all the key problems pertaining to water – quality, supply, fisheries, habitat preservation, biodiversity, flood control – need to be understood and dealt with at the level of watersheds: hydrologically defined drainage basins that feed particular water bodies.

Watersheds, including smaller watersheds nested in much larger ones, such as the Chesapeake Bay or Puget Sound, are systems defined by complex interactions among innumerable natural and social dynamics, including how and where development occurs. Only holistic, problem-solving strategies tailored to specific, place-based contexts and engaging civic associations and institutional actors in active stewardship could hope to maintain and restore them.

Even though fragmented federal regulations, command-and-control techniques, and massive investments in wastewater treatment have significantly reduced point-source pollution since the Clean Water Act of 1972, watersheds remain at risk owing to nonpoint source pollution, primarily from farms, transportation systems, and urban runoff, as well as innumerable everyday activities of ordinary citizens (use of lawn fertilizers).

Floods, droughts, sea level rise and other challenges linked to climate change add further to the complexity of protecting water resources. The familiar regulatory tools, while critically important and under attack by the Trump administration, are inadequate for nonpoint pollution, ecosystem restoration, and adaptation.

Watershed associations can engage ordinary citizens, as well as diverse stakeholders, in volunteer monitoring, citizen science, restoration, public deliberation, and sustainable local and regional economic strategies.

Other civic and environmental groups also address watershed issues, not just ones with “watershed” in their names.

#### References:

Paul A. Sabatier, Will Focht, Mark Lubell, Zev Trachtenberg, Arnold Vedlitz, and Marty Matlock, eds., [\*Swimming Upstream: Collaborative Approaches to Watershed Management\*](#) (Cambridge: MIT Press, 2005).

Carmen Sirianni, [\*Sustainable Cities in American Democracy: From Postwar Urbanism to a Civic Green New Deal\*](#) (Lawrence: University Press of Kansas, 2020), chapter 5.

Kim Herman Goslant, “Citizen Participation and Administrative Discretion in the Cleanup of Narragansett Bay,” *Harvard Environmental Law Review* 12 (1988): 522-556.

Mark Lubell, Mark Schneider, John T. Scholz, and Mihriye Mete, “Watershed Partnerships and the Emergence of Collective Action Institutions,” *American Journal of Political Science* 46 (2002): 148-163.

Paul Stanton Kibel, ed. *Rivertown: Rethinking Urban Rivers* (Cambridge, MA: MIT Press, 2007).

## National groups

- [\*River Network\*](#): founded in 1988, the River Network has been key to building the broad watershed and rivers movement; it has provided training to local and state watershed associations; it holds the annual River Rally, typically in conjunction with another major national association. See its [Strategic Plan 2108-2022](#).

- [Center for Watershed Protection](#): CWP was founded in 1992; it provides research and consulting to local watershed associations, urban stream groups, municipalities, advocates, professionals, and policymakers. It has also produced many usable manuals. It convenes an annual Watershed and Stormwater Conference.

*toolkit*: Tom Schueler and Anne Kitchell, [Methods to Develop Restoration Plans for Small Urban Watersheds](#) (Ellicott City, MD: Center for Watershed Protection, 2005).

- [Restore America's Estuaries](#): founded in 1995 as a coalition of ten regional groups, many active through the National Estuary Program (NEP), RAE helps to build civic, legal, and institutional capacity, including of the multi-stakeholder groups that NEP requires as part of each NEP management conference, required by as a condition of federal funding. It develops scientific, economic, and hands-on estuarine habitat restoration tools.

Members of RAE include such groups as [Save The Bay](#) (Narragansett Bay), [Save the Bay](#) (San Francisco), [Chesapeake Bay Foundation](#), [North Carolina Coastal Federation](#), [Coalition to Restore Coastal Louisiana](#), and [Save the Sound](#).

- [American Rivers](#): focuses on dam removal, often through very collaborative and relational organizing processes, to restore the ecological health of river basins, as well as to secure various co-benefits to communities, such as recreation, tourism, flood control, and aesthetics.

## State groups

These affiliate local watershed groups, provide training, financial support, data sharing tools, forums for deliberation and strategic planning, annual conferences, collaboration with state agencies, environmental education, and similar activities; models of local problem solving, restoration, local expertise, stewardship.

Examples of state groups:

- [Massachusetts Watershed Coalition](#): formed in 1991 and was key to the development of the Massachusetts Watershed Initiative in 1994.

*toolkit*: [Community Guide to Growing Greener \(2011\)](#)

- [Colorado Watershed Assembly](#)
- [Network of Oregon Watershed Councils](#): serves some 90 councils across the state; [Strategic Plan 2018-2021](#). Fifty-nine watershed councils receive capacity funding support through the state Oregon Watershed Enhancement Board (OWEB).

## Office of Wetlands, Oceans and Watersheds (OWOW)

This office was created in 1991 within the Office of Water at the U.S. Environmental Protection Agency (EPA). It has helped to develop watershed strategies, build watershed association capacities, and generally shape the watershed movement and larger watershed institutional field.

It has done this in various ways:

- *watershed grants*: while these have taken different forms (to associations, states, nonprofit intermediaries), such grants have helped local watershed associations build their capacity for watershed planning, convene community forums, and develop volunteer monitoring and restoration strategies.

Grants to capacity builders, such as the River Network, the Center for Watershed Protection, Restore America's Estuaries, the Ocean Conservancy, the Southeast Watershed Forum, the International City/County Management Association (ICMA) have been important and could be leveraged for much broader impact with more substantial and stable funding.

The [NOAA Restoration Center](#), at its National Marine Fisheries Service has also provided significant funding. It also funds the [Veterans Corps](#) within the Oregon Conservations Corps to restore watersheds and to steward conserved land.

- *toolkits*: OWOW, along with partner agencies such as NOAA, have developed, funded and/or coproduced toolkits to enable community action in watersheds. Some examples:

[Volunteer Estuary Monitoring: A Methods Manual](#), second edition, by Ronald L. Ohrel Jr. and Kathleen M. Register (Washington: Ocean Conservancy, 2006).

Developed by the Ocean Conservancy (with a grant from EPA), in conjunction with several hundred local watershed groups around the country as well as other professional partners, this 396-page manual covers all aspects of monitoring estuary health. It also covers project planning, organizing volunteers, and monitoring safety.

[Watershed Plan Builder](#), enables the development and implementation of watershed plans, the analysis of data and the implementation of management practices. It was coproduced by OWOW and various watershed groups that insisted on their design input to ensure usability by local groups and their partners.

[Watershed Academy](#) provides webcasts, online training modules, other training opportunities. Typically presented jointly by agency, university, and nonprofit staff.

[Handbook to Develop Watershed Plans to Restore and Protect Our Waters](#): a 400-page handbook designed for communities, watershed organizations, and agencies, with technical and legal guidance, but especially for building a partnership, developing a plan and strategies to implementing it, and monitoring progress.

[Digital Coast](#), managed by NOAA’s Office of Coastal Management in partnership with eight other civic and professional associations, this toolkit contains many tools for analyzing sea level rise, flooding, managing coastal adaptation and the like. Visualization and predictive tools. Includes local case studies.

- *networks*: OWOW and other offices at the EPA and partner agencies have co-sponsored conferences, such as regional and national watershed forums, volunteer monitoring conferences, and similar meetings. Such conferences have brought together hundreds and at times several thousand leaders of local groups, tribes, conservation corps, and nonprofits, as well as stakeholders from other institutions, such as businesses, local and state agencies, and University Extension programs.

Senior administrators as well as mid-level staff have also presented at conferences convened by the major watershed networks, such as the River Network’s [River Rally](#) and Restore America’s Estuaries [National Coastal Estuarine Summit](#).

Watershed grants from EPA and NOAA, of course, also enable national and regional groups to expand and strengthen networks through training events, as do some state grants for in-state networks.

#### References:

Carmen Sirianni, “Bringing the State Back In Through Collaborative Governance: Emergent Mission and Practice at the U.S. Environmental Protection Agency,” in Jennifer Girouard and Carmen Sirianni, eds., [Varieties of Civic Innovation: Deliberative, Collaborative, Network, and Narrative Approaches](#) (Nashville: Vanderbilt UP, 2014), 203-238.

Mark Lubell, “Do Watershed Partnerships Enhance Beliefs Conducive to Collective Action?” in Sabatier, [Swimming Upstream](#), 201-232.

Tomas Koontz, et al. [Collaborative Environmental Management: What Roles for Government?](#) (Washington, DC: Resources for the Future, 2004).

U.S. EPA, [Community-Based Watershed Management: Lessons from the National Estuary Program](#) (Washington, DC: U.S. EPA, Office of Wetlands, Oceans, and Watersheds, 2005).

## Case studies

- *Los Angeles River*: in the restoration of the Los Angeles River watershed, for instance, funding from California’s Prop 50 bond of \$3 billion for water projects in 2005 incentivized – indeed required through Integrated Regional Water Management plans – collaboration among multiple public agencies, as well as the conservancies and watershed groups that had been active for two decades.

Project planning tools enabled the deliberative evaluation and ranking of grant projects according to their multiple benefits, as well as “service to disadvantage communities.” [Friends of the Los Angeles River](#) and the [Los Angeles County Bicycle Coalition](#) helped to produce a guidebook for walks and rides to enable more people to fall in love with the river and thus work actively to protect and restore it. James Rojas, senior transportation planner and founder of the Latino Urban Forum, developed art and design charrettes to engage neighborhoods and children actively imagining how to restore the river and its public spaces.

Sources:

Anne Taufen Wessels, “Ways of Knowing the Los Angeles River Watershed: Getting from Engaged Participation to Inclusive Deliberation,” in Jennifer Girouard and Carmen Sirianni, eds., *Varieties of Civic Innovation: Deliberative, Collaborative, Network, and Narrative Approaches* (Nashville: Vanderbilt UP, 2014), 23-44.

Robert Gottlieb, *Reinventing Los Angeles: Nature and Community in the Global City* (Cambridge, MA: MIT Press, 2007), chapter 4.

## Other resources

- *handbooks:*

Ann L. Riley, *Restoring Neighborhood Streams: Planning, Design and Construction* (Washington, DC: Island Press, 2016).

Ann L. Riley, *Restoring Streams in Cities: A Guide for Planners, Policymakers, and Citizens* (Washington, DC: Island Press, 1998).

Last updated: 8/21/20

We welcome suggestions and comments to help improve this entry: [civicgreen@tufts.edu](mailto:civicgreen@tufts.edu)