

Collaborative Partnership Design: The Implications of Organizational Affiliation for Watershed Partnerships

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Collaborative watershed partnerships are a common strategy for addressing complex natural resource management decisions. Despite a large literature surrounding their procedural strengths and weaknesses, little theory regarding collaborative partnership design is available to guide policymaking and implementation efforts. This study investigated the relationship between partnership structure and activities using interview data from 29 of Oregon's watershed partnerships. Confirming previous research, partnership composition is related to outcomes. Further exploration reveals that organizational affiliation is related to both composition and activities. Independent partnerships were more likely to conduct scientific assessments or plans, while agency-affiliated partnerships focused primarily on restoration projects. Additional findings suggest that independent partnerships develop priorities internally, while agency-affiliated partnerships tend to adopt the strategies of their parent organization. Diverse participation, incentives, and capacity are identified as critical design considerations for collaborative partnerships.

Keywords collaboration, ecosystem management, institutional design, organizational norms, participation, policy, watershed planning

In recognition of the lack of congruence between the scale of ecological processes and the human institutions devised to manage them, ecosystem management has gained support (Weber 1998; NRC 1999; Singleton 2002). At the same time, a growing preference has developed for “new governance” strategies that encourage decentralized, participatory, and consensus-based problem-solving arrangements in conjunction with traditional bureaucratic institutions (Kenney et al. 2000; Salamon 2001). Together, these factors have led to the rapid expansion of watershed initiatives

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throughout the nation. For example, as many as 400 watershed initiatives existed in the western United States alone by the year 2000, more than four times as many as existed in 1995 (Kenney et al. 2000). Appearing initially as dispersed community-based organizations, watershed-scale management institutions are increasingly structured by state legislation and agency directives (Leach and Pelkey 2001). Although they carry a variety of names (watershed council, watershed initiative, etc.), watershed partnerships have quickly become a preferred policy alternative (NRC 1999; Leach et al. 2002) and garnered high levels of political support (McGinnis et al. 1999).

The U.S. Environmental Protection Agency (EPA) reported in 2002 that 20 states had formally adopted a watershed approach to managing some elements of their water resources in the last decade. Many if not all of these programs rely on collaborative watershed partnerships in some capacity (U.S. EPA 2002). As they have proliferated, watershed partnerships have evolved and matured. Originally considered unique grass-roots phenomena, partnerships are increasingly formed to address specific ecological problems across states or regions. This evolution challenges policymakers and academic scholars alike to consider not only the potential for collaboration to achieve substantive results, but also how to design partnerships to best achieve public policy objectives.

The primary objective of our study was to investigate the relationship between watershed partnership structure and partnership activities. As such, it contributes to a growing literature concerned with the relationship between collaborative partnership design and their accomplishments. Affirming Moore and Koontz (2003), our study shows that important relationships exist between partnership composition and group activities. In addition, we find that partnerships' organizational affiliations are strongly related to outcomes. Finally, differences in partnerships' structural characteristics appear to be related not only to their activities, but also to the strategy used to select priorities for action. Accordingly, our study underscores the importance of intentional and well-reasoned partnership design. Specific partnership design considerations are discussed at the conclusion of this article. The next section briefly reviews the literature on collaborative watershed partnerships, and the context for watershed planning in Oregon.

Collaborative Watershed Planning

A large literature pertaining to collaborative partnerships has emerged relatively quickly, much of it concerning watershed groups. Several studies have analyzed the use of collaborative partnerships to resolve conflicts over natural resources (Weber 1998; McGinnis et al. 1999; Woolley and McGinnis 1999; Huntington and Sommarstrom 2000; Kenney 2000; Wondolleck and Yaffee 2000; Weber 2003; Lubell 2004). Frequently exploratory in nature, much early research on collaborative partnerships focused on the unique successes of groups, and did not develop theories about how collaborative partnerships function in general, or what they are likely to accomplish (Moore and Koontz 2003). We have learned from decision behavior theory that groups are affected by many structural variables, yet we lack a complete understanding of how these variables affect the likelihood of organizing successful models of collective action (Ostrom 1998). For these groups that frequently lack legal authority, it is also difficult to apply lessons from participatory democratic theory (see Moote et al. 1997), as many collaborative partnerships are not directly related to administrative decision making or regulatory implementation. These

differences challenge practitioners and scholars alike to identify design principles that are appropriate for this new family of collaborative institutions.

While there are few comparative studies of watershed planning groups, existing literature identifies the planning process as an important factor for successful plan implementation (McGinnis et al. 1999; Huntington and Sommarstrom 2000; Bentrup 2001; Margerum 2002). Recently, a literature on evaluation has emerged, recognizing the variability in outcomes produced by collaborative groups (Leach and Pelkey 2001; Beierle and Cayford 2002; Leach et al. 2002; O'Leary and Bingham 2003). Often focusing on intrapartnership considerations, this research may be more relevant to practitioners than policymakers, as little research has been conducted with an eye toward identifying design-relevant characteristics that facilitate achievement of specific policy outcomes.

As governments increasingly foster and support the development of collaborative partnerships to address specific policy problems, it is important to understand how partnerships might be designed to achieve particular goals. Recognizing this need, several scholars have begun to investigate the links between partnerships' characteristics and their achievements. Korfmacher (2000), Steelman and Carmin (2002), and recently Moore and Koontz (2003) found that some types of groups are better suited to particular problems than others. In particular, Moore and Koontz identified significant differences in the activities pursued by Ohio watershed partnerships depending on the types of participants involved. Building on the *Rapid Watershed Planning Handbook* developed by the Center for Watershed Protection in 1998, Moore and Koontz devised a typology of watershed partnerships based on composition. Their typology distinguishes groups as *citizen-based*, *agency-based*, or *mixed*, based on their participants. Most notably, mixed groups were more likely to identify the creation of a management plan as an achievement, while citizen-based groups were more likely to cite lobbying or advocacy achievements. Both mixed and agency-based groups were more likely to cite group development and sustainability activities as achievements when compared to citizen-based groups (Moore and Koontz 2003). These findings make clear that structural elements of collaborative partnerships are important considerations along with the process-related elements that have been captured by earlier research. What remains unclear is (1) whether the relationship between composition and outcomes holds true elsewhere, and (2) whether consideration of other structural characteristics in relation to outcomes is useful. Additionally, as Moore and Koontz relied on a mail survey, they were unable to explore in depth the potential causal mechanisms behind their findings. Our study begins to fill these gaps by investigating the relationship between partnership structure and activities in one of the nation's first statewide collaborative watershed management initiatives.

Study Context: Watershed Planning in Oregon

Upon passage of the Oregon Coastal Salmon Restoration Initiative (OCSRI) in 1997, Oregon became one of the first states to formally institutionalize watershed partnerships as a part of the state's salmon recovery effort. Efforts to foster watershed partnerships in the state can be traced back to 1987, when Oregon Senate Bill 23 created the Governor's Watershed Enhancement Board (GWEB) to distribute funds to watershed partnerships. Responding to emerging threats of Endangered Species Act (ESA) listing of several populations of Oregon's salmon, the more

comprehensive OCSRI reiterated earlier policy goals and greatly expanded the scope of the state's commitment to watershed partnerships. The OCSRI quickly became known as the Oregon Plan for Salmon and Watersheds (hereafter referred to as the Oregon Plan) when the geographic focus was expanded from coastal fish populations to include the entire state. The broad mission of the Oregon Plan is to "to restore our coastal salmon populations and fisheries to productive and sustainable levels that will provide substantial environmental, cultural, and economic benefits." The eight goals articulated in the Oregon Plan encompass building capacity for community leadership of salmon recovery; building scientific capacity to plan for, implement, and monitor salmon recovery planning; and acquiring and maintaining adequate funding to ensure the long-term sustainability of the Oregon Plan (State of Oregon 1997).

Through provision of financial incentives and an accompanying media campaign, the Oregon Plan has fostered a network of collaborative watershed partnerships encompassing most of the state's land area (Oregon Watershed Enhancement Board [OWEB] 2001a). To achieve its multiple goals, the Oregon Plan seeks to balance flexibility and prescription, allowing watershed partnerships to define for themselves the partnership design that best suits their needs. The only structural requirements of watershed partnerships under the Oregon Plan are that they be locally organized, collaborative, nonregulatory institutions that are open to the public. Although the Oregon Plan suggests that watershed partnerships include participants from "timber, agriculture, aggregate, conservation, recreation, federal, state and local government including irrigation/drainage districts and city and county planning departments, residents, as well as the business community" (State of Oregon 1997, chap. 17), the state has done little monitoring or enforcement of these guidelines.

Unlike a traditional intergovernmental policy implementation scenario, the Oregon Plan does not delegate the state's authority for managing its water resources to local watershed partnerships. Instead, the Oregon Plan relies on the voluntary formation and operation of watershed partnerships that receive funding to plan for and conduct watershed improvement actions. Watershed partnerships are directed to conduct a scientific watershed assessment, to aid in the development of a prioritized action plan. The purpose of the action plan is to prioritize, select, and fund projects (e.g., stream restoration, environmental education), which should in turn be monitored for impact. Previous evaluation has documented a high degree of variability in the capacity and performance of the state's watershed partnerships (Rickenbach 1999; Huntington and Sommarstrom 2000; OWEB 2001a). Given the flexibility afforded in terms of partnership design, this variability makes the Oregon Plan well suited to the goals of our study.

Study Design and Methods

This study sought to investigate the relationship between the structure of watershed partnerships and their activities. *Structure* means the set of characteristics that can be used to describe a particular partnership (e.g., composition of participation, funding, age, or organizational affiliation). As the variables most easily manipulated—but not necessarily controlled—by policymakers, these structural attributes are particularly relevant to the design of policies and programs fostering collaboration. Partnership *activities* are the physical tasks that groups accomplish, such as the development of

plans or the completion of restoration projects. Unlike structural variables, activities are emergent characteristics of the process of collaboration and may or may not be directly related to policy design. Collecting data on 29 partnerships operating within a single state policy framework allowed us to compare partnerships sharing similar policy objectives and access to resources, yet characterized by different structural arrangements. Therefore, only partnerships formed since passage of the Oregon Plan were of interest for this study. We investigated a broad spectrum of types of partnerships by employing a stratified random sampling procedure. This marks a substantial methodological advance compared to many earlier studies, which have focused on intentionally selected cases, often representing well-known success stories.

Data were collected through personal interviews with staff members of a sample of watershed partnerships in Oregon. To ensure representation of the state's environmental, economic, and social diversity, a sampling design was used to select 29 partnerships for study. While many watershed partnerships already existed in the state prior 1997, these partnerships were not considered eligible for sampling because the factors affecting their development were influenced by earlier policy goals and in some cases radically different fiscal resources. Despite this strategy, it was not entirely possible to use a sampling strategy to rule out the effects of alternative policy goals. In addition to the Oregon Plan, during the late 1990s several federal policies and programs also encouraged watershed partnership formation (e.g., EQIP program under the 1995 Farm Bill); thus, some partnerships may have formed in response to multiple policy incentives.

Partnerships that had been in existence for less than 28 months were excluded, as these groups may have had insufficient time to develop plans, projects, or other outputs.¹ Combining information from a variety of sources, a "population" of 41 partnerships was determined to be eligible for sampling.² A stratified random sampling design was used to select partnerships to ensure adequate representation of the population.³ Partnerships were stratified by region into four groups: Coast/Southwest, Middle Columbia, Willamette Valley/Lower Columbia, and Central/Eastern. These regions correspond broadly to the "Major Watershed Basins of Oregon" delineation offered by the Oregon Department of Forestry (ODF 2003). While physiographic in origin, this categorization captures much of Oregon's environmental, economic, and social variability.

Primary data were gathered through personal interviews with 29 watershed partnership coordinators during the summer of 2002. As the only paid staff person for many of the partnerships studied, watershed coordinators are often the only reliable source of information about partnerships' composition, funding, and activities. Although there may be a weakness associated with a study design reliant upon one interview per partnership, the nature of our research questions justified the decision to prioritize breadth in our data gathering. In particular, interviews were not intended to measure perceptions of success or evaluate the collaborative group process, but rather to measure objective structural dimensions of the partnership and specific outcomes, such as plans and activities. All watershed coordinators contacted agreed to participate in the study, even those who indicated that they had recently refused to participate in other academic investigations. Several coordinators noted the investigator's willingness to travel to a place of their convenience, the limited time commitment required, and the lack of required participation by other, "study-fatigued" members of their partnership, as important factors contributing to their participation. All interviews were conducted by the primary investigator

to reduce potential interviewer bias, and were audiotaped to ensure accurate recording of interviewee's responses.

A semistructured interview style was employed, allowing for diversions from the interview guide where appropriate (Robson 2002). The interview guide was pretested with one of the watershed partnerships that had not been selected for study. Open-ended questions were designed to capture the variety of factors influencing group formation, the collaborative process, and project implementation. For example, coordinators were asked, "How have the projects completed to date been selected?" Follow-up questions were used to move beyond superficial responses such as "by consensus," and to learn more about the strategies used to prioritize and select activities. Subjects were asked about the role of funding, their assessment and action plan (if applicable), and the types of landowners that received funding for projects. Interview data was supplemented with a review of secondary sources when available (e.g., watershed assessments, action plans, partnership charters, and public outreach materials) to gain an in-depth understanding of the contextual issues affecting particular watershed partnerships. Because many of the partnership documents provided important details about the history and formation of the partnership, secondary documents were useful to triangulate and assess the completeness of interviewee responses. Data analysis was conducted in a manner consistent with the content analysis strategy suggested by Rubin and Rubin (1995). This strategy involves organizing data by coding important concepts or themes that recur throughout the data to aid in comparison and explanation building. Due to the complexity of the interview and document data, themes were identified iteratively using both deductive and inductive coding strategies based on the data themselves and from relevant literature (Wolcott 1990). Coded themes and demographic variables were recorded in Microsoft Excel for easy comparison and analysis.

Results and Discussion

Partnership Characteristics

As expected, Oregon's watershed partnerships are as varied as the state's watersheds. The watershed areas sampled ranged from small coastal drainages averaging more than 150 inches of precipitation each year to large desert basins that receive as little as 6 inches annually. These watersheds vary in size from 14,000 to 3 million acres, and include populations ranging from 100 to 50,000 people. The average age of the watershed partnerships studied was approximately 4.8 years,⁴ with a standard deviation of 1.3 years. Most partnerships reported forming in 1997 or 1998, in response to the initiation of the Oregon Plan. The watershed partnerships fell into two broad administrative categories: (1) those affiliated with an existing agency, such as a Soil and Water Conservation District (SWCD), as a parent organization; and (2) "independent" partnerships with no organizational affiliation. Fifteen partnerships were affiliated with a local agency, which served as their fiscal manager and in some cases provided additional staffing and support services. The 14 independent partnerships were established by citizens who later went on to seek partnership recognition by the state, and in some cases federal, government for tax purposes. All of the partnerships had at least a part-time paid coordinator, although several shared one coordinator with as many as four other watershed partnerships. At the time of this study, 83% of the partnerships studied were receiving coordinator funding from the state

agency responsible for overseeing the Oregon Plan, the Oregon Watershed Enhancement Board (OWEB). In some cases coordinator support was provided by the federal Bonneville Power Administration (BPA) and indirectly through various project-based grants.

Given that most of the watershed partnerships studied had been in existence for 4 years or longer, we expected that many would have completed both a watershed assessment and a prioritized action plan. Despite consistent encouragement from OWEB about the importance of assessment and action planning, significant diversity exists in the activities that partnerships have elected to pursue. Of the 29 partnerships studied, 18 had completed assessments, 5 were in the process of conducting their assessment, and 6 had no assessment. When asked, no partnership coordinator reported having had significant difficulties in obtaining funding for their assessment. Seventeen of the assessments completed or initiated at the time of the study were funded by OWEB, five by BPA, and one by the Bureau of Land Management. Although BPA funds were geographically concentrated in the watersheds that feed the Columbia River, OWEB assessment funds were distributed across the state. Partnerships without assessments were slightly younger on average than those with completed assessments (4.3 vs. 4.8 years, respectively), reflecting the fact that the two most recently formed partnerships studied had not yet acquired funding to conduct an assessment. Partnerships that lacked the technical capacity to conduct the assessment themselves frequently opted to contract with a consultant to complete the task. This finding suggests that missing assessments were a function of partnership priorities rather than physical limitations. Similarly, only 10 partnerships had completed what they considered to be an action plan, 11 had no plan at all, and another 8 had either an informal list of priorities or a plan developed externally without the input and collaboration of the partnerships' members. Partnership age shows no association with the decision to develop an action plan, with groups conducting plans and those forgoing them both averaging 4.8 years since formation. To one of the coordinators whose partnership had developed an action plan, the value seemed obvious:

It doesn't take a rocket scientist to look at a stream and say this looks ok or this looks really bad, but you need to have somebody that knows what they are doing in order to really tell you what is going on to a level of detail that you can actually prioritize one area over another.

Despite the absence of scientific assessments and action plans, 27 of 29 partnerships studied were implementing watershed restoration projects during the study period.⁵ OWEB stands out as the primary source of funding for the watershed partnerships studied, disseminating both state and federal funds. Of the \$32.6 million available for the Oregon Plan for the 2001–2003 biennium, \$26.5 million (81%) was earmarked for on-the-ground restoration projects, \$3.7 million (12%) for watershed assessment, monitoring, action planning, and outreach, and \$2.4 million (7%) for direct support for watershed councils (OWEB 2003). OWEB's heavy focus on funding restoration projects provides a strong incentive for watershed councils to minimize administrative processes (such as planning) and costs in favor of on-the-ground expenditures. Although OWEB's 2001 Strategy acknowledged that planning, monitoring and outreach efforts have been insufficient, and must be expanded for the Oregon Plan to achieve its mission, these activities remained poorly funded in

the 2001–2003 biennium (OWEB 2001b). Given OWEB's disposition toward funding restoration projects rather than planning, our finding of few completed action plans among the partnerships studied is not surprising. In light of this, it is valuable to consider why more than one third of partnerships studied had completed an action plan. The next two subsections explore the role of structural characteristics in explaining variation in partnership activities.

Partnership Composition and Activities

To investigate the role that partnership composition may play in affecting choices regarding activities, we attempted to apply the typology suggested by Moore and Koontz (2003), discussed earlier. Due to the heavy focus on citizen participation in the Oregon Plan, it was not possible to directly apply this typology, as none of the Oregon partnerships studied consisted primarily of agency personnel. Even where agency staff members were involved in the partnerships studied, they tended to participate as individuals rather than as formal representatives of their agency. Accordingly, all of Oregon's watershed partnerships are largely citizen based by design, making Moore and Koontz's typology inapplicable to the Oregon context. However, the number of types of stakeholder interests⁶ (e.g., agricultural, forestry, agency, environmental) in each watershed partnership proves to be informative in capturing the partnership composition concept, which lies at the heart of Moore and Koontz's typology. Table 1 shows differences in the percent of partnerships pursuing various activities based on the number of different types of stakeholder interests represented in the partnership. We see that those with fewer types of participants (more homogeneous groups) were less likely to complete scientific assessments or develop action plans, but were quite likely to conduct watershed improvement projects. The large portion of partnerships that had only one or two types of stakeholder interests made the use of three interests a natural cutoff point for comparison purposes. Although the small sample size does not permit the use of statistical techniques such as the chi-squared test, the percentages suggest a sharp difference between the 11 partnerships with less than three interests represented compared to the 18 partnerships with more diverse participation. Notable is the lack of action plan completion by the homogeneous partnerships, which at the same time are likely to be conducting projects.

The importance of inclusive participation in the collaborative process itself has been well established in the dispute resolution literature (Gray 1989; Innes et al. 1994; Lowry, Adler, and Milner 1997). Our findings complement this work,

Table 1. Percentage of partnerships conducting activities by diversity of composition

Watershed partnership activity	Percent of partnerships ($n = 29$)	
	Fewer than three interests represented ($n = 11$)	Three or more interests represented ($n = 18$)
Completed assessment	55%	94%
Developed action plan	0%	56%
Implementing projects	91%	94%

providing strong evidence that the composition and diversity of participants are related to both the decision-making processes that partnerships pursue and their substantive activities. Our findings also support those of Moore and Koontz (2003), who found that partnerships with mixed memberships were more likely than those comprised largely of citizens or agency staff alone to cite completion of a watershed plan as an achievement. The semistructured personal interview approach used in our study allowed for follow-up questioning in order to begin understanding the sources of this relationship.

Content analysis of interview data revealed the avoidance and mitigation of intrapartnership conflict, as well as strategic behavior for accessing funding resources, as important factors driving planning. Several of the partnerships that had completed action plans reported that there had been significant contentiousness in their group at the time of formation, or shortly thereafter. While these partnerships reported having a difficult time agreeing on projects and priorities, they did not have difficulty agreeing to conduct a scientific assessment of their watershed. The tendency for conflict-laden partnerships to be able to agree to focus on research or information sharing is not surprising, and has been observed in collaborative partnerships in Wisconsin and Australia (Margerum 2002). While explicitly stated by only a few of the coordinators interviewed, planning may provide for a formal process for struggling partnerships to negotiate and agree on shared priorities. Finally, other partnerships simply felt that an action plan would give them an advantage when competing for funding. Regardless of the cause, it is clear that the structure of participation in a watershed partnership does indeed affect the decision to pursue technical and administrative, rather than on-the-ground, activities. However, this finding alone ignores a critical question underlying partnership design: that is, why partnership composition is so variable. The next subsection discusses the relationship between organizational affiliation and partnerships' composition and activities.

Organizational Affiliation

Although it is intuitive that the diversity of participants involved in a partnership affects the outcomes, research to date has struggled to explain the causal mechanism driving this relationship. Without understanding how partnership composition affects outcomes, it is not possible to assess whether current participation is sufficient, or how future policies might be structured to facilitate achievement of specific policy outcomes. The tendency for diverse partnerships to face and strive to overcome conflict provides one mechanism by which differences in partnership composition may produce diverse outcomes. What this answer lacks is an explanation of why some watershed partnerships developed as heterogeneous groups, while others did not. Additionally, it is unclear why more homogeneous partnerships, which presumably avoided conflict, did not meet the assessment and planning requirements of the Oregon Plan. A closer look at partnership structure reveals that organizational affiliation appears to be strongly related to activities.

Given that watershed partnerships under the Oregon Plan are both required and reported to be open to the public, why is actual participation in the partnerships so variable? Certainly, some watersheds are more diverse than others, which presumably affects partnerships' membership heterogeneity. Nonetheless, nearly all partnerships had long-standing representation gaps (judged by the criteria established in the

Oregon Plan), regardless of the demographic characteristics of their watershed. For example, only 3 partnerships examined included representatives from city governments, while 17 of their watersheds included incorporated cities. Most partnership coordinators also discussed having a difficult time maintaining consistent participation from state and federal agency employees, whose jurisdictions frequently span several watersheds. Rather than mere stakeholder availability, there is evidence that partnership participation is structured by intrapartnership conceptions of the nature of watershed-related problems. This is demonstrated by the fact that all interviewees stated that their members represented all of the important stakeholders in their watershed, while it is clear when considering the criteria included in the Oregon Plan that many partnerships were missing key stakeholders. Despite the overarching policy context, the grass-roots nature of the Oregon Plan allows partnerships to define for themselves the problems they are interested in addressing, and subsequently, who should be involved. Conceptualizing participation as a function of internal rather than external factors helps to explain why some partnerships become more diverse than others. Comparing watershed partnership heterogeneity with partnerships' organizational affiliation reveals a distinct pattern. Fifteen of the 29 partnerships studied formed in affiliation with one of three types of agencies; SWCDs, Natural Resource Conservation Service (NRCS) offices, or state extension offices. In Oregon, an SWCD is legally defined as a subdivision of state government, but it functions as a local unit, led by a locally elected board of directors (ODA 2005). The State Department of Agriculture provides funding for SWCD program administration and staff, although many SWCDs also fund programs through grants. It should be emphasized that the agency-affiliated partnerships discussed here bear no resemblance to the agency-based partnerships described by Moore and Koontz (2003). Under the conception described here, both agency-affiliated and independent partnerships could include participation of agency staff, but only agency-affiliated partnerships had a formal partnership with an existing agency.

Table 2 shows that independent partnerships are far more likely to have a diverse membership than partnerships affiliated with existing agencies. While it may at first seem counterintuitive that partnerships affiliated with existing agencies would be so homogeneous, this underscores the strong relationships that existing agencies have with their constituents. Although watershed partnerships are supposed to be independent entities, partnerships often relied heavily on these agencies, which serve as their fiscal agent and may provide staff or other support. All three types of agencies represented here are primarily service-rendering entities that assist private (mostly agricultural) landowners. Not surprisingly, agricultural landowners comprised the largest portion of the membership in all but one of these partnerships. Watershed partnerships' organizational roots also help to illuminate why homogeneous groups are more likely to forgo the Oregon Plan's assessment and

Table 2. Partnership composition and organizational affiliation

Watershed partnership composition	Number of partnerships ($n = 29$)	
	Independent	Agency affiliated
Fewer than 3 interests represented	0	11
Three or more interests represented	14	4

Table 3. Percentage of partnerships conducting planning by organizational affiliation

Watershed partnership activity	Percent of partnerships (<i>n</i> = 29)	
	Independent (<i>n</i> = 14)	Agency affiliated (<i>n</i> = 15)
Developed action plan	57%	13%
No action plan	29%	47%
Using other plan	14%	40%

planning objectives in favor of on-the-ground restoration projects. Unlike partnerships that form as independent entities, the agencies that preceded formation of the watershed partnerships already had established restoration programs, and had a history of assisting landowners.

Evaluation of the relationship between partnerships' organizational affiliation and the activities that they choose to pursue reveals a pronounced difference between groups. Table 3 compares independent and agency-affiliated partnerships in terms of their decision to develop an action plan. Recall that developing an action plan is one of the few requirements, yet an underfunded aspect of the Oregon Plan. Independent partnerships were far more likely to create an action plan than those partnerships that had formed with an affiliation to an existing agency. Agency-affiliated partnerships were more likely to forgo planning altogether, or to rely on priorities developed through a preexisting plan or program external to their partnership. As these external documents were frequently developed by outside contractors during the assessment process, there was not necessarily any partnership input or consensus about the projects and priorities identified.

Lack of funding was the most common reason for not conducting an action plan cited by independent and agency-affiliated partnerships alike. In only 2 of the 10 cases where plans had been completed had partnerships garnered additional funding to cover the costs of their planning process. Funded or not, completion of action plans required large amounts of volunteer effort by both the members of the partnership as well as the coordinator. Rather than a function of participation or funding alone, these differences suggest that partnership behavior may relate to conceptions of watershed problems and the perceived need to establish new restoration priorities. Where partnerships were affiliated with agencies already conducting watershed restoration programs, coordinators frequently indicated that they already had an understanding of their watershed's problems, and were more interested in seeking funding for projects than in developing an action plan. Additionally, by including fewer stakeholders in the process, there are fewer opportunities for the restoration priorities of the parent agency to be reconstituted by the members of the partnership. As a result, agency-affiliated watershed partnerships appear to become new facades for existing programs, rather than truly new, bottom-up governance institutions. As one coordinator explained:

We kind of struggle with the fact that I am a SWCD employee and we basically are implementing SWCD programs, but we are trying to fit that into the Oregon Plan, which emphasizes watershed partnerships... For example, when [OWEB] formed their recent small grants program they

insisted on forming it around watershed lines, without recognizing that there are already administrative boundaries, that although it would be nice if they followed ridgelines, they don't. And so we have to organize whole new bodies that don't naturally function together in order to administer the program. . . . To work with them you have to take a square peg and wiggle it into a round hole. We had a process, they have their own concept. We're not doing away with the old process, we're making it fit into their hole.

These findings suggest that partnerships' organizational affiliation may be more than an administrative distinction, but may reflect a philosophical difference in approach. Nonetheless, the implications for the goals of the Oregon Plan are not immediately clear. Agency-affiliated watershed partnerships could simply be getting a head start on establishing restoration programs. On the other hand, agency-affiliated partnerships' preferred actions could be fundamentally biased through the interaction with their parent organizations. The next subsection begins to address this uncertainty by examining the processes that partnerships use to prioritize and select specific restoration projects.

Project Prioritization Strategies

Practically, the structural distinctions identified between partnerships are important if they translate into substantive differences in on-the-ground actions rather than simply procedural divergences. Despite the fact that the Oregon Plan is in its eighth year of implementation, it is still too early to judge the conservation value of individual watershed partnerships. Due to the 3- to 5-year life cycle of most salmon, along with the variety of factors affecting salmon decline, measuring partnership success in biological terms will be a difficult, or at least a long-term, proposition. While a challenge, the complexity inherent in salmon and watershed restoration makes a strong argument for a prioritization approach that is focused and strategic, rather than haphazard or opportunistic. As one coordinator put it:

I wonder if we are doing the right thing by throwing all this money at the problems. I'm not sure that we always have a good handle on what it was exactly that we did to get ourselves where we are in the first place. You don't think yourself out of a problem with the same thought process that you thought yourself into it with . . . we can't do it without the public funding, but I'm not sure that we can just sit back and spend the problem out of existence.

Despite the complexities involved in selecting particular restoration projects, 27 of the 29 groups studied were implementing projects. Table 4 illustrates the strategies watershed partnerships reported using to select restoration projects as a function of their organizational affiliation. Again, differences based on organizational affiliation are quite pronounced. Agency-affiliated partnerships tended to identify projects based on landowner interest or the interest of the members of the watershed partnership, while independent partnerships' project selection relied more heavily on their scientific assessment and action plan along with favorable opportunities. Therefore, differences in composition and organizational affiliation appear to be related not only to partnerships' activities, but also to the strategies partnerships use to establish

Table 4. Project selection strategy by organizational affiliation

Strategy for selecting projects	Percent of partnerships (<i>n</i> = 27)	
	Independent (<i>n</i> = 13)	Agency affiliated (<i>n</i> = 14)
Landowner interest	38%	86%
Action plan or assessment	31%	7%
Opportunity and/or funding	31%	7%

priorities for action. It is useful to recall that given the voluntary nature of the Oregon Plan, many projects (particularly on private land) must be somewhat opportunistic in order to succeed. This helps to explain why all partnerships commonly take advantage of willing landowners or funding opportunities. Despite this, the strong tendency for agency-affiliated partnerships to select restoration projects based primarily on landowner interests suggests that the decision-making norms that predate the formation of the watershed partnership are persistent. Rather than being overshadowed by the emergent priorities of the newly established watershed partnership, the landowner service mentality that characterizes the parent agencies appears to have strong effects on the norms that develop within partnerships.

Not surprisingly, these findings are consistent with long-standing theories regarding organizational innovation and decision making. Echoing the early findings by Gaus and Wolcott (1940), entities in contact with a particular clientele tend to respond to the satisfactions and goals of that clientele. Similarly, March and Simon (1958) argue that individuals and organizations give preferred treatment to alternatives that represent continuation of present programs over those that represent change. Although partnerships affiliated with existing agencies consistently included participation by members of the public, agency staff may in fact be “training” new members about existing organizational norms and standard operating procedures. Rather than collaboratively forging new priorities for action, agency-affiliated partnerships may continue to rely on “repertoires of programs of action suited to different situations” (March and Simon 1958, 155). Even where strong signals are sent indicating the importance of new programs of action, organizations are frequently slow to respond (Carpenter 1996). A search for new solutions is activated only when previously prepared solutions encoded in organizational routines are judged inadequate (Jones 2003). Our findings suggest that collaborative partnerships may behave like traditional bureaucratic institutions in important respects. The context and history of a collaborative partnership thus becomes critical to understanding their behavior. At least in the 29 cases studied here, partnerships that form in affiliation with an existing agency are therefore not simply building on the experience of their parent organization, but are likely to behave in the same fashion. The final section considers these findings collectively and offers suggestions regarding the design of collaborative partnerships.

Designing Collaborative Partnerships

Collaboration is by design an emergent process, and it is expected that the structure and activities of collaborative partnerships will vary based on unique participants,

geography, history, and other intrapartnership characteristics. Despite their variability, collaborative partnerships increasingly find themselves nested within a complex hierarchy of governance. A better understanding of how policy-relevant variables affect the likelihood of successful collective action is needed. We found that structural characteristics of collaborative partnerships are related to both process and outcomes. Consistent with previous work, the composition of interests represented in a partnership is related to the outcomes of the process. A deeper investigation of this pattern reveals that organizational affiliation appears to have a profound impact on the partnerships' activities. While independent partnerships develop their own priorities, partnerships affiliated with existing agencies tend to adopt the problems and strategies defined by their parent organization. These results suggest that watershed partnerships' behavior in Oregon is largely driven by factors endogenous to the partnership, rather than by external pressure from the state or federal government. For scholars of collaboration, these findings may raise concerns that some partnerships may be forgoing the deliberative dialogue, shared learning, and consensus decision making that are often the primary features of collaborative processes, and may simply be adapting to the availability of public funding sources. Although more intentional design and targeted incentives may help to encourage desired partnership behaviors, policymakers would be wise to realize that these steps may also produce an unintended effect, overshadowing the desired ends of the collaborative process itself and replacing them with processes captured by the very organizations and interests they were designed to mediate.

Getting Partnerships Right: Diversity, Incentives, and Organizations

From a policy design perspective, several important conclusions can be drawn for governments seeking to facilitate collaborative partnerships. First, diverse participation is extremely important if the process of collaboration is to result in changes in the management of water resources. Whether through assessment, planning or the day-to-day operations of the partnership, heterogeneous groups are forced to wrestle with their internal differences and establish new collective goals and strategies to achieve them. Without such diversity, partnerships in Oregon seem inclined to serve only the narrow interests of a select few constituents, potentially leading to relatively little difference compared to status quo programs. Particularly where funds directed toward collaborative efforts are reappropriated from other programs rather than from entirely new sources of funding, the net effect may be a simple renaming of existing institutions, rather than the creation of new ones. Where they only remodel existing agency programs, collaborative natural resource management programs may easily (and perhaps appropriately) become construed as merely symbolic policies, as Lubell (2004) suggests. If watershed partnerships are to play a valuable substantive role in states' watershed management programs, then encouraging and maintaining heterogeneous participation is critical.

Second, the experience of the Oregon Plan makes it clear that an "open door" policy on participation is insufficient to ensure that a diversity of interests will be represented within a partnership. As long as participation is voluntary, active recruiting will be necessary to include a variety of perspectives in a partnership. As collaborative policies are developed, sponsors must strike a balance between the proverbial "carrots and sticks" to achieve an appropriate balance of participants. For example, as with other types of collaborative processes such as regulatory negotiation

at the federal level, states might consider providing monetary and technical resources to facilitate participation of underrepresented stakeholders (Ryan 2000).

Finally, our results illustrate the importance of considering organizational affiliation in the design of collaborative natural resource management policies. Although Margerum (2001) identified stakeholder concerns about agency dominance in some agency-led partnerships, previous research had not thoroughly investigated the effects of organizational affiliation on collaborative partnership process or activities. Results from this study suggest that organizational culture and preexisting constituent relationships may dictate partnerships' definition of the problem and the range of preferred alternatives in agency-affiliated partnerships in Oregon. Although those preferences can be expected to change depending on the agency involved, policymakers should recognize that they are unlikely to match those of an independent partnership. Depending on the specific ecological goals at hand, the organizational and participatory biases related to affiliation are likely to range in intensity, and may or may not justify the creation of new institutions. Particularly, in some areas (e.g., extremely rural areas), independent partnerships may initially lack the administrative capacity to perform duties such as grant writing and administration. Rather than forgoing independent partnerships in these areas, policymakers may need to provide additional assistance. Regardless of the affiliation decision, states would do well to explicitly recognize the implications of organizational affiliation when designing policies that foster collaboration. Without ample resources to enhance capacity, collaboration should be expected to reinforce rather than replace institutional norms.

Because data for this study come from one state, it is not clear that the relationships between partnership structure and outcomes will be the same in all situations. Nonetheless, as the Oregon Plan was one of the first statewide watershed initiatives to rely primarily on collaborative partnerships, it is a logical place to begin such an inquiry. Although the methodology employed here did not permit in-depth analysis of within-partnership behavior, there is certainly much to be learned about the social processes producing the patterns observed here that could help to further clarify the relationships between partnerships' design and activities. Ideally, future studies could test and refine the relationships identified here through cross-state comparative and larger sample statistical analysis. At the same time, additional case-study research remains important to reveal the complex social processes that govern interaction within collaborative partnerships, ultimately creating the patterns that are observed in comparative analyses. As states consider new strategies, or look to refine existing approaches for watershed management, guidelines for designing collaborative partnerships will continue to be extremely useful. Furthermore, understanding the relationship between partnership design and performance may prove valuable beyond the sphere of watershed management, as new governance strategies become more common in a variety of policy domains.

Notes

1. See Huntington and Sommarstrom (2000).
2. Current partnerships were identified from the Oregon Watershed Enhancement Board's web page at http://www.oweb.state.or.us/groups/WSC_List.shtml, along with For the Sake of Salmon, which maintains a list of watershed groups available at <http://www.4sos.org/wsgroups/wsgroups-or.html>. Partnerships formed before 1997 were identified from *The Oregon Plan: Coastal Salmon Restoration Initiative* (State of Oregon 1997) and from survey data provided by Dr. Mark Rickenbach, who surveyed Oregon watershed

partnerships in 1998 as part of his PhD dissertation at Oregon State University. Partnerships identified by either source as being formed prior to 1997 were removed from the sample population.

3. Sample size assumed a conservative 50/50 probability of responses and standard error of 10%.
4. Some partnerships met informally for extended periods of time before seeking official recognition. Data reported here represent what coordinators considered to be the date the group formed.
5. Restoration projects include fish passage, riparian planting and weed control, removing or altering dikes, gravel push-up dams and tide gates, and installing sediment control basins and terraces.
6. *Interests* were defined as either a professional or academic association with a resource/subject area.

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