

Chapter 16

Observations and Policy-Level Recommendations

Introduction

We conclude this report by focusing primarily on trends and findings that have emerged since the publication of the first *Source Book* in 1996. In 1996, watershed initiatives were still largely an unknown phenomenon that the Natural Resources Law Center sought to describe. While describing watershed initiatives is still part of our mission and a major focus of this new *Source Book*, modern inquiries to the Natural Resources Law Center are increasingly from people already aware of the basic information. Now we are typically being asked for advice in predicting where the movement is going, which issues are emerging as most salient, which answers are most elusive, which cases best illustrate particular issues or experiences, and which lessons are most widely transferable. Inquiries pertaining to measures of success and “appropriateness” have also become common, and seem to be surrounded with a sense of urgency. While we do not claim to have complete or definitive answers to these questions, the conclusion of this project provides an obvious opportunity for reflection and speculation. Hopefully, the observations offered below will encourage still more detailed investigations, leading to insights of practical value to both field-level practitioners and policy-makers.

Some Trends and Observations

Of all the information that we have gathered over the past couple years, a few trends and observations stand out, either due to their significance, prevalence, or both. Three such observations are (1) the strength and breadth of the watersheds movement in the Pacific Northwest, (2) the growing importance of nonpoint source pollution and Total Maximum Daily Loads (TMDLs), and (3) the emergence of so-called “umbrella groups.”

The Pacific Northwest: The Preeminent Laboratory of Experimentation

In compiling research for the revision of the *Source Book*, we were repeatedly struck by the superior level of development in the watershed movement along the Pacific coast and in the Columbia River Basin in the Northwest. In comparison to the other parts of the West, not only is the sheer number of groups active in the Pacific Northwest much larger, but the level of funding²⁸⁰ and administration is generally much greater as well. Unique and aggressive state

²⁸⁰ As shown earlier in Figure 13-84 (chapter 13), it would appear that budgets for individual watershed initiatives in the Pacific Northwest are not significantly different than those for groups elsewhere in the West, however, the net level of funding is higher in the Pacific Northwest given the high density of groups in the region.

programs have shaped the watershed movement in this region, and new innovations, like the proliferation of umbrella groups (discussed later), have also set a standard.

Several factors are likely responsible for this high level of activity in the Pacific Northwest. First, there is simply more water in this region than in other parts of the West. Along the mountainous coastlines of Northern California, Oregon and Washington, rugged terrain and high precipitation has conspired to create hundreds of relatively small, discrete watershed drainages, most containing at least one year-round stream. This contrasts the more open, arid topography of the Southwest, where the “jurisdiction” of a watershed group formed around one stream or river segment may cover hundreds of thousands of acres. Also extremely important in the Pacific Northwest is the influence of federal environmental laws, particularly the Endangered Species Act as pertaining to regional salmonid populations. Many of these issues are acute in the upper regions of the Columbia Basin, implicating watersheds in Idaho and small parts of Montana and Wyoming.

It is against this backdrop of voluminous water resources, smaller drainages, compelling natural resource issues, and federal environmental laws that the role of watershed groups in the Pacific Northwest has developed. The past few years have seen a growing influence of state watershed management programs in this region. The Oregon program, administered by the Oregon Watershed Enhancement Board, is the best known of these programs. It provides financial resources to well over 100 active watershed initiatives. Unlike many groups from the Interior West, nearly all Oregon groups have paid coordinators and most have offices and support staff.²⁸¹ The lesser known Idaho program is also compelling, particularly by its explicit effort to “nest” the activities of so-called Watershed Advisory Groups (WAGs) into a coordinate framework provided by the Basin Advisory Groups (BAGs).

It remains unclear if the state programs of the Pacific Northwest should be viewed as the “best” programs; they are undoubtedly the most ambitious and structured, and appear to be the leading edge of the watershed movement in the West. In addition to issues of structure, budget and activity, the watershed initiatives of the Pacific Northwest also have a different “feel” from those outside of the region. Primarily, this is due to the central role of citizens and other nongovernmental stakeholders in the initiatives of the Pacific Northwest. The model in the Pacific Northwest appears to be one of community-oriented watershed initiatives featuring the assistance, support and involvement of government agency personnel. Elsewhere in the West, the model tends to be one of interagency workgroups supplemented by citizen and stakeholder involvement.²⁸² Again, this observation is not meant to anoint one approach as preferable to another, but suggests that the efforts of the Pacific Northwest better approximate the rhetoric of community control so prevalent in the watershed initiative literature.

²⁸¹ Some groups (requesting anonymity) have indicated that, especially during the early years of the state program, they had more funding available than they could practically spend, a “problem” not reported elsewhere.

²⁸² One way to appreciate this is to look at the list of contact people provided in the *Source Book*. The typical contact person for a group outside of the Pacific Northwest is usually an agency employee, often a Natural Resources Conservation Service employee. In the Pacific Northwest, coordinators are often concerned citizens recruited out of the local community.

A Growing Arsenal of Federal Hammers: Nonpoint Source Pollution and TMDLs

In many western watersheds, the Endangered Species Act is the preeminent “federal hammer” prompting the formation and activity of watershed initiatives. The Act prohibits any federal agency action—and many private activities—that may jeopardize an endangered or threatened species or modify its habitat.²⁸³ As such, the Endangered Species Act dictates water resource management decisions at many levels, from requiring instream water levels to support endangered fish, to curtailing logging operations that might create sediment pollution. Many watershed initiatives are actively involved in federally mandated management of endangered species habitat. Key species include the razorback sucker on the upper Colorado River, and the multitude of salmon populations along the entire reach of the Columbia and the north Pacific coast.

The Endangered Species Act, however, is not the only hammer of significance influencing western waters and the functioning of western watershed initiatives. In recent years, the actual and potential influence of the Clean Water Act on western watershed management has grown significantly. The Act has always been among the most important of all environmental laws, requiring permits for the discharge of pollutants from point sources into the nation’s waterways. Until recently, most activity under the Clean Water Act was confined to these permitting activities. Lately, however, Section 303(d) has become a focus of regulatory activity. This section requires states to identify and list those waters within their boundaries for which the discharge permits have failed to achieve water quality goals. In these non-attainment areas, the Clean Water Act requires the establishment of Total Maximum Daily Load (TMDL) standards for each listed water segment at a level adequate to attain the water quality goals. Essentially, the TMDL is a calculation of the stream’s ability to assimilate pollutants—a limit defined mostly by biophysical factors. Once a TMDL standard is established, then this “allowable” level of pollution must be allocated among all polluters. Increasingly, this means attempting to address nonpoint sources of pollution from broad urban and agricultural areas, an exceedingly difficult logistical challenge for administrators.

In part due to the enormous administrative challenge of TMDL implementation, Section 303(d) was largely ignored for the first two decades of Clean Water Act. However, the growing inability of point-source programs to make further gains in addressing water quality issues, combined with several strategically placed TMDL lawsuits, have forced the Environmental Protection Agency to seek new strategies for protecting water quality. Increasingly, the federal government is identifying watershed initiatives as a potentially useful mechanism for addressing this complex challenge.

In particular, the Clean Water Action Plan, a multi-agency federal initiative led largely by the Environmental Protection Agency and the U.S. Department of Agriculture, is based on a program of unified watershed assessments, watershed restoration action strategies, watershed pollution prevention, and watershed assistance grants. This strategy includes supporting “locally led partnerships that include a broad array of federal agencies, states, tribes,

²⁸³ See Chapter 3 for a discussion of relevant federal laws pertaining to watershed management.

communities, businesses, and citizens to meet clean water and public health goals.”²⁸⁴ Section 319 of the Clean Water Act, which provides grants to states for addressing nonpoint source pollution, is already the major source of federal funding for many watershed initiatives—particularly for coordinator’s salaries. As TMDL and nonpoint source pollution issues continue to become more prevalent, it seems quite likely that watershed initiatives will be asked to play a greater role in resource management and problem-solving.

Umbrella Groups

Another significant development over the past several years has been the growth of so-called “umbrella groups.”²⁸⁵ Umbrella groups can be loosely defined as organizations that do not focus on a single watershed, but rather work within a larger geographic area (often a particular basin). These groups provide oversight or advice and services to several individual watershed efforts. These “umbrella groups” come in many forms, but—not surprisingly—seem to be most prevalent in the Columbia Basin and Pacific Coast states of California, Oregon, Washington and Idaho. Examples of umbrella groups include the Rogue Basin Coordinating Council in California/Oregon, Streamworks in northern Oregon, and the BAGs (Basin Advisory Groups) in Idaho. Umbrella groups may provide funding opportunities, administrative infrastructure, and general networking opportunities to watershed initiatives that they would otherwise not be able to realize. They may also begin to make the connection between small watersheds and larger river basins, a traditional deficiency in American water management.

Like the local watershed initiatives themselves, umbrella groups come in many forms. Some are grassroots non-profits dedicated to assisting groups with environmental agendas, such as People for Salmon in Washington and the aforementioned Streamworks in Oregon.²⁸⁶ Increasingly, however, these organizations are established by state governments as part of a larger watershed planning scheme. This is the case with the Basin Advisory Groups (BAGs) in Idaho, and a pair of Basin Coordinating Councils operating under Oregon Watershed Enhancement Board. One of these efforts is the Rogue Basin Coordinating Council, directed by representatives from seven watershed initiatives in this discrete coastal basin in southern Oregon and northern California. One of the operational highlights of the Coordinating Council is that member councils can propose joint projects to be undertaken by all the groups, using joint funds. This pooling of resources greatly strengthens the groups’ grant-writing and administrative capabilities. A recent example of a successful joint project was the receipt of a grant to train and equip one GIS (Geographic Information System) specialist for each of the seven member groups, and then coordinate the GIS capabilities for the region. Another joint

²⁸⁴ A Clean Water Action Plan website exists to describe developments in the still emerging program (<http://www.cleanwater.gov/action/overview.html>). The quote is taken from the “overview.”

²⁸⁵ Note how this situation is beginning to mimic the world of community-based forestry partnerships, as discussed in Chapter 12.

²⁸⁶ The *Source Book* contains at least one case that could easily be classified as an umbrella group: the Rio Grande/Rio Bravo River Coalition (chapter 11). This organization is working to develop the capacity of local communities and other local grassroots groups and organizations in an area that encompasses the entire Rio Grande basin on both sides of the U.S.-Mexico border. It is included as a watershed initiative case study only due to the lack of watershed initiatives functioning in this basin.

project now underway is a proposal to map all fish passage barriers in the basin, and coordinate efforts to address the passage problems.

Emerging Issues and Future Research

As we head into a new century, the most pressing research questions for watershed initiatives involve issues of success and appropriateness. As discussed in Chapter 14, it is extremely difficult to systematically assess effectiveness of western watershed initiatives for many reasons, including the youth of most efforts, the difficulty in maintaining an adequate database of highly diverse and rapidly changing initiatives, the challenge of maintaining objectivity in data collection schemes reliant on participant observations, and the presence of conflicting normative (i.e., value-based) ideas influencing how success should be defined. Researchers face other challenges as well, including the growing hesitance of many watershed initiatives to cooperate with researcher inquiries. This apparent trend is partly explained by time and budgetary limitations, but also by the feeling that these interactions are often one-way streets. We have heard from several groups expressing concern that researchers “take” information without providing anything in return in terms of practical advice or assistance. Additionally, several watershed initiatives complain that researchers consistently fail to allow groups to review case studies for accuracy before publication. That is bad form on the part of the research community.²⁸⁷ We also occasionally hear from watershed initiatives asserting that it is nobody’s business what they are doing, a position that is hard to justify if the effort involves public resources or the enforcement of legal requirements, and/or receives public funding.

One way to potentially focus the research agenda is to identify those questions generating the greatest diversity of opinions. This has been done below in Table 16-1, which lists the statements/questions from the Hart survey featuring the highest standard deviations. These are the statements to which the Oregon survey respondents exhibited the greatest diversity of opinions and experiences. These statements cover some key issues, including the adequacy of funding and staffing levels, process characteristics, quality of representation, and on-the-ground effectiveness. For “factual” questions such as numbers 55 and 52, the diversity of responses suggests significant variability in experiences *among* different watershed initiatives. For other questions, such as numbers 1 and 2, the variability shown might also reflect some differences in opinion and interpretation *within* given watershed initiatives. Both phenomena are worthy of further exploration.

²⁸⁷ The Natural Resources Law Center has tried to address these concerns in several ways. For example, all watershed initiatives featured in *Source Book* case studies were provided with an opportunity to review and, if necessary, modify the factual information in the case studies—an opportunity exercised by just over 50 percent of the groups. All featured watershed initiatives also receive a free copy of the *Source Book*.

Table 16-1. Summary of the Eight Valued-Scaled Questions Showing the Largest Variability (as Determined by Standard Deviation) in the Hart Survey of 276 Oregon Watershed Initiative Participants.								
Question #	Statement/Question as Written in the Hart Survey	Strongly Disagree = 1	Disagree = 2	Neutral = 3	Agree = 4	Strongly Agree = 5	Mean	Standard Deviation
10	The watershed group with which I am associated has adequate financial support.	47	93	63	57	15	2.64	1.15
12	The watershed group with which I am associated has not improved physical conditions in the watershed.	28	96	64	60	25	2.85	1.15
2	The watershed group with which I am associated uses an ineffective process to reach decisions.	33	110	55	60	18	2.71	1.13
55	During its formation the group used an independent party or neutral facilitator.	12	49	21	54	7	2.97	1.12
52	During its formation the group received financial assistance to support formation.	20	29	13	74	10	2.97	1.12
17	The watershed group with which I am associated has inadequate staff support.	18	87	65	81	23	3.01	1.10
1	The watershed group with which I am associated is well balanced.	14	39	27	155	39	3.61	1.06
6	The watershed group with which I am associated is not representative of interests in the watershed.	69	142	21	32	10	2.17	1.05

Policy-Level Recommendations

The *Source Book* is primarily a directory and basic reference—a place for beginning a journey, rather than a destination. True, for parties with only a modest interest in the western watersheds movement, the *Source Book* may provide all the data that is desired on the subject. But for those with a more intimate interest in this subject matter, the *Source Book* is best used as a springboard to more detailed investigations. One obvious product of those investigations will be increasingly detailed and effective policy recommendations, a particular interest (and role) of the Natural Resources Law Center. The Natural Resources Law Center has published policy-level recommendations in several venues, namely in *Resource Management at the Watershed Level* (Kenney, 1997) (our report to the Western Water Policy Review Advisory Commission), the *State Role in Western Watershed Initiatives* (NRLC, 1998), and in *Arguing About Consensus* (Kenney, 2000).

Despite the passage of time and our increase in knowledge, we are convinced that the recommendations found in those reports still appear sound. One reason these policy recommendations are still relevant is that they are general in nature. Originally, we crafted highly general recommendations based on the logic that the current state of research and experimentation was still in its infancy, and consequently did not support more detailed recommendations. Although there remains an abundance of still unanswered research questions, today we know much more. But what we have learned is not pointing us to more specific policy recommendations. To the contrary, perhaps the most dominant theme of our research is that there is no dominant theme. Despite all our attempts to correlate form with function, and function with outcomes, watershed initiatives stubbornly defy useful generalizations. Obviously some exceptions exist, and where they do, we have attempted to draw attention to those exceptions as they are highly important. But perhaps the greatest defining characteristics of watershed initiatives are diversity and uniqueness. For watershed initiatives, “one size often fits just one.”

While this observation may appear to throw a wrench into efforts to craft policy recommendations, just the opposite is true. It is highly fortuitous that “what we know” and “what we do not know” both point to similar policy recommendations—at least at this point in time.²⁸⁸ Both suggest restraint, caution, and incremental change, discouraging efforts to aggressively replicate or standardize watershed programs except to the extent that flexibility and creativity are maintained. Well-intentioned legislative and/or executive attempts to recognize or support watershed initiatives could easily be as harmful to the movement as could direct opposition if the net result of that governmental attention is to impose one model on all efforts.

This line of reasoning brings us back to the concept of “guarded optimism,” the policy described in the Natural Resources Law Center publications mentioned above. That policy suggests that most western watershed initiatives should be viewed as exciting and promising,

²⁸⁸ Thus, our recommendations may not be getting much more specific, but they are getting better—they are the product of a better understanding of the situation.

but still largely incomplete, experiments in resources management and problem-solving. The evidence collected to date is sufficient to maintain enthusiasm and to justify further public investments in these collaborative efforts, but only in a manner maintaining adequate regulatory backups. Those interests that see watershed initiatives as a potential replacement to the regulatory regimes of the Clean Water Act and Endangered Species Act should realize that these “regulatory hammers” are a common—often essential—stimulus behind watershed initiative formation and activity. It is possible, actually quite likely, that neither the regulatory nor the consensus-based processes can offer the on-the-ground benefits possible through both processes occurring simultaneously.

Policy-makers should also be sensitive to issues of representation, balance, and accountability. Those lamenting the involvement of national interests—particular the federal natural resource agencies—in seemingly local resource management affairs should recognize that the federal government remains the primary source of financial resources, technical support, and implementation authority utilized by most western watershed initiatives. Given the magnitude of federal lands in the West and the range of “public good” issues addressed through federal environmental legislation, this federal involvement seems appropriate on both philosophical and practical grounds. To the extent that a watershed initiative deals completely with private lands and private issues, then these recommendations are largely moot. This situation, however, rarely occurs in the West.

Ultimately, the goal should be to base policy decisions on effectiveness. Policy-makers should show little tolerance for proponents describing watershed initiatives as panaceas to difficult and seemingly chronic problems in resources management, nor for opponents convinced that all efforts have anti-environmental agendas and promote civility over real problem-solving. While each perspective can be supported by case studies, neither perspective has emerged as an accurate generalization. Clearly, a reading of the *Source Book* case studies paints a fairly rosy picture. However, that enthusiasm should be tempered with a realization that defunct efforts are obviously not included, and that case studies based on participant impressions have an inherent bias. The Natural Resources Law Center continues to find more reasons for excitement than pessimism, but realizes that there is much more to learn.

Finally, we urge policy-makers and watershed initiative participants to remember that learning through experimentation is a legitimate means of identifying improved institutional arrangements only to the extent that these “experiments” are faithful to the scientific construction of experimentation. This requires that issues and assumptions are well defined, that information is collected and analyzed in a credible manner to test those assumptions, that measurable results are explicitly used to shape conclusions, and that peer review is used to validate results. Those working on-the-ground in watershed initiatives realize that this is not a beauty pageant, but rather is a serious attempt by dedicated people to solve real problems. The appropriate role of policy-makers is to provide the assistance needed to give these efforts (within acceptable bounds) a chance to succeed or fail, and then to base future decisions upon that track record. As shown in this *Source Book*, that track record is rapidly growing.