



## Collaborative Watershed Planning in Washington State: Implementing the Watershed Planning Act

Clare M Ryan & Jacqueline S Klug

To cite this article: Clare M Ryan & Jacqueline S Klug (2005) Collaborative Watershed Planning in Washington State: Implementing the Watershed Planning Act, Journal of Environmental Planning and Management, 48:4, 491-506, DOI: [10.1080/09640560500128384](https://doi.org/10.1080/09640560500128384)

To link to this article: <https://doi.org/10.1080/09640560500128384>



Published online: 22 Jan 2007.



Submit your article to this journal [↗](#)



Article views: 137



View related articles [↗](#)



Citing articles: 12 View citing articles [↗](#)

# Collaborative Watershed Planning in Washington State: Implementing the Watershed Planning Act

CLARE M. RYAN\* & JACQUELINE S. KLUG\*\*

\*University of Washington, College of Forest Resources, Seattle, WA, USA,

\*\*Washington Department of Ecology, Water Resources Program, Bellevue, WA, USA

(Received March 2004; revised October 2004)

**ABSTRACT** *In 1998 the Washington State Legislature enacted the Watershed Planning Act, which encourages local governments to develop watershed plans using collaborative processes. Objectives of the statute are to address water resource and water quality issues, salmon habitat needs and to establish instream flows. This exploratory study sought to examine two aspects of how local governments are implementing the Act: challenges and benefits associated with collaborative watershed planning and the capacity of local governments to conduct collaborative watershed planning. Using documents and interview data from four cases, it was found that all planning groups experience similar challenges, although newer planning groups experienced more challenges than groups with previous planning experience. Challenges include issues surrounding the collaborative process, interagency co-ordination and trust. Local governments struggle with building capacity to plan, particularly in the areas of funding, technical expertise, incentives for participation, adequate time to conduct planning and questions regarding appropriate scale and scope of their planning efforts. Despite the challenges, collaborative watershed planning is well underway, with more than 37 planning units conducting planning under the Act.*

## Introduction: Watershed Planning in Washington State

Although the principle of managing water on a basin scale has been proposed throughout the history of settlement of the West, collaborative watershed planning has emerged within the last decade as a preferred tool with which to address the issues associated with balancing environmental concerns and consumptive uses of water (Kenney *et al.*, 2000). Many collaborative watershed planning efforts are initiated and managed at the local level. In these situations, a diverse group of stakeholders come together to formulate a strategy for management of water resources within a basin or sub-basin, typically using consensus decision making and joint fact finding to generate a final plan.

---

*Correspondence Address:* Clare M. Ryan, University of Washington, College of Forest Resources, Box 352100, Seattle, WA 98195-2100, USA. Email: cmryan@u.washington.edu

The state of Washington has experienced a long history of conflict and litigation over water supply and water rights. This legacy, combined with the impending listings of several salmon stocks under the Endangered Species Act (ESA), galvanized support for legislative action on water issues. Recognizing that long-standing water resource issues associated with water rights processing and instream flows would only become more complicated after the ESA listings, the Watershed Planning Act and the Salmon Recovery Planning Act were enacted by the Washington State Legislature in June 1998. These statutes provided for locally directed programs to address both water resources and salmon recovery. The Watershed Planning Act sets forth a formal process whereby local governments and communities can collaboratively plan for water needs and uses in their basin. The focus of the Salmon Recovery Act is on improving salmon habitat by implementing habitat restoration projects chosen by local governments and citizens. Clearly, Washington State's strategy for managing water resources relies heavily upon local planning and management activities. As a result, there are many disparate watershed planning processes and salmon recovery activities underway throughout the state, often in the same watersheds, but initiated and implemented by different groups.

This paper focuses specifically on the collaborative watershed planning processes that are ongoing under the Watershed Planning Act, and does not address the many other processes that are active across the state. As such, it provides an update on the status and challenges associated with implementation of the Watershed Planning Act, rather than an evaluation of particular watershed planning processes or plans. The paper is organized as follows: first, background on the Watershed Planning Act and relevant theoretical literature are presented. Next, the guiding research questions and methods are discussed, concluding with a discussion of key findings and implications.

### *The Watershed Planning Act*

The Watershed Planning Act provides a framework whereby local governments and citizens can voluntarily develop water management plans through consensus processes. Watershed planning groups that receive planning grant funding from the state are required to address four items in their planning processes: (1) how much water is physically available; (2) how much water is currently being used; (3) how much water is allocated through existing water rights; and (4) how much water is needed for future uses. Optional elements that may be addressed by local planning units include water quality, fish habitat, and instream flows. The statute specifies participation from, at a minimum, all counties in the watershed, the largest city or town and the largest water purveyor in the watershed. In addition, Indian tribes may be invited (but are not required) to participate and are afforded the same standing as other governmental participants. The role of the Washington State Department of Ecology (WDOE) in the planning process is to provide funding and technical assistance, upon request from the planning groups. Other stakeholders may be invited to participate in the process, but unlike the initiating governments listed above, cannot individually veto the plan. Because the participation requirements in the statute specify primarily governmental participants, and do not specify representation by non-governmental citizen, development or environmental organi-

zations, the planning groups vary widely in terms of representation and participation from those interests.

Once watershed plans are completed and adopted, the state, through its water resource agency, WDOE, is required by the statute to implement the plan recommendations and codify any resulting decisions from the planning group on instream flows through rule making. Local governments are also directed, but not required, to adopt ordinances to implement actions in the watershed plan. Ultimately, the plan recommendations will also influence the issuance of water rights in the watershed (Washington State Department of Ecology, 2003).

Thirty-seven watershed planning units have formed in the state and are presently conducting planning activities in 45 of the state's 62 defined watersheds known as Water Resource Inventory Areas (WRIAs) (Washington State Department of Ecology, 2004). Since the inception of watershed planning under the Act, the state has spent more than \$35.3 million to fund the local planning efforts through grants (Washington State OFM, 2001). Watershed planning units are eligible to receive up to a total of \$400 000 per watershed over a three-year period to perform technical studies and develop the final plan. Two watershed plans were adopted in 2004, and 18 final watershed management plans are due by the end of 2004. As the deadlines for the planning products approach, the full extent of the organizational and financial resources needed to implement the plans is becoming apparent. Most recently, amendments to the Watershed Planning Act were enacted in the 2003 legislative session. The amendments, responding to anticipated implementation challenges involved with adopting the final watershed plans, provide additional funding of a total of \$100 000 per planning unit over a three-year period, if the planning unit provides a 10% match.

### *Watershed Planning in Context*

By its very nature, watershed planning is an interdisciplinary undertaking. The literature surrounding the topic of collaborative resource management served as a cornerstone for the study. Definitions of collaborative partnerships are as diverse as the resources they manage—they are called private-public partnerships, ecosystem management, community-based environmental protection or alternative dispute resolution groups (Wondolleck & Yaffee, 2000). Collaborative partnerships are also recognized as an important component of Integrated Environmental Management (IEM) efforts (Margerum, 1999). Despite the differences in name, several common characteristics define collaborative planning arrangements. Such groups are generally place-based, co-operative and involve multiple parties (Coughlin *et al.*, 1999; Wondolleck & Yaffee, 2000). Some groups use joint fact finding in an effort to build trust between individuals or institutions where relationships have been strained. Often, groups are organized from the bottom-up at a community level, and participation is voluntary. However, collaborative partnerships are increasingly being employed and directed by resource management agencies to gain stakeholder perspectives on proposed management strategies (Wondolleck & Yaffee, 2000). Despite differences in structure, almost all collaborative partnerships use consensus decision making.

Research on collaborative groups has identified several factors that influence the collaborative process itself, and these elements apply to collaborative watershed

planning groups as well. The presence of a co-ordinator or other staff devoted to the organization, encouraging multiple viewpoints, effective communication, strong leadership, stable funding, adequate long-term resources, and allowing enough time for relationships to be built have all been identified as key elements of effective partnerships (Leach *et al.*, 2000; Sommarstrom, 2000; Wondolleck & Yaffee, 2000; Margerum, 2002a). Additional elements necessary for successful collaborative partnerships include adequate funding, effective leadership and management, interpersonal trust and committed partners (Leach & Pelkey, 2001). A variety of procedural elements have been identified, which point to the importance of focusing on structural approaches to implementing any agreements resulting from collaborative processes (Margerum, 2002b).

Because of its mandate for participation from specific governmental organizations, the Watershed Planning Act is a classic example of an intergovernmental policy approach. While the distinction between intergovernmental approaches and collaborative approaches may seem tenuous, there are substantive differences between the two. Intergovernmental planning approaches typically give standing only to governments, whereas collaborative partnerships involve multiple parties and stakeholders. In addition, many collaborative partnerships are voluntary and organized from the bottom-up, compared with intergovernmental approaches where the organization is more structured by the policy which created the forum. Finally, intergovernmental planning is often thought of as short term while collaborative partnerships are often designed to be ongoing, longer-term efforts.

Intergovernmental planning approaches are characterized by 'top-down', mandate driven planning efforts, and 'bottom-up', co-operative driven planning. The 'bottom-up' planning efforts emphasize collaboration among levels of government and grew out of the conflict and resentment of local governments to mandates from above. These arrangements, referred to as collaborative planning efforts or co-operative policies, seek to enhance the interest of local governments in the issues and strengthen their capacity to work towards meeting higher policy goals (May *et al.*, 1996). Intergovernmental planning efforts often set forth process requirements (such as planning) to be followed rather than prescribing detailed standards and procedures to attain policy goals (Bollens, 1994). However, co-operative policies place added burdens on state legislatures to develop and define appropriate state planning goals and guidelines for local governments to follow (Bollens, 1994). Co-operative policies rely upon a variety of financial and technical assistance tools to both enhance the commitment of the governments to achieve the policy goals, as well as increase their ability to implement actions towards those goals. Moreover, the planning process itself has been identified as an important policy tool to raise interest in the problem and gain acceptance from local governments and their citizens in the development of the solutions (Burby *et al.*, 1997). The Watershed Planning Act contains nearly all of these elements, so it is indeed an excellent example of an intergovernmental approach.

### Study Design and Approach

Examining implementation of watershed planning efforts presented several operational challenges. Collaborative watershed planning under the Act was just getting

started during the time of the study (2000–2002). Thus, it was impossible and unfair to evaluate the groups based on the nature of their planning processes or achievement of specific agreements. Yet, as Washington State had devoted considerable resources to watershed planning, an exploratory investigation of how the planning process had occurred to date seemed appropriate. As a result, the study did not set out to evaluate planning processes or agreements, rather it sought to present a mid-course look at what is sure to be a very long-term and evolving process. The study was framed around the following areas of inquiry:

- *Challenges of the collaborative resource management process.* What challenges does multi-party, consensus decision making present? Research on collaborative partnerships highlights the importance of building relationships and trust in such processes.
- *Capacity of local governments.* Do local governments have the capacity to conduct collaborative watershed planning? The intergovernmental planning literature suggests that special consideration of timelines, funding and technical expertise should be included in intergovernmental planning efforts in order to strengthen the capacity of local governments to address the issues at hand.

### *Case Selection*

Because the study sought to explore a contemporary phenomenon within its real life context, a case study methodology was appropriate (Yin, 1994). A stratified random sample of four watershed planning units (cases) was selected from the larger population of active watershed based planning efforts. First, the total population of watersheds was separated into two groups: those watersheds where planning was ongoing *before* passage of the Act, and those watersheds in which planning efforts began *after* passage of the Act. A random sample was then performed within each of the two categories to select watershed planning units for the study cases. Available funding, time, and research personnel constraints limited the number of cases and the total number of interviews in the study. The cases are briefly described below, following an explanation of data collection and analysis techniques.

### *Data Collection and Analysis*

A total of 22 personal interviews were conducted with all of the representatives from the governmental organizations in each of the four watershed cases. Governmental participants (including tribal governments) comprise the majority of participants in the planning groups. Public citizen, non-governmental and other participants have been more variable in their participation, and were less responsive to requests for interviews. Interviews were structured around the guiding thematic areas of inquiry (collaborative resource management issues and capacity of local governments) but were also adjusted slightly to incorporate new findings consistent with the ‘flexible, iterative and continuous design interview style’ throughout the investigation (Rubin & Rubin, 1995). While the style and content of each interview varied slightly, each respondent was questioned about (1) their experience with how the groups were organized and functioned; (2) how they viewed the objectives of the planning

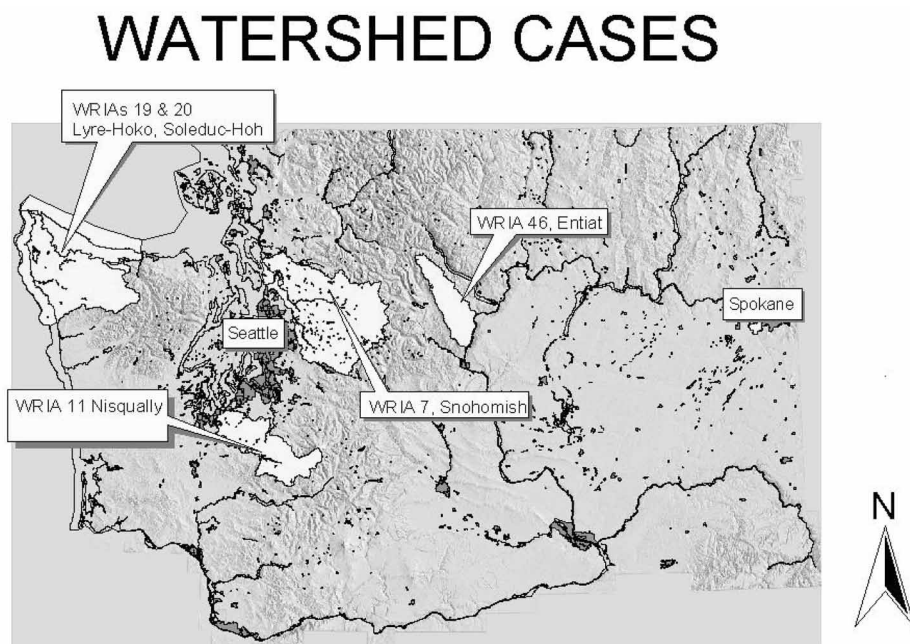


process; and (3) what sort of implementation issues they currently face or expect in the future.

Interviews ranged from 1–3 hours, and were tape recorded and transcribed in their entirety. Interview transcripts were then analysed using qualitative content analysis techniques of coding for themes and patterns. The codes were interpreted, expanded or collapsed to develop a parsimonious, yet rich description of the factors influencing implementation of watershed planning in each case (Miles & Huberman, 1994; Coffey & Atkinson, 1996). Coded results were then used to create a master list of themes held by a majority of participants, which could then be compared within and across cases. The interview data were triangulated with other documents gathered from watershed planning unit meetings, as well as technical assistance documents developed by WDOE and other organizations.

### *Case Descriptions*

The four randomly selected cases include: (1) the Nisqually watershed in South Puget Sound (WRIA 11); (2) the Entiat watershed in Eastern Washington (WRIA 46); (3) the Snohomish watershed (WRIA 7) in the Central Puget Sound; and (4) a watershed planning group focused on the watersheds of the Western end of the North Olympic Peninsula (WRIs 19/20). Figure 1 displays the locations of the four cases. Following is a brief description of each watershed's unique political, social and geographic features.



**Figure 1.** Map of watershed planning groups investigated

Two of the cases, the Nisqually and the Entiat, had a history of watershed planning before the Watershed Planning Act was passed, thus providing settings to observe how the existing planning groups responded to the Act's planning directive. The Nisqually River and Watershed, with its headwaters enclosed by Mt. Rainier National Park and its delta protected by the Nisqually Wildlife Refuge, is one of the most pristine watersheds in the Puget Sound area. Roughly 56% of the land in the basin is privately owned, much of it by forest products companies. About 30% of the basin is owned and managed by federal agencies, with the balance of the land base (14%) owned by state, municipal and tribal governments (Maun, 1998). These unique qualities prompted the state to declare it a river of statewide significance in 1972. Legislative efforts to protect the Nisqually culminated in 1985 when the legislature directed WDOE to develop a Nisqually River Management Plan, providing for a balanced stewardship of the basin's economic, cultural and environmental resources. To develop the plan, WDOE established the Nisqually River Task Force, a group comprised of timber, agriculture, hydropower and environmental interests, as well as private landowners, resource management agencies and the Nisqually Indian Tribe. The Task Force developed a management plan for the river in 1987, which was adopted by the state legislature. This plan called for the creation of the Nisqually River Council, an interagency body committed to the protection and enhancement of the Nisqually River. The Council is composed of a variety of governments, including the counties, towns, resource agencies and the Nisqually Tribe. In addition, a Citizen Advisory Committee with 21 citizens was established.

Watershed planning in the Nisqually Basin under the Watershed Planning Act commenced in 1999. The Nisqually Indian Tribe initiated the planning process and applied to be the lead entity for the planning unit grant. The Nisqually watershed planning unit approved their watershed plan in April 2004, and is currently developing an implementation strategy to implement the plan. This is the only case in the state where a tribe was the initiating government, and it is the first planning unit to develop and approve a plan.

The Entiat Watershed, located in North Central Washington, is part of the Upper Columbia River system. The watershed has a sparse human population, with only two small towns located at the lower part of the river valley. About 87% of the land is in forest cover, and most of the forestland is owned and managed by the US Forest Service, with primary use of the forest for recreation—hiking, camping, hunting and snowmobiling. Agriculture is the second largest land use in the watershed, with most of the agricultural lands located in the lower part of the valley.

Planning efforts in the Entiat commenced in 1994 following flooding after a major fire in the Entiat Valley. The Chamber of Commerce, town of Entiat, Chelan County Conservation District and the US Forest Service initiated resource planning using the Co-ordinated Resource Management Planning process set forth by the National Resource Conservation Service, and created the Entiat Co-ordinated Resource Management Plan in 1998. After passage of the Watershed Planning Act in 1998, the group applied for watershed planning money and focused their planning on water quantity issues.

Conversely, the Snohomish and the Lyre-Hoko, Sol-Duc-Hoh cases did not have a history of planning before the Act. As such, they provide an opportunity to examine



how the Act's planning directive is being implemented through more recent initiatives and efforts. The Snohomish River Basin encompasses some of the fastest growing and densely populated regions in Washington State. The watershed begins in the Cascade Mountains, and includes parts of northern King County and Snohomish County. The Snohomish River terminates in an estuary in the city of Everett, Washington. Major land uses include residential and commercial development, forestry and manufacturing. In 1993, a group called the Snohomish Basin Work Group, comprised of high-level staff from various government jurisdictions, came together. The group was active for about five years, developing a report called the Snohomish Basin Conditions and Issues Report. With the ESA listings and the passage of the Watershed Planning Act, the work group realized that they did not meet the participation objectives of the statute, so a new organization was created: the Snohomish Basin Salmon Recovery Forum. The city of Everett and the Tulalip Tribe agreed to be co-leads for watershed planning and applied for a start-up watershed planning grant. However, past relations between the city and the Tribe have been strained at times given the complexities relating to tribal treaty rights to fish and water resources. Since the interviews were conducted, the governments in this basin have not been able to reach agreement on the structure and scope of the planning process, and the planning activities have stalled. While there has been considerable collaboration on salmon recovery planning in the Snohomish basin, comprehensive watershed planning as conceived under the Act has ceased. Perhaps contributing to this was a major turnover of elected officials on the Snohomish County Council in 2002. This political and administrative shift had the effect of severely reducing the county government's participation in many efforts related to natural resource conservation and planning.

The Lyre-Hoko and Sol-Duc-Hoh watersheds are composed of numerous individual drainages and watersheds, and the two WRIAs represent areas defined in terms of geographic rather than hydrologic properties. Overall, the region is sparsely populated. WRIA 19, the Lyre-Hoko, encompasses the northwestern part of Clallam County and the cities of Neah and Clallam Bay on the Olympic Peninsula. WRIA 20, the Sol Duc-Hoh, encompasses parts of Clallam and Jefferson counties as well as the town of Forks. Both watersheds contain large portions of federal and state public lands, including Olympic National Park and Olympic National Forest. In addition, the watersheds contain Indian reservation lands. A majority of the privately held land is owned and managed by private timber companies. Forestry is the largest land use, in addition to agriculture and localized development.

Prior to the Watershed Planning Act, planning occurred on a relatively small-scale basis within the watershed. For example, watershed assessments and analyses were conducted by the land management agencies, such as the Washington Department of Natural Resources, and the US Forest Service. Watershed planning under the Act was initiated in 1999 by Clallam County. In 2000, the initiating governments hired a co-ordinator to serve both groups. Although the watershed planning groups for WRIA 19 and 20 are categorized and tracked together, the planning groups for each watershed have unique members and do function separately. They are listed together because they share financial resources in order to fund a co-ordinator for the two groups.

## Overcoming Challenges and Building Capacity

### *Implementing Collaborative Resource Planning*

Collaborative planning presents both challenges and opportunities for each of the watershed cases investigated. The interview data suggest that there are a number of benefits and challenges associated with collaboration that are shared by all watershed planning groups. These elements (summarized in Table 1) include challenges related to building relationships and trust, organizational capacity and specific tools with which to conduct planning. The shared benefits of collaboration include opportunities to build trust, as well as gaining capacity to address local water resource issues.

While the benefits and challenges shown in Table 1 were present in all of the watershed groups, some challenges were experienced to a greater extent by newly formed watershed groups. Three major challenges mentioned by all participants in the newly formed groups included challenges with organizing the planning group, relationships with other governments and defining the role of the public.

Organizing the watershed planning groups presented difficulties in conducting and managing the collaborative process. These challenges included struggles over deciding which government would lead the process, or if a third party should facilitate the meetings. In addition, newer planning groups were challenged by the task of developing objectives and ground rules for operation of meetings and developing work plans. Efforts to develop (or in some cases repair) relationships with other local governments highlighted the importance of developing trust between elected officials and the staff that represent them in the planning process. Finally, defining the role of the public in the process presented uncertainties about how to even engage the public in watershed planning, and what role the public might play in the process. All respondents mentioned that in order to overcome these challenges, more time was required for their planning processes.

Prior research on collaborative planning efforts has established that timelines for collaborative or intergovernmental groups to produce outcomes are often lengthy in comparison to traditional decision-making processes. Intergovernmental management approaches take longer as they require local governments to come to terms with policy objectives and provide time for state officials to provide technical assistance (May *et al.*, 1996). Furthermore, the inherent difficulty of coming to consensus on final management plans and strategies requires more time than other

**Table 1.** Shared benefits and challenges of collaborative planning

Benefits	Challenges
<ul style="list-style-type: none"> <li>● Establish relationships and trust between governments</li> <li>● Gain local capacity to address water issues</li> </ul>	<ul style="list-style-type: none"> <li>● Building trust is complex and multi-layered</li> <li>● Trust must exist within all layers of an institution and between institutions</li> <li>● Tools provided in statute are inadequate:</li> <li>● Timelines</li> <li>● Funding</li> <li>● Technical assistance from the state</li> </ul>

centralized decision-making processes (Leach *et al.*, 2000). Confirming these findings, every respondent stated that the collaborative planning processes required by the Act operate under a different, and significantly slower, timeframe than other decision-making processes. For example, one county representative's statement reflects the unanimously held feelings on the planning deadlines specified in the Act:

Well, I think number one, the way that the legislature set up the timeframes just are unrealistic. It's taken the Dungeness River Management Team over ten years of relationship building to be able to be co-operative and to build trust and understanding with each others' position. You just don't do that in two years. Not and be totally co-operative in the spirit of getting things done. I just think it takes longer than that to go through team building. And to have governments and special interest groups diametrically opposed; it's going to take a long time.

Extending timeline expectations to take into account the challenges of reaching consensus corroborates findings from other investigations of collaborative planning efforts. For instance, a study at the University of California at Davis found that it takes around five years for watershed councils to produce substantive outcomes (Leach *et al.*, 2000).

*Trust: two key dimensions.* Trust was a concept that all respondents identified as a major challenge, yet at the same time it was clearly the most important element in conducting watershed planning and working collaboratively with other governments and stakeholders. As one WDOE representative noted: "It all comes down to that, how people work around a table". As noted in the literature, trust is a necessary element for coming to consensus, and it is built through the process of collaboration (Wondolleck & Yaffee, 2000). The collaborative management literature traditionally identifies trust between people at the negotiating table as an important element in making collaboration work. However, the interview data reveal that there are two distinct dimensions of trust that are at play in the watershed planning cases: mutual trust and social trust. Participants must trust not only the other individuals in the process; they must also gain the trust of their elected officials, who in turn must trust the elected officials and staff of other jurisdictions. These dimensions align with the concepts of mutual and social trust found in the literature.

Thomas (1998) identifies mutual trust as interpersonal or trust between persons. In addition, mutual trust may increase the propensity for individuals to co-operate, but the existence of co-operation does not imply that individuals necessarily trust one another. Social trust, or trust between institutions and organizations, takes into account that trust occurs within a social system. Social trust is a form of social capital, and, once it exists, makes transactions more efficient (Thomas, 1998). That these two dimensions of trust are tightly interwoven was confirmed by the interview responses, as all respondents commented that mutual trust had a great influence on and would eventually give rise to social trust in their planning process.

For example, when queried about trust in their planning process, most respondents stated that whether mutual trust existed in the group depended

considerably on the personality and behavior of each individual participant. Open communication between the participants and being clear about one's position were other factors that contributed to building mutual trust. As one respondent noted, "I think first it is built by direct, human interpersonal relationships. Before you can trust someone, you really have to know who that person is and how he or she operates". Most respondents added that following through on commitments with actions can strengthen mutual trust.

While all of the watershed planning participants identified mutual trust as important, they cautioned that just because one trusts the people around the table and agree on a course of action, that does not mean that the action will be implemented. The participants in the planning process are representatives of larger organizations; therefore trust must exist at all levels for any action to stick. Consequently, mutual trust was viewed as a critical building block to developing another kind of trust within and between institutions—social trust.

Historical events and relationships appear to greatly affect the ability to build and maintain social trust. One city representative's view on social trust:

The institutional ones [relationships] tend to be built on a lot of mythology. That stuff can last well past its useful life; so that takes a little longer to overcome. If you have negative relationships between governments because of institutional memory, shoot, the incidents that everyone is still upset about might have occurred a generation ago. And the players are long since gone on both sides, but you can carry that wound in the organization for quite some long time. That is a little harder to overcome. It takes a number of positive personal relationships to overcome that.

Because of the local nature of the watershed planning process, the institutions involved in watershed planning groups often have a track record of interaction, providing opportunities for trust to have been built or eroded. As one county representative noted:

At any given time, including right now, there are half a dozen major issues and tensions between our city and county. It's very normal. So the key is trying to work through those issues and work the problem while maintaining good working relationships.

This was clearly a factor in the Snohomish case, where historical relationships, in addition to political changes, may have prevented collaborative planning from moving forward. The difficulties in the Snohomish case underscore the importance of considering time as an important dimension of collaborative processes. In particular, those involved in collaborative planning must plan for and allow adequate time for the planning process to build (or repair if possible) relationships and trust, as well as adjust to new political landscapes. Future research incorporating additional watershed planning cases may help to determine whether collaborative watershed planning processes as designed and implemented under the Watershed Planning Act are well suited to developing these two important dimensions of trust.

*Capacity Defined as the Ubiquitous Three: Money, Technical Expertise and Time*

In addition to the notion that local involvement is critical in order to gain legitimacy for water management actions, a majority of participants stated that the statute provides a valuable opportunity to engage in comprehensive local planning. Several tools (such as grants, information and mandates) are provided in the statute to create incentives for local governments to participate in and gain capacity in watershed planning. Grants and inducements (up to a total of \$400 000 for three years) for the watershed assessments and development of the final plan are provided to offset some of the costs of participating in the program. Information, in the form of technical assistance from the state agencies, is also an important tool provided in the Act. To augment the capacity of local governments, WDOE has assigned an agency representative to work with each watershed planning unit, issued guidance documents and conducted workshops for local governments. The mandates in the statute provide guidelines for the minimum amount of information needed in the plan. For example, one mandate includes the requirement to determine the water budget of each watershed. Use of mandates implies that the state desires some consistency across the watersheds in the content of their plans in order to address the larger issue of water availability.

While there is a considerable amount of disagreement in the literature regarding the causes of implementation failure, it is nearly universally accepted that implementing agents need adequate tools: funding, technical expertise to address the issues, and a reasonable timeframe to accomplish policy goals. Policy makers consistently underestimate the amount of technical expertise, resources and time it will take to attain policy goals or simply choose not to devote adequate resources and attention to those items. The interview data illustrate the widely held perception among watershed planning participants that the Act does not provide adequate funding or technical expertise, and specifies unrealistic, unachievable timelines.

Adequate funding is a necessary element in policy implementation, especially in programs involving conditional grants-in-aid as provided by the Watershed Planning Act. Grants create incentives for local governments to engage in intergovernmental approaches, and the funding helps reduce the financial burden related to the additional work. While the amount of funding provided by the Act sounds quite generous at first, these funds are quickly depleted as the planning groups hire facilitators, pay participating governments for staff time or watershed co-ordinators and hire consultants to conduct costly technical studies and assessments.

All respondents mentioned that they thought funding should be increased to help local governments implement the recommendations of the final watershed management plans when they are developed. This concern has been addressed to some extent in a recent legislative session, where an additional \$100 000 of funding was allocated, with the condition of a match from the planning group.

Participating in collaborative planning requires more than just funding, it also requires local governments, tribes and citizens to have a certain degree of technical expertise and knowledge. A majority of the respondents felt they did not have the technical expertise to fully participate in watershed planning. These participants viewed their primary technical challenges as problems related to the scope and nature of watershed planning, as well as not having the technical skills in-house such

that their institution could fully participate in the process. The latter issue was most apparent in rural governments that often did not employ biologists, hydrologists, geologists or other technical staff. As mentioned above, all of the planning groups used much of their funding to acquire this expertise. However, all respondents noted that they have gained considerable knowledge of water issues as a result of participating in the planning process.

In addition to procedural delays, the technical elements required by the Act present additional challenges to meeting the timelines specified in the Act. Many participants noted that they were either currently struggling as a group with defining the scope and extent of data collection and analysis strategies, or fully expected to struggle when the time arose. Although none of the watershed groups were near the plan formation stage at the time of the interviews, a few participants mentioned that they felt the group had not yet been truly tested in terms of making difficult decisions. As more planning groups move into drafting specific watershed management plans, the discussions on the technical merits of data could easily present challenges and possibly delay the process of developing final plans.

### **Implications for Collaborative Watershed Planning**

#### *Collaborative Planning Takes Time and Experience*

Collaboration, partnering and co-operation are often stated as shared goals, but these concepts are quite difficult to translate into reality. While it has been long accepted in the literature that trust must be present between parties at the table, this study reveals that the concept of trust is more complex and includes both interpersonal (mutual) and inter-organizational (social) trust. While numerous situations help build trust (e.g. shared goals, lack of contentious issues), it is clear that a critical element to building trust is time. The challenges of building trust and reaching consensus on the complex issues associated with water resources raised doubts for some participants on whether collaboration is the 'right' way to obtain the desired policy outcomes. However, those planning groups with previous experience, such as the Nisqually, appear to have benefited from the time they had already invested in planning or other collaborative activities. They were able to build upon their previous efforts and move into more substantive discussions a bit earlier than other groups.

Experience with the procedural elements of collaborative processes is also important. It is not surprising that the newer watershed planning groups with less experience struggled with how to initiate and manage a collaborative planning process. Defining roles, deciding who and how to participate, and obtaining agreements to participate all require time and skill. Procedural elements can be even more difficult to navigate if relationships have not yet been established, or are strained in some way. As a result, the newer planning groups struggled mightily with both procedural elements and developing trust, with the added pressure of a relatively short timeline in which to conduct planning.

*Building Capacity: Are we Planning on Appropriate Scales?* Putting into practice a legislative directive to work collaboratively is a complex and multi-dimensional



endeavor. Although there are incentives in place to attempt to keep government institutions involved in the planning process, the appeal of these incentives is uncertain—the funding, technical assistance and timelines to complete watershed planning may be inadequate for the scope, scale and mix of relevant issues and institutions.

The notion of capacity is broader than simply resources, expertise and time. Capacity is also defined in terms of scale and authority, as the financial, technical and organizational capacity of local governments to engage in watershed planning differs dramatically across watersheds and regions. The ability of local governments to control or impact issues is limited in several instances. For example, watersheds are geographic units that encompass several municipalities and jurisdictions. While planning on a watershed scale can provide a cumulative picture of the impacts of activities across various jurisdictions, many watershed management issues are broader than the scale of the state designated WRIAs or the jurisdiction of local governments. In Washington, forest practices and federal land management activities are beyond the purview and authority of local governments. In addition, existing state water laws governing water allocation constrain the ability of local governments to develop water management plans.

As a result, the question should be raised regarding whether the watershed might *not* be the best (or at least not the only) scale on which to plan. Perhaps a watershed is an appropriate scale for water quantity and instream flow planning, but it may not be an appropriate scale for salmon recovery planning or growth management planning, for example. The challenge then is to integrate or nest the various planning processes such that appropriate goals are addressed at the proper scale and yet not all processes are completely distinct from each other.

Capacity is also about the authority of governments and appropriate tasks for each level of government. The interviews revealed a sense of resentment as well as the perception that the state agency (WDOE) was ‘handing off’ its responsibility to manage water to local governments, which in most cases do not have the desire or technical ability to handle the task. Some have suggested that encouraging a more top-down planning process co-ordinated at the state level might be a more reasonable approach in order to address some of the larger resource issues, as the plans could be shaped by the regulating agencies with appropriate authority to do so.

In spite of the criticism, all respondents stated that local planning and control of the process was clearly one of the primary objectives of the statute, and it would add legitimacy to the final product. Although it may take longer and cost more, a collaborative plan may result in more meaningful results in the long run. Local governments and citizens are the parties most impacted by water decisions, and involving them in crafting the rules they live under may enhance implementation of the rules. While it may not be the easiest or most efficient way to address water issues, it may be the best approach given the diverse mix of interests, goals and legal requirements of the parties involved. Clearly, augmenting and sustaining the capacity of local governments to address water issues will facilitate attainment of the statutory objectives of implementing locally tailored water management plans, and could foster the creation of institutions that are prepared to address future resource management problems.

## Acknowledgements

The authors wish to thank those individuals that participated in interviews and otherwise shared their valuable time and other information with the investigators. In addition, the authors appreciate the financial support provided by the Washington Sea Grant Program through Project #R/MS-49. Finally, thanks are due to Ryan Bidwell and three anonymous reviewers who provided valuable comments as the manuscript was finalized. The observations and conclusions presented here are those of the authors alone.

## References

- Bollens, S. A. (1994) Restructuring land use governance, *Journal of Planning Literature*, 7(3), pp. 213–226.
- Burby, R., May, P., Berke, P., Dalton, L., French, S. & Kaiser, E. (1997) *Making Governments Plan: State Experiments in Managing Land Use* (Baltimore, MD: John Hopkins University Press).
- Coffey, A. & Atkinson, P. (1996) *Making Sense of Qualitative Data: Complementary Research Strategies*. (Thousand Oaks, CA: Sage Publications).
- Coughlin, C., Hoben, M., Manskopf, D. & Quesada, S. (1999) *A Systematic Assessment of Collaborative Resource Management Partnerships* (Ann Arbor, MI: University of Michigan, School of Natural Resources and Environment).
- Kenney, D., McAllister, S., Caile, W., and Peckham, J. (2000) *The New Watershed Source Book: A Directory and Review of Watershed Initiatives in the Western United States* (Boulder, CO: Natural Resources Law Center, University of Colorado School of Law).
- Leach, W. D. & Pelkey, N. (2001) Making watershed partnerships work: a review of the empirical literature, *Journal of Water Resources Planning and Management*, 127(6), pp. 378–385.
- Leach, W. D., Pelkey, N. & Sabatier, P. (2000) Conceptualizing and measuring success in stakeholder partnerships. Paper presented at the Annual Meeting of the American Political Science Association, Washington, DC, 31 August–4 September 2000.
- Margerum, R. D. (1999) Integrated environmental management: the foundations for successful practice, *Environmental Management*, 24(2), pp. 151–166.
- Margerum, R. D. (2002a) Collaborative planning: building consensus and building a distinct model for practice, *Journal of Planning Education and Research*, 21, pp. 237–253.
- Margerum, R. D. (2002b) Evaluating collaborative planning: implications from an empirical analysis of growth management, *Journal of the American Planning Association*, Spring, 68(2), pp. 179–198.
- Maun, C. (1998) *The Living River: A Guide to the Nisqually River Basin* (Yelm, WA: Nisqually River Education Project).
- May, P., Burby, R., Ericksen, N., Handmer, J., Dixon, J., Michaels, S. & Ingle Smith, D. (1996) *Environmental Management and Governance: Intergovernmental Approaches to Hazards And Sustainability* (London: Routledge Press).
- Miles, M. & Huberman, A. (1994) *Qualitative Data Analysis: An Expanded Sourcebook* (Thousand Oaks, CA: Sage Publications).
- Rubin, H. & Rubin, I. (1995) *Qualitative Interviewing: The art of Hearing Data* (Thousand Oaks, CA: Sage Publications).
- Sommarstrom, S. (2000) Part II: The process of council operations, in: C. Huntington & S. Sommarstrom (Eds) *An Evaluation of Selected Watershed Councils in the Pacific Northwest and Northern California*. Prepared for Trout Unlimited and Pacific Rivers Council. Available at: Pacific Rivers Council, PO Box 10798, Eugene, OR 97440.
- Thomas, C. W. (1998) Maintaining and restoring public trust in government agencies and their employees, *Administration and Society*, 30(2), pp. 166–193.
- Washington State Department of Ecology (2003) Assistance Sheet. *Watershed Assessments, Plans and Water Right Decisions*. Available at: [http://www.ecy.wa.gov/watershed/watershedassessmentswater rights.htm](http://www.ecy.wa.gov/watershed/watershedassessmentswater%20rights.htm) (accessed 29 May 2003).
- Washington State Department of Ecology (2004) *Watershed Planning*. Available at: <http://www.ecy.wa.gov/watershed/index.html> (accessed 30 September 2004).

- Washington State Office of Financial Management (2001) Office of Financial Management Report on Watershed Planning, 35.
- Wondolleck, J. & Yaffee, S. (2000) *Making Collaboration Work: Lessons From Innovation in Natural Resource Management* (Washington, DC: Island Press).
- Yin, R. (1994) *Case Study Research: Design and Methods* (Thousand Oaks, CA: Sage Publications).