AN ABSTRACT OF THE THESIS OF

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Abstract Approved: A. Scott Reed

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Oregon's watershed councils are local, non-regulatory, collaborative forums charged with the recovery of endangered salmon and improving water quality under *The Oregon Plan for Salmon and Watersheds*. Private forest landowners, given their prominence is owning riparian areas, are central to success of these efforts. Using a statewide survey of watershed councils and in-depth qualitative data collection in three study areas (Central Oregon, North Coast, and South Coast), a case study of landowner involvement is developed and explored. Using a manuscript format, three manuscripts form the basis of the thesis. Manuscript 1 describes the status of Oregon's watershed councils and postulates the concept of spatial participation. This term describes a spatially-explicit aspect of social capital in people and institutions with control over resources of interest (e.g., land, authority, water rights, etc.) are able to effect change on the landscape. Manuscript 2 applies the concepts of world view and human values to woodland owners' interactions with watershed councils. Landowners apply four salient values -- stewardship ethic, perception of others, need for control, and action-orientation -- in deciding their relationship to watershed councils. Through this lens, watershed councils are seen as one of many opportunities for landowner involvement. Manuscript 3 takes the results of the first two and suggests policy and education tools to further the work of watershed councils. These tools include programs that target landowners and watershed councils, stress the role of capacity building, and realize that councils compete for scarce time. Opportunities for future research are also discussed.

Watershed Councils and Woodland Owners:

The Oregon Experience

by

Mark G. Rickenbach

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I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

Mark G. Rickenbach, Author

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Where to begin? It is difficult to acknowledge everyone who either had a hand in this project or, more importantly, bringing me to this place. A doctoral thesis is a defining part of the writer's life: It intertwines the individual and the research so tightly that forever the two are linked. As Steve (Daniels) mentioned early on, doctoral degrees are not so much intellectual accomplishments as tests of will and persistence. If that is the case (and it is in mine), the support of institutions, faculty, friends, and family have made the difference.

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Contribution of Authors

Dr. A. Scott Reed contributed practical guidance in the development of the project and provided critique and commentary on all three manuscripts -- in particular the third one. Dr. John Bliss provided significant intellectual guidance on the first two manuscripts. His critique and commentary on manuscript two were substantial and greatly enhanced its value and clarity.

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Hard to choose, so I won't.

This work is on behalf of their voices and dedicated to Zoë, my beacon.

Woodland Owners and Watershed Councils: The Oregon Experience

Introduction

In 1996, the National Marine Fisheries Service (NMFS) proposed listing coho salmon throughout the coastal Pacific Northwest under the Endangered Species Act (ESA). In response, the State of Oregon initiated and continues to pursue an innovative approach to species recovery. Through *The Oregon Plan for Salmon and Watersheds* (*The Oregon Plan*), a substantial portion of the state's restoration efforts depend on local collaborative organizations, called watershed councils. This thesis, through three manuscripts, attempts to describe and understand one portion of that innovation: The involvement of nonindustrial private forest (NIPF) or woodland[1] owners on watershed councils under *The Oregon Plan* (State of Oregon 1997, 1998a). At this point, those ideas and relationships have very little meaning to readers unfamiliar with the topic.

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[1] While "NIPF owners" is currently the prevailing descriptive term for individuals and families that own forestland, the term is not always seen as desirable from some landowners' perspectives. For this reason, as well as the term's implied bias, we will refer to this group of owners who generally own fewer than 5,000 acres of forests and do not own a processing facility as woodland owners. In situations where woodland owners are also ranchers or have other ties to the land, we will seek to portray the different aspect of land ownership and management.

However, over the course of the next hundred pages or so, we[2] hope that you will come to understand this dynamic and complex relationship.

Research Questions

This is a thesis in three parts; nevertheless, it did not begin that way. In 1997, there was only an idea: Investigating the involvement of woodland owners in watershed councils. The project had four objectives.

1. Characterize, on a limited scale, the variation of watershed councils in Oregon as to their organizational structure, membership, land ownership patterns, and other characteristics to better understand the current state of watershed councils.

Within selected study areas,

2. Develop a framework of the social, political, and economic context surrounding the councils and local communities.
3. Identify the range of woodland owner involvement in watershed councils as a function of their beliefs, attitudes, perceptions, motivations, land management goals, and assessment of tradeoffs regarding watershed councils.

Lastly,

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[2] Given the collaborative nature of this work and the manuscript format, the global "we" is used throughout this document. When greater clarification is required, footnotes will be used.

4. As appropriate, identify issues, opportunities, and mechanisms for education directed toward woodland owners, councils, or other interested parties (i.e., extension faculty, government agencies, etc.) within the specified watersheds and beyond.

Methodological Overview

The methods are presented in much greater detail in Manuscripts 1 and 2, but an overview will help orient the reader. To address the objectives, we developed a case study of landowner participation in voluntary, collaborative natural resource forums. Specifically, we investigated the involvement of woodland owners in Oregon's watershed councils. Oregon has a number of exceptionally well-known and active councils (e.g. The Grande Ronde Model Watershed Project and The Applegate Partnership) that predate *The Oregon Plan.* However, it was our interest to understand the typical situation of councils. Using Yin's (1994) approach, we used both quantitative and qualitative social science methods. The case study's effectiveness and value were seen as dependent on collecting qualitative data through interviews and observations within several study areas throughout the state due to the emergent nature of watershed councils and the exploratory nature of the study.

Case studies investigate contemporary occurrences in their actual settings. The strength of this approach is that it can capture both situational (involvement in watershed councils) and contextual (competing opportunities, social capital) elements and account for potential explanations from each. A case study is not solely data collection or research design, but "a comprehensive research strategy" (Yin 1994:13). The strength of case studies is that they illuminate specific examples of a phenomenon and provide understanding that can be applied to similar situations. In doing so, a case study might focus on particularly good or bad examples of something. As is the case in this work, they may also describe and enlighten our sense of a typical event or occurrence. The value of a case study is to provide description and understanding of a particular event or setting in such a way that it provides insight into related, similar events or settings.

The relative newness of watershed councils and their role under *The Oregon Plan* suggested that qualitative methods might allow us to understand this phenomenon from the owners' perspective (Patton 1990). Instead of holding subjects or respondents at a distance, the researcher can see the settings, if not participate in them. The fact that the researcher is there, has the potential to bias the interaction, but it is also the only way to learn about certain aspects of interaction. "Being there" allows the researcher to more fully investigate a situation through following up particular lines of inquiry and observation. In addition, no clear theoretical model seemed evident in anecdotal accounts of landowner interactions with councils. The case study approach would allow us to explore this phenomenon with a minimum of imposed theories or ideas. From the start, selecting appropriate study areas was seen as critical. However, when this study began, little systematic data regarding councils existed and none had statewide coverage.

In order to strategically select study areas, we conducted a telephone and mail survey of Oregon's watershed councils. Data were collected on basic organizational structure, the description of the watershed, and assessment of the council's situation. This data formed the basis for selecting study sites based on a series of criteria that identified where woodland owners were relevant to the council's mission. Three study areas were eventually selected for in-depth qualitative fieldwork.

Within these study areas, interviews were conducted with landowners, watershed council members, and other informants. We attempted to understand how the council fit with the lives of private landowners and people's perceptions regarding the council. Interviews were the primary source of data for this study, but not the only one. Attending watershed council meetings and requesting documents from councils provided useful background information on how the councils operated during and prior to the interviews. The analysis of these data in concert with the survey data resulted in the three manuscripts that comprise this thesis.

Summary of Manuscripts

All three manuscripts, with some additional editing and tailoring, will be submitted for scholarly publication in appropriate journals. Each explores a slightly different aspect of the study. Manuscript 1 describes watershed councils and addresses a particular issue associated with them. The world view of woodland owners provides the basis for understanding watershed councils in Manuscript 2. In being an applied study, Manuscript 3 consolidates the previous two and offers specific policy and education opportunities. Synopses are below.

Manuscript 1

Using a survey of watershed councils and interviews with landowners, council members and others, this manuscript assesses the implications of spatial participation -- a spatially explicit aspect of social capital. Social capital is the ability of local individuals, groups, and institutions to develop, maintain, and tap social networks to collectively act. The distribution of land across a mosaic of different owners and differing levels of involvement poses a problem for councils that social theory has yet to clearly addressed: "Who, or more precisely, Who in what location participates?" is essential to understanding the ability of councils to effect change on the landscape. Spatial participation is more fully developed and some tentative guidelines are suggested.

Manuscript 2

Using the theories of world view and human values, watershed councils are investigated from the landowner's point of view. Relying on qualitative interviews with private landowners, watershed councils, and others, we develop a framework for understanding the involvement of landowners on councils and in council activities. Four salient values expressed by interviewees suggest that landowners adapt watershed councils to fit their needs and expectations. Despite councils' intent to foster local dialogue, many landowners find this process tedious and unproductive. For these individuals, councils are an opportunity for cost-share, education, or technical assistance that does not require participation in the monthly meetings nor in the decision-making processes.

Manuscript 3

Fulfilling the last study objective, Manuscript 3 addresses the policy and educational implications of the study. Using greater social interest in private forestry as an organizing theme, the article briefly describes the research and offers both policy and education ideas targeted at councils and landowners in fostering participation in natural resource forums. This idea depends on considering landowner world view and spatial participation together.

Spatial Participation in Oregon's Watershed Councils

Introduction

In 1996, NMFS proposed listing coho salmon throughout much of the coastal Pacific Northwest under the ESA. In response to the proposed listing, Oregon, under the visible leadership of the governor, offered an alternative to federal oversight. This approach, embodied in *The Oregon Plan for Salmon and Watersheds* (State of Oregon 1997, 1998a), framed species recovery as a social and cultural issue, expanded rigorous enforcement of existing laws statewide and favored local, voluntary action over additional regulation. Watershed councils[3] were to lead the local efforts.

A watershed council is a locally organized, voluntary, non-regulatory organization that facilitates restoration activities over a fixed geographic area. Watershed councils, as envisioned in *The Oregon Plan,* were not new to Oregon or the nation. Several watershed councils had been active across Oregon and elsewhere prior to the inception of *The Oregon Plan.* The innovation lies in the statewide encouragement of and reliance upon watershed councils for species restoration.

Initially, NMFS accepted Oregon's approach to species recovery. Eventually, through a court challenge by a coalition of environmental organizations, a federal magistrate ordered the agency to reconsider its decision and list coho salmon. Despite these events, *The Oregon Plan* continues as a parallel structure to federal action and is currently the only mechanism in place to actively work toward fish recovery. NMFS has yet to write specific rules as called for in the ESA. As other salmon species were listed and the U.S. Environmental Protection Agency (EPA) listed streams under the Clean Water Act (CWA), *The Oregon Plan* was expanded to recover these species and improve water quality throughout the state (State of Oregon 1998a). Watershed councils continue to be the forums for leadership, planning, and action at the local level.

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[3] Watershed councils are to be interpreted to include any basin-oriented group within Oregon. Some use the term basin group or association.

In this manuscript, we investigate Oregon's watershed councils and their ability to foster participation among private landowners. Through a survey, we collected baseline information on the councils statewide and report it here. We also collected qualitative data in three study areas to better understand landowner participation. In particular, we focus on the relationship between participation and on-the-ground accomplishments on private land through an emergent, spatially explicit aspect of social capital that we call spatial participation.

Understanding the Literature

Watershed councils, as a complement to more traditional regulatory approaches to species recovery and water quality improvement, require a consideration of both ecosystems and social institutions. We review literature on the NIPF or woodland owners and the social aspects of ecosystem management. Given the voluntary nature of watershed councils, we also outline past thought and research on cooperation and social capital.

Ecosystem Management

The emergence of ecosystem management as an alternative to previous approaches to land management requires all landowners to look across property lines as one aspect. Ecosystem management has been variously defined (Grumbine 1994, SAF 1993). Wood (1994:6) provides a useful working definition: "The integration of ecologic, economic, and social principles to manage biological and physical systems in a manner that safeguards the ecological sustainability, natural diversity, and productivity of the landscape." Wood further explains that the three component principles are not weighted equally; the economic and social outputs are constrained by the ecological. To continue as a viable management regime; however, it must also provide the values that society requires of its forested landscapes (Salwasser 1994).

Relating to private land ownership, landscape considerations and their implied social obligations have only recently been investigated and discussed (Knight and Landres 1998, Bliss and Martin, in press). Much of the recent work has studied landowners' opinions and willingness to collaborate in land management. Brunson et al. (1996) found that landowners were willing to consider greater coordination with neighbors, but were concerned over losing control and how such coordination might occur. Rickenbach et al. (1998) found favorable attitudes among Massachusetts landowners toward three dimensions of ecosystem management, one of which was a landscape perspective. It is likely that incentives would be necessary to facilitate such cooperative arrangements by private landowners (Stevens et al. 1999)

While the focus in the NIPF literature has been on willingness to cooperate, the larger natural resource literature has evaluated the ways in which social institutions might facilitate an ecosystem-based approach. Yaffee (1996) argues that social institutions are critical for coordinating landscape management. Endter-Wada et al. (1998) see a greater role for social process in the application of ecosystem management to foster social learning. Elsewhere, Yaffee (1998) suggests that the key to achieving the cross-boundary aspect of ecosystem management resides in cooperation. He posits that cooperation is a balance between cooperative and individualistic influences. Cooperative influences include the potential benefits of joint action, similar problem definition, shared goals, sense of place, leadership, greater public interest to name a few. Conflicting goals, differing norms, need for autonomy, and existing policy frameworks are among the individualistic influences.

In a synthesis of European community theory and practice, Robinson and Ambrose (1996:85) see four key advantages in a community-based, collaborative approach to natural resource management, three of which are relevant here: (1) allows for greater cooperation among local professionals and the volunteer network, (2) provides "realization to local aspirations," (3) fosters greater value for the local environment. However, they also argue that such approaches cannot be solely left in the hands of the local community. Government must ensure that the local community has the resources it needs and be willing to accept that local communities have different priorities than the national government.

Cooperation

Both Yaffee's and Robinson and Ambrose's strategies are consistent with the social psychological literature on cooperation. Social psychologists have identified three aspects that are essential for cooperative solutions: (1) perceived consensus, (2) community or group identity, and (3) legitimacy of authority. Bouas and Komorita (1996) found that perceived consensus -- the belief among participants that they are in general agreement about their next steps or envisioned future -- reduces the risk associated with cooperation and is fostered through discussion (Orbell et al. 1988). In not requiring an action vote or articulation of the item under consideration, perceived consensus is usually much easier to achieve than consensus. Second, community or group identity (Bouas and Komorita 1996, Tyler and Lind 1992) stresses that the degree to which one is a part of the group will affect one's willingness to cooperate. Third, to be effective the decision-makers must be perceived as legitimate and capable to the task (Tyler and Degoey 1995). While legitimacy is enhanced by the group's ability to deliver fair, satisfying decisions (Rogowski 1974), more recent research (Lind and Tyler 1988, Tyler and Lind 1992) emphasizes procedural rather than distributive outcomes.

Despite a well-developed theoretical basis on cooperation, applications on a landscape have been more elusive. Examples and descriptions (Muckenfuss 1992, Duncan 1998) of landscape and ecosystem management that include sizable acres of private lands have been more common in recent years, but, until recently, scant systematic analysis has occurred. Changing that trend, Cheng (1999), through a case study of Oregon's watershed councils, found that members of a watershed council with a smaller geographic area had a greater shared knowledge and commitment than did those in a watershed council with a larger area.

Social Capital

In relying on voluntary local efforts, the state's approach suggests another theoretical perspective: social capital. Through *The Oregon Plan* and other policy actions, the state developed a legal basis for watershed councils (HB 3441), encouraged state agencies to assist councils (State of Oregon 1998a), and provided financial resources. In sum, the state created an environment to empower communities to increase their capacity to address local environmental issues; the state invested in social capital.

Social capital can be considered at several levels ranging from the individual to an entire nation (Portes 1998, Paxton 1999). Given our emphasis on community-based restoration efforts, we define social capital as the ability of local individuals, groups, and institutions to develop, maintain, and tap social networks to collectively act within a community (Flora 1998, Putnam 1993). Through the use of existing social networks and developing new ones, actions occur that no single entity within the network could achieve individually. Participation within the social network allows individuals to take advantage of the network's status and resources for personal or group benefit (Calhourn 1993).

Communities can have horizontal, hierarchical, or no social capital (Flora and Flora 1993). A lack of social capital results in social fragmentation and isolation (Flora et al. 1997). The horizontal form is relationships between individuals with similar social locations. Within a watershed council, this might be the individual members' ability to recruit neighboring landowners to participate in a project. Hierarchical social capital is relationships between individuals with differing social location. This might occur when an individual working on behalf of the council is able to recruit experts on a particular topic or secure resources from outside the council.

Social capital within a community context is generally seen as a positive force, but this may not be so when it maintains unequal social conditions and power relationships (Schulman and Anderson 1999) or reduces diversity (Portes and Landolt 1996). In addition, social capital is not distributed evenly over a geographical landscape (Edwards and Foley 1998). Due to differences in local history, culture, community, and geography, social capital is high is some areas and not in others. Social capital alone does not lead to community well-being. Flora (1998) argues that social capital must be operationalized into specific goals and tasks to be effective.

In building local capacity, *The Oregon Plan* attempts to provide those specific goals and tasks in the form of species recovery and water quality improvements. Through directing funds and technical assistance to councils statewide, *The Oregon Plan* tries to level the playing field between well-established and emergent councils. Many (e.g., Etzioni 1993, Fukuyama 1995) have criticized the role of government in developing social capital, but Warner (1999) sees government as essential in fostering social capital so long as the role shifts from that a controlling position to that of a convener and facilitator.

Research Questions

In this paper, we explore the within watershed aspect of participation through the development of the idea of spatial participation. Spatial participation emerged through our investigation of woodland owner involvement in Oregon's watershed councils through two research questions:

1. How do woodland owners involve themselves with watershed councils?
2. What are the spatial implications of differing involvement?

Spatial participation attempts to understand watershed (and landscape) management as a function of differing involvement across a geographical area. While our data concentrates on watershed councils and the participation of mostly private forest landowners, it also provides insights for others grappling with landscape concepts on mixed ownerships.

Methods

Through a case study (Yin 1994) of woodland owner involvement on watershed councils, we[4] collected data in two steps. At the start of this project, scant systematic information about watershed councils in Oregon was available. To learn about councils and allow informed selection of study areas, we conducted a survey of watershed councils. Using the survey data, we selected three study areas in which we used qualitative social science methods. The details of our approach are described below.

Watershed Council Survey

From each watershed council in Oregon, we attempted to collect contact information, a simple description of the watershed, status on several organizational tasks, a list of interests represented on the council, an assessment of available technical assistance, a description of the decision-making style, and an assessment of recent successes and barriers. A telephone interview script was developed and pretested by individuals familiar with watershed councils (Appendix A). We conducted phone interviews over three months (May-July 1998). During this period, at least four attempts were made to contact a representative (i.e., coordinator or officer) of each group. Interviews were conducted with representatives from 59 watershed councils.

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[4] All the data, both the council survey and the within study area qualitative work, were collected by Mark Rickenbach. "We" is used throughout to minimize confusion.

To ensure more complete coverage, we conducted an abbreviated multi-wave (i.e., initial mailing, follow-up postcard) mail survey (Dillman 1978) among those who had yet to respond. The survey instrument closely resembled the telephone interview script (Appendix A). Another 11 councils responded to our mail survey for a total of 70 responses. Based on the list provided by the Oregon Watershed Enhancement Board[5] (OWEB) and references by interviewees and respondents, we estimated that there were 83 watershed councils in 1998 and calculated our overall response rate to be 84%.

Study Area Selection

The overall focus of the project was to understand the involvement of woodland owners on watershed councils. In order to select study areas that would include these individuals, we used the watershed council survey data to identify those areas of the state that had councils with a significant presence (30% of the area or more) of both forestland (public and private) within the watershed and private ownership within the watershed. From this subset of councils (which generally excluded urban and some agricultural portions of the state), we selected study areas that (1) reflected Oregon's diversity of landscapes, (2) included varied watershed council structures and membership, and (3) avoided on-going social science research

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[5] In 1999, the Governor's Watershed Enhancement Board (GWEB) was restructured into the Oregon Watershed Enhancement Board and serves the same general function. We will use only the newer title throughout this work to limit confusion.

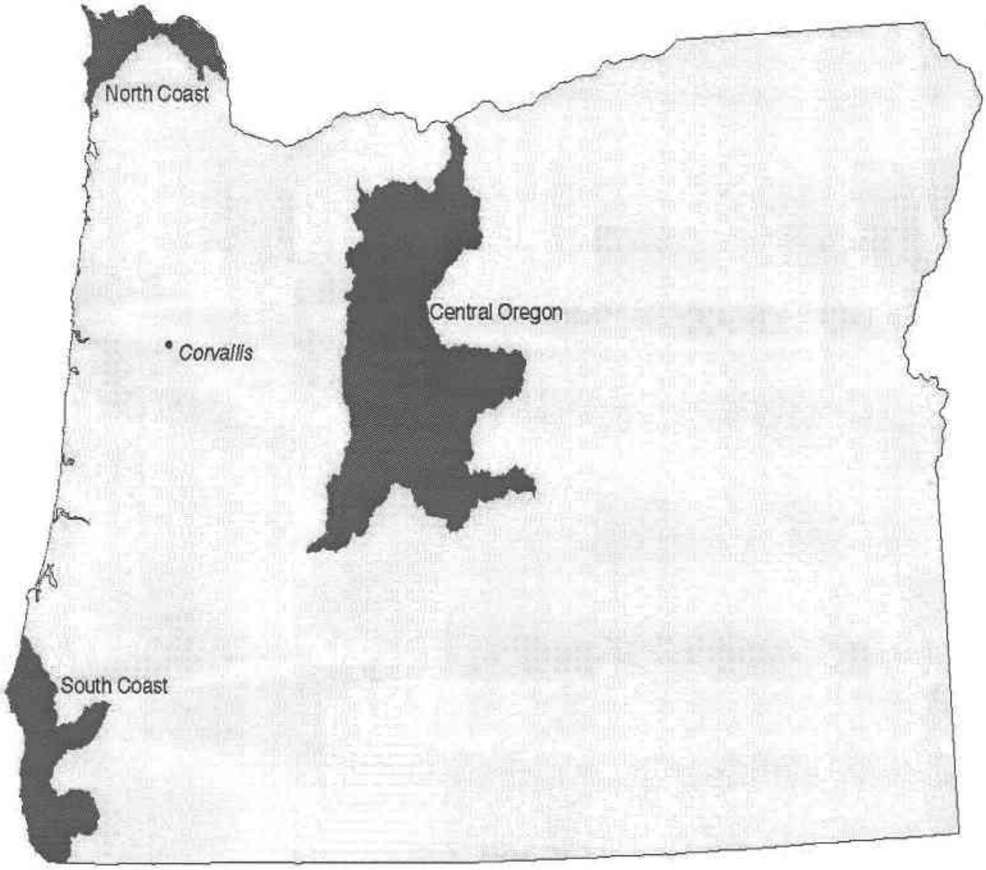

Figure 1. Map of study area sixth field hydrologic units (watersheds) where interviewees resided or in which the eight study area watershed councils were located.

on watershed councils. This last constraint was included due to the proliferation of research on and with watershed councils. Early conversations with informants familiar with councils suggested that some councils were "burned out" on research and that several councils were fed up with being under the "scientists' microscope" (pers.

communication, Louise Solliday, 12 November 1997). Our three study areas (Figure 2) (North Coast, South Coast, and Central Oregon) included eight watershed councils.

Within Study Area Data Collection

Within the three study areas, our primary data collection technique was semi-structured interviews (Patton 1990, McCracken 1988) with watershed council members, landowners, state agency employees, and extension agents. Our interview protocol focused on understanding the concerns that private landowners' have regarding land management, their perceptions of councils and their involvement on councils and other community organizations (Appendix B).

We identified interviewees through snowball sampling (Patton 1990). In this process, initial interviewees, identified through attendance at watershed council meetings, participation in woodland owner events, or recommendations by local informants, suggested others to talk to with both similar and different points of view. This process continued until new information or ideas were not present in the interview data. We collected additional data through observations of watershed council meetings and reviews of meeting minutes.

Over eight months, we interviewed 50 people of which 28 were landowners, 14 were watershed council members or staff other than landowners, and 8 of whom were public employees. Of the landowners, 9 were members of watershed councils, 7 cooperated with watershed councils, but were not members, and the remaining 12 were currently not involved. The 8 agency employees represented USDA Natural Resource Conservation Service (NRCS), Oregon Department of Fish and Wildlife (ODF&W), Oregon Department of Forestry (ODF), Oregon Department of Water Resources (ODWR), and OSU Extension. The breakdown by study areas is provided in Table 1. Interviews lasted anywhere from 20 minutes to 120 minutes with an average time of approximately 45 minutes. Through a combination of tape-recorded transcriptions (22) and unrecorded interview field notes (28), over 25,380 lines of text were available for analysis. Field notes from observations of meeting and other events and council meeting minutes yielded an additional 10,000 lines.

Table 1. Breakdown of interviewees and number of watershed councils by study area.

Region	***Total Interviewees***	*Land-owners*	*Council members*	*Public employees*	**Councils**
Central Oregon	13	7	2	4	1
North Coast	18	10	5	3	3
South Coast	19	12	5	2	4

We used thematic analysis (Boyatzis 1998) to analyze and interpret the data. Under this approach textual data is read to identify key themes. Themes might be common to all interviews or some subset. Analysis was accomplished through an initial process of coding, in which each theme was given a unique code. We coded the text for generalized opinions, statements, descriptions, and actions. Codes were refined with relationships between different codes yielding a framework for understanding the social phenomenon. Theoretical relationships were not imposed on the data *a priori*, but emerged from it in what is typically referred to as grounded theory (Glaser and Strauss 1967, Strauss and Corbin 1991, Strauss 1987). The patterns present in the text formed the basis for developing results and informing their interpretations. We were aided in this process through the use of the qualitative analysis software package, Ethnograph (Seidel 1998).

Results

The mix of methods yielded both aggregate data on watershed councils across the state and in-depth textual data from our three study areas. In this section, we will use both to explore watershed councils. Using survey data, we will provide an overview of the status and activities of councils at the time of the survey. Next, we describe the four decision-making styles of, and the interests that are represented on, Oregon's watershed councils. Lastly, we develop a definition of spatial participation that depends heavily on social capital.

Council Activities

In assessing the current status of watershed councils, we evaluated several of the organizational tasks that most watershed councils complete (Table 2). Certain of these are required. Government recognition is mandated under Oregon law (HB 3441) and a watershed assessment is a prerequisite for grants available through OWEB. The other tasks on Table 2 are those that most formal groups complete to structure their organizations. At the time of the survey, at least 80% of the groups had accomplished the basic organizational tasks (i.e., recognition, mission statement, bylaws). A few groups had sought nonprofit status. Although not required under *The Oregon Plan*, this status may be advantageous for some groups in seeking grants and maintaining accountability. Only 50% had finished an assessment or an action plan. Both of these require time that many of the groups did not have at the time of the survey. Except for a few councils that predate *The Oregon Plan* (1997) (Figure 2), our survey occurred soon after the formation of most councils.

Councils perform two types of activities. First, councils complete tasks that create the institutional structures, documentation, and relationships that define the group and allow it to function that are described above. Second, given their mandate under *The Oregon Plan*, watershed councils are to engage in on-the-ground activities that improve water quality or salmon habitat. For example, councils might hold an education meeting for the local community or plant trees along streams. We outline both types of activities below.

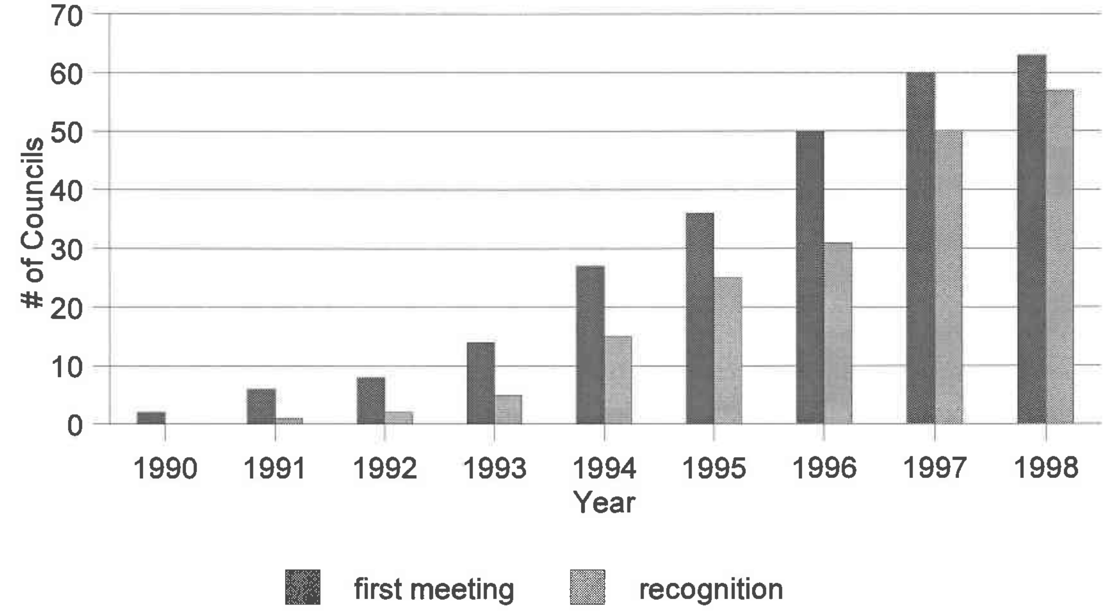

Figure 2. Cumulative number of surveyed councils by year having their first meeting and receiving government recognition (n=63).

Through a survey question that asked council representatives to identify their top three successes in the last year, respondents identified more than 160 specific items. Nearly half of these were on-the-ground activities focused on either habitat restoration or water quality improvement (i.e., watershed assessment, stream fencing, tree planting, etc.). Another third of the responses were process achievements (i.e., forming a council, developing partnerships, building capacity, forming sub-basin groups, etc.). Two smaller categories, each representing a tenth of all responses, identified grant success and outreach efforts. A more complete description of council successes can be found elsewhere (Rickenbach and Reed 1998, Appendix C).

Table 2. Comparison of all surveyed councils with the study area councils on six organizational mileposts, 1998.

	All councils		*Case councils*	
Organizational mileposts	%	*n**	%	*n**
Recognized by government under the guidelines set forth in HB3441	92%	64	88%	8
Mission statement	91%	64	71%	7
Bylaws	80%	64	71%	7
Have or are seeking nonprofit status under either state or federal law	18%	65	13%	8
In the process of completing or have completed a watershed assessment	50%	62	50%	8
In the process of developing or have developed a watershed action plan	50%	62	50%	8

* The number of watershed councils responding to individual survey questions varied by question.

Our survey also asked council representatives to identify three barriers to future or continued success. Respondents identified over 110 concerns that fell into seven broad categories (Rickenbach and Reed 1998, Appendix C). Two-fifths addressed the need for either initial or continued financial support of watershed council projects, outreach programs, and administrative functions. Another two-fifths cited the need to improve the council's administrative capacity -- most notably to hire a coordinator. Roughly 15% of the concerns noted the need to continue momentum through on-the-ground projects. One-tenth identified technical needs that were beyond the expertise of the council. Another tenth identified internal process issues. The remaining two categories (less than 10% each) encompassed the related topics of expanding council membership and involvement, and the need for outreach and education of the community.

Decision-making

One of the central tasks faced by almost all organizations is selecting a process of decision-making. Under the enabling legislation (1995 HB 3441), the decision-making protocol is left to the individual councils to determine. For the most part, Oregon's watershed councils use one of three decision-making styles (consensus, modified consensus, and majority rule) (Table 3) with the majority (84%) attempting consensus. The remaining 6% either do not have decision-making as part of their function or use some other form. While most of the definitions in Table 3 are self-explanatory, two require some additional description: modified consensus and non-deciders.

Modified consensus is a process where consensus is sought, but failing that a vote is taken. With some councils, there may be some time allotted (e.g., next meeting, two attempts at consensus) before the consensus requirement is removed and some form of majority-rule vote is taken. Among the councils that use this approach, informal questioning during the watershed council survey suggested majority-rule votes were infrequent, but were instituted to allow the councils to avoid gridlock.

Table 3. Distribution of decision-making styles among Oregon's watershed councils and those in the case areas, 1998.

Label	*Definition*	*% of all councils (n=62)*	*% of study area councils* (n=8)*
Consensus	Everyone must agree before the project or item is approved. One or more dissenters result in halting the project or item.	57%	75%
Modified Consensus	The agreement of all members is normally sought. However, if that is not possible, a simple or super majority is needed to approve the project or item.	27%	0%
Majority Rule	A simple (i.e., one half +1) or super majority (i.e., 2/3, 3/4) is needed to approve the project or item.	10%	13%
Non-Deciders	The nature of the group is such that decision-making is not a part of the group's purpose.	3%	13%
Other	None of these describes the group's decision-making process.	3%	0%

*Column does not sum to 100% due to rounding.

'Non-deciders' is a label used for councils that see their role chiefly as a convener. These councils meet to share information. If a subset within the council wishes to use the information and move forward on a particular project, it is the subset's responsibility to do so. The council may provide support to their action.

Representation

Under the enabling legislation, watershed councils are required to have broad representation. "Local watershed councils . . . shall consist of a majority of local residents, including local officials" (1995 HB3441 section 3.2). The legislature identified several interests that might participate. An "interest" is any organization, agency, association, industrial sector, company, or individual in the watershed (Table 4[6]). The Izaak Walton League, USDA Forest Service (USFS), Oregon Small Woodlands Association (OSWA), nursery producers, Willamette Industries, and private landowners are examples of each. Interests are usually outlined in the bylaws and are appointed or self-selected positions on the council. In more formal councils, bylaws may define what constitutes a quorum or require that alternates be named.

One limitation of our data is that we sought information on interest representation, not the number of individuals representing that interest or who actually attends. In addition, some respondents did not distinguish between specific categories. For example, private landowners and woodland owners both show up on Table 3.

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[6] Table 4 presents only the top 20 interests, a complete list can be found in Appendix C.

Whether any private landowners were also woodland owners was not discernable from the data collected.

Table 3. Top twenty interests represented on the responding Oregon watershed councils, 1998 (n=52).

Interest	*% of councils with this interest represented*
Local government (city, county, etc.)	67%
Environmental and conservation groups	56%
Forest and wood products industry	54%
Private landowners	52%
Agriculture interests	46%
USDA Forest Service	40%
Recreational fishing	37%
Soil and Water Conservation District	37%
Oregon Department of Fish and Wildlife	35%
USDI Bureau of Land Management	31%
Commerce or small businesses	25%
Woodland owners	25%
Education (k12, education centers)	23%
Ranching	23%
Special Districts (irrigation, flood, etc.)	23%
Native Americans	21%
Oregon Department of Forestry	21%
Oregon State University Extension Service	21%
Public or at-large citizen	21%
USDA Natural Resource Conservation Service	15%

A key point in the HB3441 is that while the state suggests potential members, it is the local community, through the action of the county commissioners, the county court, or city council, that determines if the applying organization meets the broad representation requirement. This allows councils in cooperation with local officials to determine what representation is necessary for a particular watershed. In different areas, different issues may drive council needs, actions, and membership. So, interests vary from place to place, but there are several interests common to many councils.

Environmental group participation, despite their representation on 56% of councils, was cited by 9 (n=52) councils as lacking. In addition, the environmental perspective may be in the minority in many settings. Table 4 shows few interests that might align, at least openly, in support of environmentalists' positions. This perspective was clear in an interview with John[7] (not his real name[8]), a public employee and participant in several councils. Through his public agency employment, he has worked with landowners and councils throughout his area and believes in the watershed approach, but feels the environmentalists' views are lacking.

> Having environmentalists on the council raises some points that need to be raised. They may not be very scientific or diplomatic, but they can say things that agency people, as neutral outsiders, have difficulty raising. The agency can be left in an awkward position of raising issues that may cast the agency in a bad light or not have the discussion at all.

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[7] Interviewed on 27 January 1999 over coffee at a local eating establishment.

[8] All names are pseudonyms. Anonymity was promised to all interviewees. Names were selected at random (sensitive to gender) from all the interviewees. In cases where interviewees had the same name, additional names were added to the pool.

John sees environmentalists as voicing opinions that may otherwise go unsaid. They are able to broach topics that others, like government employees, may have difficulty raising. John believes that in bringing up certain issues, environmentalists open the door for others to discuss contentious topics.

Given the number of federal and state agencies on Table 4, it is also worth noting the different roles that agencies can play on councils. Some people, including some landowners, do not trust government agencies. Charles[9], a long-time landowner and elected member of his local Soil and Water Conservation District (SWCD), provided the following insight, "We had agency participation early. However, the meetings looked a bit slanted. Ten paid people with one having a program and five landowners: Maybe being pushed down people's throats." Charles is referring to the predominance of agency employees that attend his local council meetings and that meetings usually include a presentation by an agency employee. For him, too many agency people on a council will send the wrong message. The councils might appear top-down versus the intended grassroots approach and may alter how and why people might participate.

For similar reasons, different councils treat agency membership differently. In some cases, agency involvement is not permitted. In others, agency representatives are non-voting members of the councils. Their role is to provide the agency's perspective and technical support as requested. In still others, agency representatives are full members with equal standing. Due to the nature of the watershed councils survey, we only collected data on membership, not voting privileges. However, there are four councils that have no agency participation with the remaining 48 having some form (i.e., voting, non-voting) of membership. For the study areas, all the councils had agencies as full voting members.

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[9] Interviewed on 8 January 1999 at his place of employment.

The Coordination Function

In achieving watershed council goals, a point of near universal agreement among council members and cooperating landowners is the need for an effective coordinator. This was apparent in both the council survey and the study area interviews. Indeed, for many, the coordinator is not just a grant writer, contract overseer, technical expert, and minute taker, but a central figure in representing the council to the community and to landowners who have neither the time nor inclination to attend meetings. For example, Dennis[10] exclaimed in reference to two watershed coordinators who had just departed his ranch, "Those guys are great!" Dennis is a long time rancher, resident, and community leader, who was an early participant in the local watershed council. In assessing the potential for his council, Charles, described previously, stated, "A lot of projects have been accomplished, but it only happens as fast as coordinators can find the money." Charles was not disappointed in the efforts of the coordinators, but was illustrating the important role they play in the keeping the council going.

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[10] Interviewed on 6 January 1999 at his kitchen table.

In describing their positions, the coordinators interviewed, offered very similar descriptions. Rick[11], a well established and respected coordinator, identified five areas that he routinely covers: (1) grant writing, (2) landowner contacts and outreach, (3) project implementation, (4) keeping the council alive and vital, and (5) accountability to grantors and the council. In almost all situations where they are present, council coordinators are funded through grants and may share office support and space with county, state, or federal agencies. The coordinators in our study areas had support through either a SWCD, a regional council of governments, or a federal agency.

In a more generic description of what a council coordinator should do, Sandy[12], an educator and rancher, likens coordinators to 'old-time' extension agents and would focus their attention on developing social networks.

> I -- but I think, backing up what [my husband] says, the coordinator has to be an incredibly special person. They can't -- they can't stay just in their office, and they can't just go to just those conferences. They really do have to be out.
>
> Kind of in my concept of what the old-time extension agent really was . . . Having very understanding family, having communication with the family so that they can maybe swap a series of night meetings for maybe some -- some time to do other things at home. So that they can be out where people that are involved in that watershed live and work on a daily basis.

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[11] Interviewed on 27 January 1999 at a local eating established.

[12] Interviewed with her husband on 12 March 1999 at their kitchen table.

For Sandy and her husband, it is more important for the coordinator to be well connected locally than to be a technical expert.

Only when the current council coordinator's performance was perceived as lackluster did people question the value of the investment. David[13], an educator and owner of 5 acres, had strong words for the council coordinator in viewing the person as a note-taker and meeting attendant. "The $30,000 for the position could have been spent completing an assessment or achieving other on-the-ground impacts." David's judgment was that the coordinator was ineffective in moving the local councils in a productive direction.

Whether the coordinator is perceived as effective, the coordination function is seen as essential by council members and cooperators to implement on-the-ground activities. Through grant-writing, initiating landowner contacts, and inspecting sites, the coordination function plays a vital role in fostering council activities. Council members look to the council coordinator to provide support and implement the projects. Much like the 'old-time' extension forester, the coordinator develops the social network of the council and expands it. When this person is successful, the council benefits from the exposure.

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[13] Interviewed on 18 October 1998 at his home.

Spatial Participation

At the end of the literature review, we introduced the idea of spatial participation that emerged from our interviews, observations, and analysis. In this section, we will define and expand this idea as experienced within the watershed council context. Those within the watershed who choose to participate on the councils have a significant impact on what occurs during meetings and on-the-ground. The people who attend set priorities, approve direction in grant proposals, and may have a hand in implementing council activities. However, watershed councils are likely more constrained by those who neither participate nor cooperate than by those who do. Potential ideas and options available to council participants are limited by geography.

The effort to restore salmon and manage watersheds through councils is inherently a question of spatially explicit use and development of social capital -- particularly when private ownerships are part of the landscape. Involvement and participation on a watershed council are uses of social capital toward a specific goal. Those who participate invest their human capital toward the enhancement of the watershed. The willingness of private landowners and others to either participate on or cooperate with the council determines the actual land available for restoration or enhancement projects. In addition, the non-participation of certain owners, and thus the lack of access to their land, may reduce or nullify the impacts of projects elsewhere in the watershed. In essence, one ownership, whether public or private, can halt council collective action. Spatial participation on watershed councils is the geography of social capital. In situations where access to resources is tied to specific locations, spatial participation is essential for collaborative or collective action. Through three illustrations, we will further describe the implication of this spatially explicit aspect of social capital.

Illustration 1: When One Matters

In cases where one ownership has unique positive or negative characteristics, the non-participation of the owner can greatly reduce or limit a council's ability to engage in restoration efforts. Despite the council's willingness to act, one piece of the puzzle is lacking: access to a key property. Greg[14], through his role as an industrial forester and member of his local watershed council, has implemented several stream and habitat conservation projects. Nevertheless, he sees problems downstream from company land in the management of a fish hatchery. ". . . [Our] enhancement work above the hatchery is simply window-dressing. Few fish, except cutthroat and steelhead, are allowed to move above the hatchery to use the variety of projects [the company] has put in place." Greg was acting on behalf of his company and he had the support of the council for the stream work. Yet, the full benefit of their efforts is in doubt due to the downstream hatchery's non-participation.

This illustration shows how one owner (whether public or private) can limit the available land for restoration efforts. Further restoration work above the hatchery will have unknown implications, since changes in hatchery management may or may not take advantage of the work. Part of the problem is in not knowing what the hatchery may or may not do in the future or in conjunction with the council. Under this type of scenario, a council faces the question: Is the location of non-participating owners' land critical? A non-participating owner might have differing impacts on restoration efforts depending on where it is located and the type of activities in which they engage. In our illustration, a hatchery can limit fish passage and control the number of fish that reach further upstream. In other situations, an owner might affect habitat through land management practices like timber harvesting, agricultural production, grazing, or land development.

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[14] Interviewed on 22 October 1998 at his office and during a tour of company land.

Illustration 2: When Many Matter

An alternative is when a council becomes disconnected from its land base. In our interview with Jerry[15], an acting council chair, federal employee, and owner of 25 acres, we discussed the participation of landowners on his council. Jerry described a situation where the local community was changing and the councils reflected those changes. New people to the area, attracted by the quality of life were involved with the council, but tended to own smaller parcels or lived in town. The older landowners who lived outside of town and owned much of the riparian areas were starting to lose interest and not attending council meetings. At least one of the older owners had clashed with the council on the direction the council should be headed. I asked if he felt the council was headed toward a situation where the council was disconnected from the ownership. He responded, "Th[at] could be the case."

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[15] Interviewed on 24 October 1998 at a local eating establishment.

In this illustration, the council could be faced with the harsh reality that it has little or no land available for restoration activities. In situations where spatial participation is limited or even non-existent, a council, regardless of its other accumulated social capital, is missing the critical component for action: willing owners of land. This is analogous to community that lacks social capital and is faced with social isolation. The council is isolated from that which it needs to act: land.

Illustration 3: When It Works

Lest the reader thinks that watershed councils are ineffective at garnering spatial participation, a successful watershed council project, stream fencing, is illustrated here. Howard[16], a contractor, rancher, and owner of 1,000 acres with some stream frontage, is also the chair of his local council. Although attendance at the meetings is lower than it was elsewhere in the three study areas (3-5 people each month), the council has accomplished near complete stream fencing on private land within the watershed.

> Oh, gosh. We've put in a couple miles here on our place. Well, we've got a little bit left to do on this side of the river, but the other side, I think there's two-and-a-half miles of frontage, and it's all done, and most of this side is. And then I know [neighbor] did his and [another neighbor] did his, and --

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[16] Interviewed on 21 April 1999 in his barn.

> most of the -- I think just about all of the lower river where there's livestock is pretty much fenced, actually . . . In fact, I don't know where it isn't.

Even with limited participation in formal meetings, the council was able to complete fencing on properties that included both members and non-members of the council. Bruce and a fellow council member, Lee[17], both noted that council members often relied on their knowledge of local people and personal relationships to select watershed council projects. This was supported through our observations of council meetings where members actively discussed ideas and potential cooperators.

This example illustrates that spatial participation can extend beyond the membership of a particular council by coopting others in the community. Members, owning land important to the council or simply knowing people who do, can use their ties to the local community, developed through both council and non-council interactions, to engage their neighbors and friends in watershed council activities. Spatial participation is not limited to those members defined in the bylaws, but can include all those in the watershed willing to contribute.

Ways to Participate

The three illustrations suggest that spatial participation is not limited to membership or non-membership on the watershed council. We posit that there are three ways in which someone might be involved: active participant, cooperator, and uninvolved. At the most active level, owners are active participants in council meetings and projects. In some cases, they may be a member representing a particular interest (owner or otherwise). However, given the inherent constraints on council size (as set out in most bylaws), not everyone can be a member. In these cases, an active participant might attend meetings regularly and provide input and assistance consistently.

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[17] Interviewed on 22 April 1999 at his home.

Cooperators are those who are interested in the watershed councils but do not have the time or the inclination to get involved with the routine, process-oriented council activities. Nonetheless, they are willing to cooperate with the council in getting projects done on their land. These people might use grant money or technical advice from the council to implement activities that both restore their piece of the watershed and minimize their out-of-pocket expenses. They might volunteer their time and resources to projects on and off their property, too. For these people, the watershed council may not be the driving concern. Their relationship with a council member or agency person might facilitate their cooperation. They may also have a general interest in the environment.

In electing to stay away from their local council, there are four reasons that emerged from our interviews.

1. For most of the uninvolved, the watershed council is just not a priority in their lives. Edward[18], a self-employed professional with land along a river, feels that his time is better spent doing other, equally important things to better the local community. Instead of participating on the council, he is active as a board member for the community college. Other interviewees cited church, Oregon Small Woodland Association, and the local school board as alternatives to the watershed council.
2. For others, the current focus of watershed council activities (i.e., the riparian area) further limits their willingness to participate. Landowners with property outside the riparian area are of the opinion that the watershed councils are not for them. Landowners Earl[19], a retired forester, and Joan, a church organist, live well away from a major stream. When asked about participating on the watershed council, Earl responded, "I'm not that up on the water end of it, because, as I say, we're not that impacted."
3. The watershed council, either through its goals or approach, is antithetical to their values. Barbara[20], an older, retired landowner, felt her neighbor was this type of person. "He's the type that does things for himself." In this case, it is the

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[18] Interviewed on 12 November 1998 at his office on his property.

[19] Interviewed on 24 March 1999 in their home.

[20] Interviewed on 15 November 1998 at her home.

collaborative approach that is problematic. For others, non-participation might also be a boycott of the process or a sign of non-support.

4. The uninvolved might be so because they may not like particular individuals or organizations on or working with the council and do not want to interact with them. At this level, it is not so much the council, but the personalities involved and may be caused by events unrelated to the council or even natural resource management.

Spatial participation can have a substantial impact on watershed council effectiveness. Within a specific area, participation is a function of landowner willingness and the degree to which the council values their participation. In addition, participation must be defined as something more than meeting attendance alone. Under this measure, a council could be considered ineffective because only two landowners attend the meeting. As we described above, willingness to cooperate with the council is likely a more important indicator of participation.

Conclusions

The spatial and interactional nature of ecosystem management through watershed councils makes spatial participation key in achieving both the goals of the council and society. Nevertheless, it is not the only factor. Watershed councils were formed and exist within communities with varying degrees of existing social capital. Long before councils came on the scene, communities formed social networks and established institutions. People developed ways of getting things done, making a living, and interacting with others. Watershed councils must function within this system to be effective. In some cases, councils may benefit from historic interest and social capital around natural resources and fisheries. Other councils may be trapped by the cycles of change that affect all communities at one time or another. If a council is ineffective, it may mean that the council is mirroring larger social conflicts rather than any inherent organizational flaws.

We have defined spatial participation as a spatially explicit aspect of social capital that watershed councils can access through their membership and in targeting potential cooperators. Nevertheless, the existing social networks of the members are a powerful tool for councils to exploit. In our study, councils that could effectively partner with other institutions were likely able to tap those institutions' connection to build support and legitimacy for the council. As councils complete projects with members and cooperators they further build the council's credibility and network; both of which increase the council's social capital. Roger[21], a council chair and environmentalist familiar with voluntary efforts, saw this clearly. "People involved in environmental issues can burn out. They don't always know how to be effective, but a few early successes can go a long way. Early successes can embolden them to hang on. Success gives staying power." These successes also provide the organization a history of activity that, if managed, can lead to future success.

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[21] Interviewed on 13 April 1999 at a local eating establishment.

Increasing spatial participation should likely be a desirable outcome for watershed councils in Oregon and for similar organizations elsewhere. Natural resources and their management from a landscape perspective are a geographical exercise. Individual owners matter both because they offer human capital and because they own a specific piece of land with characteristics that are unique. Ecosystem management and spatial participation revisit an old question, but with a new twist. The differential adoption of management practices by private landowners is not a new issue (Royer and Risbrudt 1983). Ecosystem management, however, considers the importance of location and tries to understand how what happens in one place reverberates, positively and negatively, across the landscape.

In using social capital to act collectively, Flora (1998) outlined three components: legitimacy of alternatives, mobilization of resources, and network qualities. Through watershed councils, legitimacy of alternatives is achieved through the decision-making and planning process. Both the councils and the state, through *The Oregon Plan*, mobilize human, technological, financial, and informational resources in the implementation of projects and the day-to-day operations of the council. The members, the coordinators, and the community lend their social networks to the council. Flora (1998) sees the network aspects as enhancing the other two. Spatial participation on watershed councils does as well. Through greater spatial participation, more land is available on which to plan and form alternatives. This enhances mobilization of resources by providing potential sites and cooperative owners to participate in restoration activities.

Much of the research on social capital, its development, and use consider social capital in macro-geographical (i.e., the community, the county, the state) or geographically-independent settings (i.e., individuals). Social networks are important because they can allow resources to be harnessed in the execution of either a collective (e.g., building a hospital) or individual (e.g., receiving a quality education) outcomes. Even environmental issues like the siting of a new factory or dump is only geographic in that they affect a specific location within a community. The management of natural resources as envisioned in ecosystem management transcends traditional geo-political boundaries. The stream and the impact a particular landowner has on it do not stop at the property line or even at the ocean. Spatial participation is an idea that captures this nuance of overlapping social capital and ecosystem management.

This research and anecdotal accounts of council members and advocates suggest that spatial participation is a critical factor for councils to achieve their mandates of water quality and salmon habitat improvements. What is lacking is a well-defined, geographically sensitive analysis. While this project began the exploration and hypothesized a relationship, it does not provide complete evidence. Additional research to understand spatial participation and the mechanisms for enhancing it are essential in formulating the successful implementation of a widespread collaborative-based approach to improving salmon habitat and water quality.

To be effective in the long run, watershed councils will need to increase spatial participation, not only on the council itself, but through projects that create the outcomes necessary for species recovery, water quality improvement, or other desired goals. We have no illusions that total spatial participation through watershed councils is possible. The differing preferences and competing opportunities for alternatives of owners (and others) will always find people doing other, equally-meaningful things.

The Involvement of Woodland Owners on Watershed Councils

Introduction

Traditionally, practice, policy, research, and extension have focused on NIPF owners as individual actors. For the most part, owners were treated as unencumbered by the need to meet societal expectations beyond timber production. While only potentially problematic in the past, the emerging societal interest in private forestry makes such viewpoints provincial. Other, non-landowners are expressing an interest in the management of private lands and, in some cases, exerting pressure to effect change. NIPF owners are being asked to both demonstrate good management and participate in collaborative conservation efforts with neighbors and other community members.

In this paper, we evaluate the involvement of private landowners in local, non-regulatory, collaborative forums. Specifically, we consider the social dynamics of participation in Oregon's watershed councils as they grapple with species recovery and water quality enhancement. Through analysis of qualitative social science data, we demonstrate that landowners are action-oriented, protective of their control, caring in their management of the land, and are affected by their perception of others. We then use these ideas to understand and address woodland owner involvement on watershed councils.

Background

The proposed listing of coho salmon in 1996 and the likelihood for other listings by NMFS under the ESA were another blow to a region harried by disputes over the future of old growth forests and spotted owls. In developing a response, Oregon, under the leadership of Governor John Kitzhaber, charted a different path to species recovery. This approach, embodied in *The Oregon Plan* (State of Oregon 1997), framed salmon recovery as a social and cultural issue, sought increased agency coordination and vigilance, and empowered local communities to act (Cheng 1999). Relying on previous success elsewhere in the state, watershed councils were chosen as the local advocates and instigators of watershed restoration.

Although NMFS initially accepted the state's plan as an alternative, a federal magistrate eventually overturned this decision. Despite the listing of coho (and several other species), *The Oregon Plan* continues as a parallel structure to federal action. Indeed, until specific rules are developed as called for in the ESA, *The Oregon Plan* is the sole structure in place. It has been expanded to include recovery of other species and water quality improvement throughout the entire state. Watershed councils continue to be the local leader and change agent in recovery and improvement efforts.

Over 80 watershed councils are active across Oregon. Under *The Oregon Plan,* the state adopted watershed councils as the preferred mechanism for watershed restoration at the local level.

> A watershed council is a locally organized, voluntary, non- regulatory group established to assess the condition of their watershed and build a

> work plan to implement enhancement and protection activities within their watershed. Watershed councils offer local residents the opportunity to be involved in making decisions at the local level that affect their watershed. (State of Oregon 1997:Chapter 17A)

By law (OR HB 3441), watershed councils are required to have broad-based representation. This may include local stakeholders from environmental, recreational, timber, agricultural, educational, and other interests as well as representatives from all levels of government (local, state, and federal). To be eligible for competitive grants and official status through OWEB, a council must be recognized by local government -- usually by the county commissioners or court. A requirement of this recognition is meeting the broad-based representation requirement and developing a charter.

Literature Review

Although relatively new on the natural resource management stage, watershed councils have been in the research limelight. Woodland owners have a much longer and eclectic research history. The literature surrounding these topics as well as the larger realms of ecosystem management are reviewed. In addition, the concepts of world view and values are presented. While not the initial theoretical basis for this project, they provided significant insights into the views of woodland owners toward watershed councils and other aspects of society's growing interest in private land ownership.

Woodland Owners & Ecosystem Management

NIPFs and their owners have been the subject of numerous studies through the years. Traditionally, the focus of research has been on understanding the management of NIPFs on an individual ownership basis (Egan 1997). For example, Cleaves and Bennett (1995) investigated harvest practices of landowners in Western Oregon. Other research has considered the degree to which owners might seek out educational opportunities or participate in incentive programs (Blatner et al. 1991). Johnson et al. (1997) focused on landowner response to potential regulation. In considering the link between attitudes and action, Egan and Jones (1993) compared actual management practices to landowners' expressed objectives and desires. In a broader view of NIPF owners, Bliss and Martin (1989) illuminated the role of social factors, like ethnicity, in the management practices of private landowners. Nevertheless, the focus remained on individual owners or ownerships.

The emergence of ecosystem management as an alternative to previous approaches to land management requires landowners, both public and private, to look across property lines. Ecosystem management has been variously defined (Grumbine 1994, SAF 1993). Wood (1994:6) provides a useful working definition, "The integration of ecologic, economic, and social principles to manage biological and physical systems in a manner that safeguards the ecological sustainability, natural diversity, and productivity of the landscape." Wood further explains that the three component principles are not weighted equally; the economic and social outputs are constrained by the ecological. However, to continue as a management regime ecosystem management must also provide the values that society requires of its forested landscapes (Salwasser 1994).

Only recently have landscape considerations and their implied social obligations been investigated and discussed (Knight and Landres 1998, Bliss and Martin 1999). In understanding landowner and ecosystem management, much of the work has focused on opinions and willingness to collaborate on cross-boundary management. Brunson et al. (1996) found that landowners were willing to consider greater coordination with neighbors, but were concerned over the level of control they might lose or how such coordination might occur. Rickenbach et al. (1998) found favorable attitudes among Massachusetts landowners toward three dimensions of ecosystem management, one of which was a landscape perspective. In a related study, however, Stevens et al. (1999), using conjoint analysis, found that incentives would be necessary to facilitate cooperative management.

Collaboration & Watershed Councils

While the focus in the NIPF literature has been on willingness to cooperate, the larger natural resource literature has evaluated the ways in which social institutions might facilitate an ecosystem-based approach. Yaffee (1996) argues that social institutions are critical for coordinating landscape management. Endter-Wada et al. (1998) also see a greater role for integrating social science and process into the application of ecosystem management and to foster social learning. Elsewhere, Yaffee (1998) argues that the key to achieving the cross-boundary aspect of ecosystem management resides in cooperation. Drawing on social theory, he argues that cooperation is a balance between cooperative and individualistic influences. For example, the potential benefits of joint action, shared goals, and sense of place are factors likely to foster cooperation, while desire for autonomy and different traditions may lead to individualistic behavior. His work is primarily descriptive with some limited discussion of potential steps for fostering cooperative action like adequate resources. However, much of his analysis of current cooperative cross-boundary work suggests that success is highly context-specific.

In other research on Oregon's watershed councils, Cheng (1999), in a case study of two watershed councils, found that group identification with the watershed council is related in three ways. Participants might have or form (1) similar interests and values, (2) shared ways of knowing the watershed, and (3) social ties within the watershed. Habron (1999), also conducting a case study in Oregon, determined that watershed councils played a role in reducing bureaucracy, enhancing communication and understanding, and building capacity. Furthermore, he (Habron 1999:Abstract) found that landowners' world view consisted of "independence, the importance of private property rights, aversion toward government interference and a belief in environmental resilience."

World View

World view is not something we brought to our study *a priori*; however, in analyzing the data we found it to be a useful theoretical model for understanding landowner involvement on watershed councils. A world view is a way of understanding the world. It seeks to describe the relationship of an individual to all that surrounds them (Kearney 1984). It is a framework for perceptions of how and why things happen the way they do. It is a flexible model that has been applied to a variety of settings. World view goes to the fundamental assumptions and beliefs which individuals and groups hold. Collingwood (1940) calls these "presuppositions." Presuppositions are that which we take for granted about the world and that we do not try to verify. In religion, a presupposition is the existence of some higher being. In medicine, a presupposition is that all diseases have causes.

Kearney (1984) developed five, interrelated, world view universals that provide a basis for assessing the relationships between an individual and the world around them. Universals are the underlying rules that govern the development of a world view; they are what must be explained for a world view to be credible. Together, these five -- the self and others, relationships, classification, causality, and space and time -- are sufficient to describe the world (Table 5). The relationship of the self to the other, determines the ways in which the self classifies the other and understands causality. Time and space affect the self in further clarifying causality.

Time and space provide a framework and the information for predicting causality which may reinforce or contradict an existing classification or create a new one.

Table 5. Kearney's (1984) five world view universals and a brief definitions of each.

World view universal	*Definition*
Self and others	Essential to any world view is a recognition of the 'self' and 'other.' The other is not limited to people, but includes everything that isn't part of the self. To function, the self must be able to gather information about the other and be able to change its behavior based on that information.
Relationship	This universal describes the relationship between self and other. How people understand their relationship to the other determines the nature of their interaction. If one believes they are dependent on another for food, they may treat that person differently than someone they are not dependent upon.
Classification	To better understand the world, the self will classify the other into groups. In some cases, they are members of the group and in others they are not. Classification can be broad (e.g., cats) or quite specific (e.g., those cats seeking the presidential nomination).
Causality	In order to understand the world, the idea of cause and effect are essential. Things happen for a reason. Rain may be due to the intervention of God or the movement of the atmosphere. Both express causality.
Space and Time	This universal accounts for constancy and change in understanding the world. We are able to distinguish between different places and times.

In considering the fundamental assumptions, world view has been linked to the concept of values that is likely more familiar to most people (Hebel 1999). "A value is an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence" (Rokeach 1973:5). Hebel (1999) likens world views to human value systems where the system provides an organizational structure to the variety of values people have. In updating and expanding Rokeach's definition, Schwartz (1994) posits five features of values. They are (1) beliefs that (2) describe desirable outcomes or behaviors, (3) that are independent of specific situations, (4) but dictate assessment and action toward individual and events, (5) and are organized within a value system.

While world view informed our thinking about landowner involvement on watershed councils, the more precise definitions of values allowed greater clarity in shaping our understanding. Nevertheless, world view remains a useful concept upon which to reflect because it forces a consideration of woodland owners within a larger framework. They are not solely owners of land, but are citizens, parents, retirees, and community members (Keniston 1962). We use the concepts world view and values to understand the involvement of woodland owners on Oregon's watershed councils. Our intent is not to illuminate the value system of woodland owners, but to identify those values that might help us understand how and why landowners (and others) form attitudes toward and engage in with watershed councils.

Research Questions

Values and their implication for attitudes and behaviors provide a powerful theoretical tool for understanding why landowners (and others) do what they do. In applying this notion to the involvement of woodland owners in watershed councils, our intent is not to wholly and completely describe the woodland owner value system, but to isolate the values that are salient in a particular phenomenon, specifically:

1. What values are most salient in woodland owners' involvement (or non-involvement) with watershed councils?
2. How do landowners articulate those values?
3. And, what are the implications of those values for woodland owner participation on or cooperation with watershed councils and similar collaborative efforts in natural resource management?

Finally, we'll tentatively explore the importance of landowner values, value systems, and world views in the larger policy arena.

Methods

Given our desire for an in-depth analysis of watershed council involvement, we selected a case study approach (Yin 1994) that depended on gathering both quantitative and qualitative social science data. The analysis in this paper depends heavily on the qualitative data gathered within three study areas across Oregon. In this section, we will describe our study areas and our approach for gathering data.

Study Areas

A 1998 survey of Oregon's watershed councils was the basis for selecting study areas. Given our explicit emphasis on woodland owners, our primary criterion for study site selection was significant presence (30% or more) of both forestland and private ownership. These criteria created a subset of councils from which to select that generally excluded more urban and agricultural portions of the state. In targeting specific study areas, we attempted to (1) reflect Oregon's diversity of landscapes, (2) include varied watershed council structures and membership, and (3) avoid on-going social science research on watershed councils. Using the data from the watershed council survey and the criteria above, we selected three areas of the state (Figure 1) (North Coast, South Coast, and Central Oregon) that together form our case study for understanding woodland owner involvement on watershed councils.

Data Collection

Our methods yielded textual data -- primarily through 50 semi-structured interviews (Lindlof 1995, McCracken 1988) with landowners, watershed council members and staff, extension agents, service foresters, state biologists, NRCS conservationists, and water masters (see details below). We collected data to understand how and why landowners participate and how watershed councils fit within the broader social context. Hence, along with questions on watershed councils, our protocol (Appendix B) sought information on their current management activities and other issues and concerns related to land management. Depending on the situation, interviews were either recorded or detailed field notes were kept and expanded soon afterward. Interviews lasted anywhere from 20 to 120 minutes with an average of around 45 minutes. Through the split of tape-recorded transcriptions (22) and unrecorded interview field notes (28), over 25,380 lines of text were available for analysis.

To identify interviewees, we used snowball sampling (Patton 1990). Initial interviewees were identified either through their attendance of watershed council or woodland owner meetings or by the advice of local informants that were interviewed in each area: council coordinators, OSU forestry extension agents, and ODF service foresters. We selected these three because we felt they would provide the best coverage of watershed council membership and forest landowners. Later interviewees were found by asking initial (and subsequent) interviewees to identify others, particularly landowners, with both similar and different viewpoints. This process continued until new information or ideas were not forthcoming in the interview data.

Data Analysis

We used thematic analysis (Boyatzis 1998) to analyze and interpret the data. Analysis was accomplished through an initial process called coding. Codes identify common themes and ideas that both transcended the entire cast of interviewees and some that were limited to specific sub-groups. Unlike some coding schemes that focus on individual words and their connotation, we coded the data for generalized opinions, statements, descriptions, and actions. As codes were refined, relationships between different codes yielded a framework for understanding the social phenomenon. While world view and values provided frameworks for understanding the data, we did not impose theoretical relationships on the data *a priori*, but allowed it to emerge from the data in what is typically referred to as grounded theory (Glaser and Strauss 1967, Strauss and Corbin 1991, Strauss 1987).

Results

Using the interviewees' own words and experiences, we will describe four values that were salient in landowners' descriptions, discussions, and understandings of watershed councils. These values -- *stewardship ethic*, *perception of others*, *need for control*, and *action-orientation* -- are described in detail. However, before we develop these, some descriptive statistics about whom we interviewed is appropriate.

Over the course of eight months (October 1998 - May 1999), we interviewed 50 individuals (Table 6). Landowners, either through self- or interviewer selection, were categorized as either members or cooperators with a watershed council or currently un-involved. In the case of the uninvolved, 3 had a previous relationship with the council. Public employees included 4-OSU Extension agents, 2-Oregon Department of Forestry foresters, 1-Oregon Department of Fish and Wildlife biologist, 1-Oregon Water Resources Department water master, and 1-NRCS conservationist.

In further considering the landowner portion of the pool, they had varied life experiences. Occupations ranged from ranchers and farmers, who looked to the land to provide most of their income (8 people cited the land as a primary source of income), to professionals with no such dependency. Ten supplemented (25% of income) employment or retirement income with that from the land. The majority (22) said that they had some formal training beyond high school ranging from some college, trade school or college degrees, through advanced degrees. Thirteen were long-time (20 yr or more) residents of the community and 5 were relative newcomers (5 yr or less). Ownerships ranged from 5 to 7,695 acres with 10 owning fewer than 100 acres and 7 with 1,000 acres or more.

Table 6. Breakdown of interviewees by interviewee category and study areas.

	Landowners (n=29)			*Non-landowners (n=21)*	
Region	*Un-involved*	*Cooperator*	*Member*	*Council member*	*Public employee**
Central Oregon	3	3	1	2	4
North Coast	5	2	3	5	3
South Coast	4	4	4	5	2

*All but two public employees (1-North Coast and 1-Central Oregon) were members of at least one watershed council.

All of the landowners have engaged their local communities at some level through membership in local or regional organizations. Many of the landowners have tended toward resource-oriented groups. In addition to (or instead of) watershed councils, interviewees noted participation in Soil and Water Conservation Districts, Cattlemen's Association, Oregon Small Woodland Association (usually the local chapter), and others. However, they also participated in school or other local boards, occupation-related groups, church, local environmental organizations, and youth-oriented activities.

The Salient Values

Stewardship Ethic

Previous research on private landowners has found that many want to 'do the right thing' on their land (Egan and Jones 1993, Haymond 1988). Our work provides no exception. Stewardship is a commitment to high personal principles of managing and caring for the land. Through ownership, landowners feel a responsibility to the land. Some may envision this relationship as one where taking care of the land protects their own future options. For others, it may have religious or cultural connotations of holding the land in trust. Regardless of the source, stewardship usually goes beyond economic and regulatory considerations to include the environment and future generations. Landowners speak passionately about their personal stewardship ethic.

Michele[22], a middle-aged artist and musician owns 60 acres. She described her ownership objectives in terms rarely expressed by landowners: "One, for the good of the forest, and one, for my own health and well-being." She has no illusions of getting rich from her land, nor does she need to. She values the land for the meaning it provides for her life. Her view is more typical of landowners with little vested economic interest in the land. However, they too share a stewardship conviction.

Mark[23] owns 310 acres of land where he runs cattle and manages his forests. He cooperates with his council and is active in landowner issues throughout the state. Mark discussed stewardship: "Landowners have a stewardship ethic that includes soil and environmental quality. This ends up being more important than economic value. Very few other businesses have that ethic. Who is willing to make thousands of dollars in investments and never reap the returns?" Mark sees landowners as willing to make investments that other people might see as too costly. The shared ideas of personal stewardship provide a way for landowners to distinguish themselves from others, derive meaning for their experiences on the land, and rebuff challenges to the extractive aspect of land management.

In comparing regulatory and cooperative approaches, Earl[24], a retired forester and owner of 1,000 off-stream acres active in Oregon Small Woodlands Association

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[22] Interviewed on 25 March 1999 at her dining room table.

[23] Interviewed on 14 January 1999 with his wife at their dining room table.

[24] Interviewed with his wife on 24 March 1999 in their living room.

(OSWA), but not the council, felt a need for both. "Well, I think the voluntary approach is fine. I think it's a better way to go. But, you know, you've got to get the job done, and there are people that are, you know, breaking the rules and trying to do everything they can with whatever they can get away with, and that's wrong. So you need both, I suppose." Earl, like several of the landowners interviewed, feels that a minimum standard is necessary, because not everyone shares the same stewardship ethic. When someone gets it wrong and tries to 'get away with something' enforcement should kick in.

For several, a stewardship ethic is tied to joining the watershed council or carrying out the projects. Kyle[25], an older professional with 670 acres who depends on the land for part of his income, noted: "I concentrate on clean water and repairing the devastation. This was the force behind my involvement in the watershed council." Kyle's property was in rough shape due to past practices and recent recreational trespass. Collaborating early with his neighbors, he was able to effect changes in enforcement and get some grants to improve the land. He was also an early participant in his local council.

Kathy[26], a retired divorcee and active manager of 10 acres, expressed a similar perspective. "I've been doing this since the '60s, and I've learned, and I care about the land. It's not just a place for me to go and hide. And so I felt, you know, participating in the watershed group, even though I wasn't -- I'm not on any water, was just part of the whole health of the environment for where we are here." Kathy had a sense of the landscape and the importance of water in her community. She is the one exception of cooperative and member landowners: She does not own land on or near a stream.

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[25] Interviewed on 24 March 1999 over lunch at an eating establishment close to his place of work.

[26] Interviewed on 26 March 1999 at her home.

The sense of wanting to 'do the right thing' is tempered by experience and managerial constraints. Landowners also tend to be skeptical of new approaches. Barbara[27], a long-time resident and landowner whose husband is a logger and farmer, illustrated, "There is always someone telling what you should do. First, it was no snags. Now, it is leave snags. In addition, they're always positive they're right." Hers is a common complaint among landowners. In addition, some technical solutions exceed the ability of landowners to pay, even with cost-share. Stan[28], a long-time landowner and rancher active in his watershed councils, argued, "Agency folks suggest expensive solutions that we just cannot afford in money or sweat. We'll do things as long as we can afford to." The different constraints, experiences, and expectations of landowners likely create differing views of good stewardship. For some, a particular option may be easily accomplished, while for others it is not possible. Hence, not every landowner who feels a stewardship ethic exhibits the same management practices or outcomes. However, they share and are motivated by a sense of 'doing the right thing.'

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[27] Interviewed on 5 November 1998 at her dining room table.

[28] Interviewed on 6 January 1999 around his kitchen table.

Need for Control

Owners articulated a need or desire to control their fate and that of their land. While varying in degree, there was universal consensus on this point. The need to exhibit and restate control arises from landowners' uncertainty and concern about the future. In our study, challenges to the existing tenure system were the primary source of concern and uncertainty that led landowners to exert their need for control. This a recurrent value among landowners. Bliss and Martin (1989) found control as an ownership motivation. Yaffee (1998), seeing a similar individualistic influence, labeled this idea: need for autonomy. Under changing tenure and policy, other people may now dictate what is acceptable, when in the past they showed little interest or concern. The ways in which a need for control show itself are varied.

For many landowners, land ownership comprises the majority of their asset base. While the need for periodic returns varies by situation, most understand the financial value of their property. Howard, an owner of 1,000 acres, council chair, and road contractor, had views similar to others.

> You know, timber, it sure sounds like big checks when you're getting them, but you only get them about 50 years apart, so that's a big concern for landowners. I mean, here they are, they have been taking care of the land for generations, so they lose the privilege of harvesting that timber. That can make a landowner upset.

Howard pointed out one of the chief issues in economic returns in forestry: long intervals between harvesting. During these long intervals, sentiment and policy can change and affect the future management opportunities. The most notable of these was Ballot Measure 64.

Under Oregon's initiative system, a ballot measure appeared in 1998 that would have effectively eliminated clearcutting as a management option. Earl, the OSWA-active landowner described previously, expressed the sentiment of almost all the landowners interviewed. "Well, of course, we [we]re all scared to death about, you know, Measure 64 . . . which I feel would have put us out of business . . ." The fear was that outsiders would limit management options. Landowners responded by exercising their rights to control the land through political activism and voicing their concerns to neighbors and friends.

Another concern related to control is trespass. Kyle, the older professional landowner described above, noted trespass as a concern for him in managing and caring for the land.

> We also have a lot of trespass. Young people tear through the land. Fences are down. The grass and meadows are ruined, although we don't use them. We had to fence to control trespass. With the fences on the lower portion of the property, we've been able to halt much of the trespass there. The upside is not as good. We could fence it, too, but it would restrict our access and make it difficult to operate. We took a joint landowner effort to the county to limit trespass without fences. Clean water is threatened by runoff from roads and trespass.

Kyle sees trespass as degrading his land and causing him additional time and resources to correct. He sees his trespasser as unconcerned for the land beyond their fleeting use of it.

Other landowners have faced similar conflicts. George[29], an educator, parent, council member, and owner of five acres along the stream, was worried about the trespass situation in his area.There is a dispute between owners and recreational fishers and differing interpretation of the law by local authorities over whether access to stream sides is allowable. He bought the land with the impression that access is required; however, "I don't feel I should have to deal with people taking dumps on my land. In addition, recent conflicts have escalated to include guns." As with Kyle, George feels that other users of his land don't care about his land.

For some, watershed councils, usually in their formative stages when uncertainty is highest, represented a similar threat. Initially along the North Coast, landowner concerns that watershed councils might directly challenge property rights were widespread. During our interview with Rodney[30], a retired forester, owner of 170 acres, and attendee of watershed council meetings, he responded emphatically regarding local landowners' sentiments about the council, "We fear having our lands locked up to protect water quality or species habitat." Given the statutory non-regulatory nature of councils, this was a surprising statement. Nevertheless, others along the North Coast held similar views. Bruce[31], a local politician, watershed council chair, and stream-side landowner, corroborated Rodney's point of view in stating,

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[29] Interviewed on October 18, 1998 at his kitchen table.

[30] Interviewed on 22 October 1998 at his kitchen table.

[31] Interviewed on 18 October 1998 over lunch at a local eating establishment.

"Was the council a compelling or cooperative forum for watershed issues? The early members decided it should be a voluntary one." At least in one study area, landowners initially viewed councils -- despite explicit legislation to the contrary -- as a potentially regulatory device. Interviewees elsewhere in the state did not indicate such feelings.

In places where the scope of potential council activities was seen as non-regulatory, the larger issue became one of access to the land for (1) data collection and monitoring, and (2) projects. Lisa[32], a geologist by training and council employee familiar with access issues, described the range of sentiments she's come across: "Well, I'd say that 90 percent of the folks that we contact to ask them about access are okay with it. Maybe 20 percent of those want a little more explanation about what it's for. But most people are familiar with the work." Lisa deals primarily with road surveys and monitoring and finds that landowners may place different constraints on access ranging from very few ("go out whenever you want") to detailed ("I want to know what day, who, and so-and-so cannot come on my land").

Lisa's experiences are supported by interviews with landowners. Roughly 40% of the owners interviewed were willing to allow access for projects such as stream fencing and riparian tree planting. Allen[33], a young, innovative rancher involved with local youth activities, saw the value of projects for both the stream and his operation. "In our riparian areas, we're fencing all of them. We used grants from the watershed council. We planted trees for shade. It fits with our management plan. We would have fenced anyway." For Allen the decision was easy. The fit between council priorities and his own management allowed for cooperation to improve water quality.

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[32] Interviewed on 27 January 1999 over dinner at a local eating establishment.

[33] Interviewed on 14 January 1999 at his property.

Within the three study areas, access to private lands was most common on the South Coast, with few examples on the North Coast or in Central Oregon. Whether it is data collection, monitoring, or projects, many landowners exhibited concern over allowing the watershed councils or government agencies on their property. They described three explanations:

1. Landowners feared that access or cooperation might lead to additional regulation or penalty as Rodney described previously.
2. Opportunities through the council or government agency were too bureaucratic and had too many strings attached. The response of Stan, the activist landowner, to our question about cooperation, despite his role as chair, with council illustrates, "We don't take public monies, we do it ourselves to retain control and access." And,
3. Some landowners just prefer doing things themselves, their way. Barbara spoke of her neighbor, "[He] would not involve himself with the watershed council. [He] is the type that does things for himself."

The need for control is most often expressed in a reaction to some threat which is usually posed by some group that challenges the status quo. The invocation of property rights as a defense is typical, but not singular. Landowners may limit their participation as well by selecting levels of engagement that fall short of the ideal, full participation.

Action Orientation

Stan, described above, concisely captures the action-orientation value of many owners: "I like knowing where the problems are and then see what can be done." The action orientation value encompasses the need or willingness of landowners to act toward well-defined ends. If presented with a problem, landowners will prefer to seek out specific remedies: resolution, steps toward resolution, or a belief that either everything has been done or that nothing can be done. Landowners prefer individual action over group solutions, but do not exclude cooperative action. Such remedies usually require tangible outcomes. This was a sentiment expressed by both interviewed landowners and others. Given a potential or real problem, landowners will focus on fixing the problem or finishing a task that minimizes the impact.

Landowners are provided with several opportunities under *The Oregon Plan*. They can choose to act individually, in consultation with technical experts, with the assistance of incentives, or in cooperation with watershed councils. The first three are approaches with which they are familiar. Watershed councils offer new opportunities, but also have different expectations. Unlike technical assistance or incentive programs, councils expect landowners to participate in the process. However, most landowners, particularly those who derive much of their income (25% or more) from the land, do not see process (i.e., discussion, meetings, planning, etc.) as producing tangible outcomes.

Stewart[34], a retiree, accomplished carpenter and tinkerer, and owner of 53 acres, shared this insight in assessing his experiences from attending several watershed council meetings: "The council needs to get off the pot and do something." Stewart felt that so far, the council had accomplished little that would assist fish or improve water quality. They spend their time talking. He feels that the councils must achieve habitat improvement.

Jerry[35], an owner of 25 acres and the chair of his council, has attempted to learn why other owners don't participate. "While I've heard rumors as to why landowners don't participate, I feel the need for action is the primary reason. We're sitting around and talking. The council needs to initiate actions and not just talk about it. While necessary, the bylaws, consensus, and process stuff drain resources." Roger[36], a watershed council chair familiar with volunteer efforts from years with environmental groups, sees things similarly. "People join because they have an idea for a project or want to do hands-on projects. They are not interested in the infrastructure and that has been a problem." Both Jerry and Roger are part of councils that have yet to implement projects on the ground. At the times of each interview, their councils were attempting to establish their roles and structure. The concerns of action over process, however, are heard from folks familiar with more established councils.

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[34] Interviewed on 6 November 1998 on his property.

[35] Interviewed on 24 October 1998 over coffee at a local eating establishment

[36] Interviewed on 13 April 1999 over lunch at a local eating establishment.

Michael[37], a long-time resident who makes his living off 440 acres raising sheep and cranberries, has implemented several stream improvement projects on his land with the assistance of a state biologist and funds from the federal government. His local council also has a history of on-the-ground actions on private lands. He expressed his thoughts, "I don’t go to too many meetings. They didn’t seem to be productive . . . It gets bogged down in planning and doesn’t get thing done on the ground. My time is better spent doing things." In this case, Michael is familiar with the council's accomplishments, but feels that the process is too time-consuming and bureaucratic for him.

This is not to say that all landowners see the watershed council process as time-consuming and uneventful -- particularly among those owners who earn their living off the land. Bruce, the local politician described above, stated that his initial involvement with the council was for communication: ". . . the councils provided a way to talk to my neighbors. It was a chance to learn what others were doing." Stan, described previously, offers a similar view, "The group learns each other's language and we can tell our side of the story -- how things work in the real world". For these people, the process outcomes qualify as tangible actions. Bruce is a local politician and is well-versed in the use of process. Similarly, Stan, although a full-time rancher, is an active advocate for ownership issues.

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[37] Interviewed on 15 January 1999 at his dining room table.

Perception of Others

Perception of others describes the relationship between the self and others. People's perceptions of others have a profound influence on their willingness to interact and how interaction might occur (Augoustinos and Walker 1996, Bazerman 1994). Negative perceptions of others create initial hurdles to overcome which can require considerable effort of all those involved. Our interviews suggest that perception of others has two dimensions. One deals with who is the "other." The second considers the source of the perception.

"Others" can range from specific individuals or groups to more general definitions such as "the community," "environmentalists," "the government," or "they." For example, Tom[38] is an older rancher with 40 years in the community and was not shy about expressing his opinions. He offered a very specific critique of a public employee, "But when you get somebody like -- well, right back to it, [public employee], basically telling me I didn't know what I was doing, know what I was talking about. Well, that's not the way for an official to act [especially] when you -- when you're with [a public agency]." Tom feels that his opinion is not respected by this person and that public employees have a responsibility to listen to the public. While his opinion is directed at an individual, it was difficult to tell from our interview whether he felt that way about the entire organization.

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[38] Interviewed on 11 November 1998 at his kitchen table.

Ken[39], on the other hand, offered a more generalized other. "If we don't do it ourselves the feds'll make us do it. I've heard that statement a hundred times. What's done is done out of fear of federal regulation." Ken is a long-time farmer who has participated with the council in the past, but doesn't anymore. His duties as a volunteer fireman keep him away. His generalized 'they,' "the feds", is the federal government and the enforcement they bring with them under the ESA. He sees a listing as threatening his livelihood and *The Oregon Plan* as an alternative for the state and local people to take charge.

The second dimension of perception of others describes the source of the perception. This dimension ranges from actual experience, as described by Tom, through reported experiences of friends and neighbors to more general anecdotal sources like that of Ken. His concern over regulation is fostered not so much by what has happened to him or others (no rules affecting coho salmon were in place and he was unaffected by previous listing decisions), but by a combination of local conversations, press reports, and previous experience with government.

Mark, the activist landowner introduced previously, based his negative perceptions of NMFS through press accounts of and conversations about their own actions. In discussing the willingness of different organizations and agencies to help out under *The Oregon Plan*, he was blunt. "You can quote me: I have no use for NMFS. They have a total lack of integrity." This negative opinion is related to the larger policy decisions related to the coho listing decisions. Through press reports, he had learned that part of NMFS, based in Seattle, preferred an initial listing option over *The Oregon Plan*. Mark felt betrayed, had very little trust for this agency, and was skeptical of their actions.

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[39] Interviewed 16 January 1999 in his living room.

As the last few excerpts suggest, the majority of attributions were negative. Given the nature of the interviews and the topic, this is not surprising. A portion of the interview protocol was to understand the problems that landowners face in the management of their land and in dealing with watershed councils. Nevertheless, landowners also provided positive sentiments toward specific individuals or groups.

Landowners rely on trusted sources for information about their land management and community. Trusted sources include friends, co-workers, and neighbors. In understanding the management of their land, they might turn as well to ODF service foresters, NRCS conservationists, or local extension foresters. For the landowners who actively managed their land, they looked to these individuals for technical and management assistance. Kathy (described previously) offered a typical positive critique of two such individuals. She has worked with them over time and developed a relationship.

> That's why I really love [extension forester] and [service forester]. These guys are out there every single day. They know the different interests that are being represented, and they know the -- the personalities involved and the people and the ownership of the land and who believes in what and

> whose grandfather pioneered this down here and the attitudes that have evolved through generation after generation of ranchers and farmers and woodland owners.

In Kathy's view the service forester and extension forester go beyond technical assistance to include providing an understanding of the local community and its history.

Along the South Coast where councils have a history of grant and project success, the watershed council coordinators were also viewed positively by most folks. Part way through our interview, Dennis[40], a long time rancher and community leader, was visited by two of the council staff. They stayed for 20 minutes or so and discussed an upcoming meeting and current projects. Dennis is a member of the local SWCD and the two groups work closely together. After their departure, he exclaimed, "Those guy both do a hell of a job for us! Everyone's gotten done what they've wanted to by working with the coordinator." Even among individuals who had left the watershed council over a particular decision, a positive view of the watershed council coordinator and individuals on the council was still present.

Jonathan[41], a landowner and environmentalist, had a very difficult time accepting one of the council's recent decisions. It led him to discontinue his participation on the council. However, he still holds some members in high esteem.

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[40] Interviewed on 6 January 1999 at his kitchen table.

[41] Interviewed via telephone on 16 March 1999 at his request.

"[Council chair] is a good guy. If he asked for my help, I would do it, but I won't actively participate in the council. Same with [council coordinator], he is a great guy to have around. If he asked, I'd help." In this case, the positive working relationship developed before a key event allowed the landowner to view the council and some members negatively, but still hold other members in high regard.

The perception of others has implications for understanding people's willingness to engage watershed councils as well as other organizations and programs. Positive contacts with group representatives may further landowners' willingness to consider arrangements that they might not have on their own, while negative perceptions can have the exact opposite effects. Nevertheless, even under ideal perceptions of other people and institutions, people's perception of another world view relationship might intervene: The relationship between the owner and their land.

Participation and Action: The Role of Councils

What Is Participation?

Interviewees of all stripes (council members, public employees, and landowners) were quick to link greater participation on watershed councils to on-the-ground action. Interviewees see opportunities for involving landowners by tapping into the action-orientation. This sentiment was particularly true among the more emergent councils on the North Coast and in Central Oregon. During the interview periods, these councils were focused more on process-oriented outcomes as opposed to efforts on the ground. As we quoted Roger previously, "Early on, lots of folks were frustrated . . . People join because they have an idea for a project or want to do hands-on projects. They are not interested in the infra-structure and that has been a problem." The belief is that as councils become established and start projects, participation and attendance will increase. Eric[42], a public employee active in setting up his local council, agreed, ". . . people need to have something meaningful to do. Right now, the council is in limbo until they learn about the most recent [O]WEB grant applications." In short, the logic is that increased funding for projects will enhance landowner participation in watershed councils.

This is consistent with the literature surrounding both woodland owners and cooperation. "Large numbers of respondents [landowners] wanted to observe a demonstration project before deciding whether to participate themselves. Moreover, many said they would participate only under certain conditions . . ." (Brunson et al. 1996:20). These conditions include the participation of their neighbors. The literature surrounding cooperation stresses the importance of legitimacy (Tyler and Degoey 1995). It is easy to envision where landowners might link successful action as at least one measure of legitimacy. The larger question hinges on defining "participation."

The experiences of the more successful councils in our study do not necessarily support the meeting attendance aspect of greater participation. Councils with limited attendance have been able to accomplish a great deal on the ground. On the South Coast where fencing and planting activities on private lands have been extensive, participation by landowners in meetings is still an issue. In corroborating observational data of two watershed council meetings, Lee[43], an environmentalist and owner of 5 acres, said,

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[42] Interviewed on 18 October 1998 over lunch at a local eating establishment.

> I would describe it as struggling, in a sense. Attendance isn't very good. A lot of times there's four or five attendees, and two of those are [members of local environmental group], so it's not very well attended, but I would say there's still a core group of interested people that do show up occasionally and stay abreast of what's going on.

The literature on landowner meeting attendance is less clear. Kuhns et al. (1998), in a study of landowner education efforts, found that owners in Utah and Indiana preferred publications and one-on-one contacts to attending meetings. Force and Lee's (1991) results contradict this based on a survey of Idaho landowners. Councils do provide educational opportunities to landowners, but the greater expectation is for participation, discussion, and action (State of Oregon 1997). Once again, the interviewees are instructive.

Mark likens councils to the traditional sources of landowner outreach, education, and incentives (i.e., Extension Service, NRCS, ODF service foresters). "Once a project is completed, people stop coming to meetings. They know who to call after that." Under this scenario, councils provide a forum for ideas and discussion, but once the tangible outcome is realized, the landowner will be more likely to stop attending than continue.

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[43] Interviewed on 22 April 1999 on his deck overlooking the river.

It is likely that "membership" and "participation" are not static concepts. As councils and landowners change, involvement will also shift. Shifts in policy or issues of concern may affect the types of activities councils pursue and who participates and how. For example, current funding priorities under *The Oregon Plan* concentrate on streams and riparian areas. Under this scenario, the primary beneficiaries or targets of any action are landowners with property along streams. Of the landowners interviewed, only one not living on a stream was part of a council. If watershed councils are empowered (either by themselves or other institutions) to expand their emphasis to non-riparian issues, the likely pool of potential landowners (and other participants) will also change. Our analysis suggests that most of the interviewed landowners see themselves as primarily external to watershed councils. So, what is the role of watershed councils?

What is the Role of Watershed Councils?

For landowners, watershed councils are both a new social setting and institution. Unlike other social settings where landowners participate as landowners (landowner associations, extension programs, etc.), a watershed council brings together diverse interests and individuals. In other landowner settings, the group is dominated by landowners and the environment is comfortable and friendly. Given this relative newness, landowners can find it difficult to determine:

1. What is the role of the watershed council in the larger constellations of opportunities for landowners?
2. What is their role on a council if they choose to become involved?

Landowners have been lectured, tempted, and enticed by numerous programs and organizations over the years (Bliss and Martin, in press). Whether it is the Stewardship Incentive Program (SIP), the Forest Incentive Program (FIP), Master Woodland Managers, Oregon Small Woodlands Association, or a host of others; the opportunities for landowners to be involved both within and beyond the property line are extensive. Some offer education, cost-share, or fellowship. Others might provide market incentives and greater competitiveness. Depending on one's time, it seems a landowner could spend all one's time going from meeting to meeting, but landowners, like everyone else, have limited time and finances to become involved. In addition, the action-orientation suggests that such things might be of minimal interest. Watershed councils are a new phenomenon. They can encompass aspects of a civic club, an incentive program, a landowner association, and an education provider. Watershed councils can also take on the appearance of a potential regulator in that regulatory agency might be a representative on the council. The category or categories in which landowners place them have a great deal to do with how they react to them.

Steve[44], a rancher, logger, and former educator married to Sandy described above, captures this sentiment. "Well, we've got watershed councils. Well, what's behind watershed councils and how is that going to work if you're doing green certification and how's that going to work . . ." Steve went on to list a variety of programs and efforts that have targeted landowners currently and in the past. For Steve and others, watershed councils are only one of several competing opportunities to engage natural resource management issues. For those who do not share Steve's interest in natural resources, it is one of a much larger set of opportunities that includes raising children, working, parent teacher organizations, coaching school teams, church activities, and community outreach.

In turning to the second question, most councils start with little or no on-the-ground actions. Landowners have said that who shows up at a meeting may frame their initial understanding of the group. Charles[45], a professional, part-time rancher, and SWCD member, offered thoughts that were common of landowners. "We had agency participation early. However, the meetings looked a bit slanted. Ten paid people with one having a program and five landowners: Maybe being pushed down people's throats." For Charles and others, the participation of agency people changes the dynamic away from landowner concerns. In some cases, non-landowners are singled out. Rodney, described earlier, noted that watershed council members are ". . . liberals that listened to public radio." Specific outsiders, commonly targeted by remarks, were environmentalists. Ken, the farmer described earlier, offered his perspective on landowner involvement in his council. "They've lost participation since local environmentalists dominated what was going on." Rodney and Ken tie landowner participation to that of other groups that might differ from their own views.

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[44] Interviewed on 12 March 1999 with his wife over breakfast at their home.

[45] Interviewed on 8 January 1999 at his place of employment.

On the other hand, some environmentalists and some public employees see councils as dominated by landowners. John[46], a public employee active with landowners and the councils in his area, aptly expresses this point of view: "While all the councils have language that includes environmental stakeholders, but in practice, they tend to be absent. Either there is no environmentalist or they choose not to participate." His feeling is that the councils have adequate landowner participation, but lack other viewpoints. He continues,

> Having environmentalists on the council raises some points that need to be raised. They may not be very scientific or diplomatic, but they can say things that agency people, as neutral outsiders, have difficulty raising. The agency can be left in awkward position of raising issues that may cast the agency in a bad light or not have the discussion at all.

For John, realizing the democratic idea of watershed councils requires wide participation, which, at least in the initial stages, can be uncomfortable for landowners and compel them to seek alternative opportunities.

In considering ideas of membership, involvement, and participation in watershed councils, it is useful to envision involvement as a dynamic continuum. The range of involvement goes from active participation and membership on a council, through a willingness to attend occasionally and implement projects, to non-involvement. As the issues that councils face or choose to take up change, they will likely adapt to meet the changing environment. The key will be for councils to include or recruit individuals that both understand woodland owners and can represent their opinions.

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[46] Interviewed 27 January 1999 over coffee at a local eating establishment.

Some landowners see councils as a form of participatory decision-making and action. Others see councils as one of many groups which they may enlist to accomplish specific tasks. In this case, councils are classified as service-oriented community group that may provide assistance on specific issues. These owners may see the participatory process as secondary or interfering with their expectations for action. Finally, there are owners who may see the councils as contrary to their management experience and needs and/or as antithetical to their world view in its reliance on cooperation over individuality.

Conclusion

Our study, like others (Habron 1999, Hinrichs 1998), suggests that landowners adapt their behaviors to the social and physical environment to fit their needs. Contrary to the stated intent for watershed councils to involve landowners, the majority of interviewed owners willing to work with councils have yet to engage in the participatory and process-intensive portions of watershed councils. For them, the council is a means to an end. It is a tool for addressing issues that others or they have identified as problematic such as fish habitat or water quality.

When considered from the landowner's world view or value system, this is a reasonable relationship to form. Despite the leadership of the governor and huge investments of time and money, watershed councils do not hold an inherently significant meaning for most landowners. Landowners can choose among many opportunities in which councils may be at a competitive disadvantage because they possess only a limited a track record. At least with the majority of landowners interviewed, the case that watershed councils are essential for woodland owners and their ability to manage land in the future has not been made convincingly. As Kyle pointed out, "The big challenge is to get participation. The ones that need to come aren't there. They have to find the needs in the heart to get them to come."

In conducting this research, we singled out watershed councils as one example of greater social interest in private forestry. Yet, the world view aspects or values that emerged from our interviews and conversations with landowners have application to a wider range of programs and opportunities available to landowners. The stewardship ethic, action-orientation, need for control, and perceptions of others could, with further development, provide a basic analytical framework for understanding the ways in which landowner may react, understand, and adapt a variety of policy tools or management options. The value of world view is that it shifts the focus from a particular practice, program, or incentive and its use and disuse to where that tool fits in the landowner's understanding and practice of land management. It shows the tool as one among many. It recognizes landowners as parents, children, workers, artists, and community members as well as owners.

Watershed councils in Oregon are a relatively new phenomenon. Although the policy and outreach implications of this work are discussed elsewhere, one point is apparent. The designated and designed role of watershed councils under *The Oregon Plan* is not the only, nor even the primary association that landowners can make. While *The Oregon Plan* speaks of community action and the cultural significance of salmon (State of Oregon 1997), landowners are much more rooted in the practical aspect of day-to-day life. The relationship of landowners to councils presents several options.

1. Councils may elect to do nothing and allow the chips to fall where they may. In some watersheds, the contributions of landowners to solving watershed concerns may have minimal impact (i.e., a watershed where 90% of the watershed is in public ownership).
2. Councils might proactively engage landowners using the social networks within the councils to increase involvement or cooperative engagement.
3. If the competing roles that landowners have for councils hold up in future research, councils might restructure their organization and activities to foster participation by both types of willing participants (i.e., members and cooperators).

4. If landowner participation is critical to watershed council success, the councils could also be structured to foster greater relevance to landowner concerns and issues realizing that other groups and points-of-view may be silenced or excluded and compromise the broad representation principle.

In the larger policy arena where collaboration is envisioned as a viable alternative to traditional "top-down" enforcement and management systems, the Oregon experience is instructive. Voluntary action, by definition, allows individuals to opt out. Hence, who participates and how are important in a spatial context. Neither *The Oregon Plan* nor the literature surrounding ecosystem management provide guidance in addressing the spatial issues that varied participation poses. In this situation, landowners adapted the ways in which they participated in councils to suit their needs, expectations, and constraints. Government (and others) must be willing to abide those adaptations or risk alienating participants (Robinson and Ambrose 1998). If our management is to be adaptive, then the implementing policy instruments must be equally flexible while maintaining minimal standards.

World view and value systems were introduced as organizing theoretical concepts for this case study because it placed the owner, not the policy tool, at the center of analysis. The value in this approach is that we were able to understand watershed councils, their strengths and limitations from the owner's perspective. In doing so, we found that councils are not solely isolated social institutions, but are one among many. While some will join for altruistic or environmental reasons, councils and other policy mechanisms must offer potential participants more than the knowledge that they are something good. It also must empower them, build capacity, offer assistance, and make them better off to attract participation beyond an interested few. Using world view and values as analytical tools can assist policy-makers in evaluating why people choose a particular option over another. Landowners' choices must be viewed from their perspective, not as a static idealistic models that impose a particular world view different from their own.

We began this paper with a premise that there is greater social interest in private forestry and developed a case study that analyzed one example of it. Our example was the case of woodland owner participation in Oregon's watershed councils. Using world view as an analytical framework, we identified four elements that landowners brought to bear in considering their involvement in councils. Perhaps, this work will help us to see landowners as more than participants in watershed councils or managers of small woodlots.

The Changing Landscape: Landowner Participation in Collaborative Forums

For landowners, the past was characterized by individual decisions. The practice of forestry on NIPFs was an afterthought for society. Most owners did little or no management, with a minority actively pursuing diverse personal objectives. Both the private sector, through landowner assistance programs, industrial procurement, and consulting, and the public sector through research, policy, and education viewed landowners as individual actors, alone on the stage. An individual wishing to harvest trees could do so with little scrutiny from others. In most areas landowners, in the management of their land, were unencumbered by societal expectations beyond protecting water quality. The world has changed.

Emerging Societal Interest

Private forestry has been the focus of increased examination and questioning. Beginning in the 1970s, states began to regulate the practice of forestry on private land (Ellefson et al. 1997). More recently, ballot initiatives in Maine and Oregon have posed voters with alternatives for regulating clearcutting and other forest practices. International markets are available, in some cases exclusively, to green certified wood products. Landowners and foresters are forced to defend the ecological impacts of what they do. Where does the wood for this chair come from and was it harvested in a sustainable way? How were indigenous people or the local community affected by the harvesting of these materials? All of these factors indicate a growing societal interest in private forestry.

This phenomenon may be attributable to several factors:

- Ecosystem management and sustainable forestry require consideration of landscape processes that transcend individual boundaries.
- Greater realization of the link between private actions and social outcomes.
- Changing ideas regarding the limitations of science as the basis for natural resource decision-making.
- Impact of changing public land management on attitudes toward all forest management.

Regardless of the cause, this growing interest is changing society's expectations for the management of NIPFs. Owners are being asked to do things differently than in the past. For example, in designing its program under the federally-funded Conservation Reserve Program, Oregon is willing to pay a one-time incentive to encourage stream-side owners to coordinate their conservation efforts along multi-owner portions of a stream (Farm Services Administration 1998). Through the market and government action, landowners are being encouraged to both attain good management and participate in cross-boundary management.

It is likely that society's scrutiny will persist, if not increase. Hence, foresters and landowners must understand the implications and alternatives available to them under the variety of options being designed and implemented. In this manuscript, we consider the case study demonstrated under *The Oregon Plan* (State of Oregon 1997, 1998a) and its experimentation with voluntary, community-based collaboration in which landowners are being asked to participate. This study provides a basis for understanding the role of policy and education in furthering both landowner and societal objectives under this scenario. In particular, we briefly describe landowner participation on watershed councils and recommend policy alternatives that might further enhance participation on these and similar natural resource collaborative forums.

Woodland Owners Revisited

Research and commentary on private forest landowners and the management of NIPFs have been recurrent themes in the forestry literature. Not surprisingly, the traditional subjects of research have been on understanding the management of NIPFs on an individual ownership basis and the motivations of individual owners (Egan 1997). Some research has studied the practice of forestry by private landowners (Cleaves and Bennett 1995). Other research has considered the degree to which owners might seek educational opportunities (Kuhns et al. 1998) or react to regulation (Johnson et al. 1997). For example, Egan and Jones (1993) found that actual management practices differed from landowners' expressed objectives and desires. Bliss and Martin (1989) illuminated the role of social factors, like ethnicity, in the management practices of private landowners. Nevertheless, the focus remained on individual owners or ownerships.

More recently, various authors have articulated landscape and cross-boundary considerations in the management of NIPFs and their implied social obligations (Knight and Landres 1998, Bliss and Martin, in press). Whether the topic has been cross-boundary management (Campbell and Kittredge 1996, Stevens et al. 1999) or ecosystem management (Brunson et al. 1996, Rickenbach et al. 1998), much of the work has focused on opinions, incentives, and willingness to participate. Generally, the results suggest that landowners are receptive to collaborative ventures, but guarded.

Case Study: *The Oregon Plan*

In 1996, Oregon was a state harried by debate and controversy over spotted owls and the fate of old growth forests. It also faced the sobering prospect of another listing under the ESA. NMFS had proposed listing coho salmon throughout the coastal Pacific Northwest. In response, the state, under the visible leadership of Governor John Kitzhaber, drafted a different path to recovery. Reframing salmon as a cultural and social symbol essential for all citizens, *The Oregon Plan* called for strict enforcement of existing laws, but instituted no new regulations. Instead, the burden of species recovery was to be shouldered by all Oregonians at the local level through watershed councils.

> A watershed council is a locally organized, voluntary, **non-regulatory** group established to assess the condition of their watershed and build a work plan to implement enhancement and protection activities within their watershed. Watershed councils offer local residents the opportunity to be involved in making decisions at the local level that affect their watershed. (State of Oregon 1997:Chapter 17A, emphasis added)

After an initial review of *The Oregon Plan*, NMFS determined that it was sufficient to recover coho without the need for a federal listing. Proponents of a listing challenged the agency's decision in federal court. They argued that NMFS ignored critical evidence in reaching their decision (Laatz-Jewett 1998). In June 1998, a federal magistrate found the agency's action was arbitrary and capricious and ordered them to reconsider their decision (Barnard 1998). Coho and, soon after, steelhead were listed as threatened in different areas of the state (NMFS 1999). Despite the listings, Oregon maintained its commitment to *The Oregon Plan*, both politically and financially, and expanded it to address steelhead (State of Oregon 1998a).

As directed by the ESA, NMFS is required to develop rules to guide management and enforcement. This has yet to occur for either coho or steelhead. Until such rules are in place, *The Oregon Plan* is the de facto strategy for species recovery efforts throughout the state. In addition to salmon, rivers and streams throughout the state have been listed under the CWA (State of Oregon 1998b). The state has incorporated water quality improvements under the scope of *The Oregon Plan.* At last count there were over 80 watershed councils throughout Oregon grappling with organizational issues, species recovery, and water quality issues.

Approach

Amid the implementation of *The Oregon Plan*, we developed a case study of the involvement of private landowners on watershed councils. Initially, we collected data from councils on their organization, structure, and capacity through a statewide telephone and mail survey. Using the survey data, we selected three study areas across the state (Figure 1) for additional in-depth research. Study area selections were based on a predominance of forestland and private ownership as well as reflecting Oregon's diverse landscape. Within the study areas, we interviewed a mix of landowners, watershed council members, extension forestry agents, service foresters, state biologists, water masters, and NRCS conservationists. Along with questions on watershed councils, our interview script sought information on current management activities and other local issues and concerns related to land management and the watershed. Our 50 interviews generated the basis for understanding how and why landowners participate and how watershed councils fit within the larger community. While our complete analysis and results are detailed in Manuscripts 1 and 2, we will briefly describe councils in Oregon and outline three aspects of our results, (1) owner values, (2) ownership location, and (3) the community context, that have implications for enhancing landowner participation on watershed councils and other voluntary, natural resource collaborative forums.

Watershed Councils

Watershed councils, in keeping with *The Oregon Plan*, have broad interest-based membership. An "interest" can be any organization, agency, association, or individual in the watershed. Interests vary from place to place, but there are several common to many councils. Over half the councils have representatives from local government, environmental organizations, the wood product industry, and private landowners. Other common participants are from the agricultural sector, USFS, recreational fishing groups, SWCD's, and ODF&W. Interests are outlined in the council's bylaws and are appointed positions on the council. Eighty-four percent of the councils have consensus as their primary method for decision-making. Consensus requires that no one object to a particular course of action. In selecting those courses, councils have conducted a variety of activities ranging from watershed assessments and planning to completing on-the-ground projects that enhance or restore riparian areas and streams. In continuing their efforts, councils see the need for continued support for projects and administrative overhead.

Owner Values

Shifting from councils to one specific interest, private landowners, we found four values that were prominent in landowners' decision-making about council involvement. A value is a belief that describes a desirable outcome or behavior, that is independent of specific situations, but dictates the assessment and action toward individuals and events, and is related to other values in a structured way (Schwartz 1994, Rokeach 1973). Hence, values can be predictive or analytical in understanding how and why people do things. The four values that we found in landowner decision-making are:

1. Stewardship ethic. A sense that owners have a responsibility to the land and to give something back. While a common theme among landowners, it is defined and implemented differently based on the individual and their situation.
2. Perception of others. Landowners' perception of others provides a guide to determining their actions toward those others. Given the broad membership of watershed councils, how individuals view the membership and the groups they represent are an initial screen for understanding the council and its role.
3. Need for control. Fundamental to the emergence of watershed council is a desire to effect change on the management of land. When that land is private, owners have a need to exert their rights to the land. This does not necessarily preclude cooperative action, but will likely place constraints on projects.
4. Action-orientation. Watershed councils are process-oriented consensus-based groups. Landowners are practical and solution-oriented. Many see the process aspects of councils as lacking tangible outcomes.

Landowner involvement is dependent on how these four values come together for them. While some landowners participate in the entire process, others have adapted their relationship to councils. There are three ways in which landowners might involve themselves.

1. Active Participant. At the most active level, owners are full participants in council activities. In some cases, they may be a member representing a particular interest. However, given the inherent constraints on council size (as set out in most bylaws), not everyone can be a member. In these cases, an active participant might attend meeting regularly and provide assistance as needed.
2. Cooperator. At the next level are landowners who are interested in the watershed councils but do not have the time or interest to get involved with the routine, process-oriented aspects of councils. Nonetheless, they are willing to cooperate with the council in getting projects done on their land. These people might use grant money or technical advice from the council to implement activities that both restore their part of the watershed and minimize their out-of-pocket expenses. For these people, the watershed council may not be the driving concern. Their relationship with a council member or agency person might facilitate their cooperation.
3. Uninvolved. The final level of involvement is non-involvement. For these people other issues consume their interest or the council is, either through its goals or approach, antithetical to their world view. They may feel more

comfortable working alone or prefer to avoid involvement with government programs.

Ownership Location

Given the landscape and spatial qualities of a watershed, the differing ways in which landowners are involved suggest that involvement has a geographic pattern. The stance of landowners (public and private) and others controlling watershed-related resources or impacts (i.e., hatcheries, irrigation, etc.) determine the workable land base available for council activities. Hence, the non-participation of certain ownerships may reduce or nullify the impacts of projects elsewhere in the watershed. In essence, one ownership, whether public or private, can halt council collective action.

An example will help illustrate. Greg[47], an industrial forester we interviewed, has implemented several stream and habitat conservation projects on company land. Nevertheless, he sees problems downstream in the management of a fish hatchery. ". . . [Our] enhancement work above the hatchery is simply window-dressing. Few fish, except cutthroat and steelhead, are allowed to move above the hatchery to use the variety of projects [the company] has put in place." Further conversation suggested that the hatchery was a rare participant on the local council. In this case, one organization nullified the impact of the work done. It is easy to extend this idea to more owners that either intentionally or unintentionally stay away. While the illustration implies a negative outcome, it is possible to envision scenarios where the key landowners are the willing participants or cooperators.

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[47] Interviewed on 22 October 1999 at his office and during a tour of company land.

Community Context

It is unlikely that all potential council participants will ever be ideally distributed across a watershed. The chief task for councils is to identify and persuade landowners to participate in council activities on their land that benefit the watershed. By capitalizing on the relationships between council members and cooperators, several councils have been able to work with landowners that are not part of the council's membership and attendance rolls. Through conversations with neighbors and friends, council members have been successful in implementing projects that extend beyond individual owners and are cross-boundary in scope.

For example, multiple interviewees along the South Coast pointed to their success in fencing the entire private portion of a particular river. Fencing is done to prevent cattle from degrading riparian areas and water quality. The council that sponsored the work has attendance similar to most of the smaller councils in our study areas: 5-7 attendees per meeting. These members were able to capitalize on their relationships with friends and neighbors to either have them fence it themselves or allow workers on the land to do it. They were also able to obtain grant dollars for equipments and materials and employ retrained, local fishermen as laborers. The council was successful in this effort because it was able to tap into the social networks of the individual members and the institutions they represent.

Elements of 'Success'

Often during the data collection, analysis, and reporting phases of our work, we have been consistently asked questions such as: "What does a successful council look like?" Or, "Are councils effective?" The purpose of this project was not to evaluate council effectiveness or success. We concentrated on understanding how and why landowners become involved on watershed councils. Nevertheless, this experience has provided meaningful insights into this particular aspect of council success or effectiveness. And, as we pointed out earlier, this aspect is of considerable importance. In mixed ownership watersheds, voluntary efforts are dependent on those landowners willing to participate. For watershed councils, this translates into access to near-stream ownerships. To do this, we will describe four attributes of 'successful' or 'effective' councils that emerged from interviews and observations.

1. Council coordinator. Someone to answer the phone, handle the paper work, write grants, inspect sites, and make new contacts is essential. This individual serves as a hub for both council activities and communicating with those outside the council and the community.
2. Defined agency role. Central to council effectiveness is building trust. Landowners are very concerned that their management actions will be limited

by regulation. While the function of councils is non-regulatory, regulatory agencies may have a legitimate seat at the table. Ground rules should be set to allow individuals to speak freely about their concerns and issues without fear that their words and actions might be used against them.

3. Organizational partners. Watershed councils are relatively new social organizations. The councils in our study, that had landowner buy-in and success in funding and completing project, partnered with other local groups, organizations, and agencies to achieve desired outcomes. Through collaborations with local SWCD's or other groups, state resource agencies, and federal land managers, a council taps the skills, knowledge, and expertise of well-established organizations. These links can foster positive sentiments toward the council. Along with providing capacity, the organizations lend credibility to the council process and its activities. Over time, such activities will also embed watershed councils within the larger community structure.

4. Multiple involvement opportunities. One size fits all policies are less effective than those that are tailored to specific situations. Councils that can accommodate the varied expectations of different individuals can be more effective in attracting a diverse membership and cooperator base. Through serving diverse needs, councils can expand the landscape available for potential enhancement projects.

Policy Tools

If watershed councils, in general, and landowner participation, in particular, are desirable policy outcomes, then policy tools that foster the four characteristics above are worth formulating. In developing our policy tools, we saw two ways in which policy might affect participation and council action: (1) Efforts might be directed toward councils without respect to a particular audience or stakeholder group and (2) efforts might be directed at landowners that might foster their participation or cooperation (Table 7). Our analysis focuses on fostering councils and landowner involvement, but could easily be adapted to other policy settings.

Building Council Capacity

Dealing with administrative issues within a council and with its external partners is a time consuming, but essential function. The majority of councils cover this function through the employment of a watershed council coordinator. These individuals may have appointments ranging from part-time to full-time. Landowners saw coordinators filling an essential role in dealing with the day-to-day bureaucracy, providing support to council members, overseeing projects, and initiating new contacts and projects. In the watershed council survey, 26 (of 58) respondents were concerned with the long-term funding of councils to handle the administrative aspects with an additional 8 noting the need for money for unspecified costs.

Table 7. Policy and outreach recommendations for watershed councils and landowners to facilitate greater involvement.

Recommendation	*Description*
	Building Council Capacity
Block Grants	To cover administrative overhead and support to councils that meet guidelines.
Accreditation	Through review and education, minimum standards of council competency are maintained.
Continuing Education	Keep council staff and members current on natural resource sciences and management.
Role Education	Provide tools to council staff and members to accommodate the different expectations that individuals might have for the council.
	Fostering Landowner Involvement
Blanket grant or Line of credit	Either approach could fund different projects and would allow councils to respond quickly to request.
Council outreach	Provide education and training to council members and staff on engaging neighbors in conversations about watershed stewardship and the options available through the council.
Regulation	Maintain baseline standards and compliance.
Council-only incentives	Provide landowners who work with councils special financial and/or non-financial (e.g., reduced inspections) incentives.
Option suite	Provide an array of options with differing scales of risk and corresponding incentives.

Given the importance of the coordinator function, baseline support should be available to councils. However, councils should be allowed to use the money as they see fit (i.e., block grants). If a council is able to provide the coordinator function at a cost below that of baseline support, the council can use the money for other projects or costs. In providing money to councils on a non-competitive basis for coordination, the burden of accountability should be shifted to the council as well. Rules for the block grants should specify the expectations for a coordinator function and identify acceptable alternative uses of the money.

In 1998 when we completed the survey, administrative capacity varied. Some councils had GIS software and equipment, while others still needed a dedicated phone line. Administrative capacity should be part of the coordinator function. Part of the baseline of support should include a minimal set of equipment with allowances for each. If a council chooses to spend more on a given area they must raise the capital.

In developing a system to determine if councils are meeting the accountability expectations, a form of accreditation may provide a useful assessment tool as well as an opportunity for education. While an accreditation team assesses compliance with the block grant guidelines, the team may also provide guidance on emerging issues and opportunities, effective tools for engaging the community, new technology, and more. The accreditation could be part assessment and part in-service. An initial failed accreditation should not be the basis for termination of funding, but should focus external capacity on helping the group move forward. Only after repeated failures (e.g., 3 in 5 years) should funding be ended.

The value of an accreditation process is that it allows the assessors the opportunity to actually see what is happening within the local area. The diversity of

Oregon's landscapes and the differentiation between councils makes a one-size-fits-all approach potentially ineffective. A team could evaluate a particular council on its own terms compared to standards that fit its situation. In addition, by including council members from elsewhere (if feasible) as part of an accreditation team, they could both provide insights based on their experiences and learn from that of others.

Helping councils adapt to the multiple roles that landowners (and others) might assign to them is another need. As we noted, some landowners see councils as service providers much like service forestry or extension. It might be useful to provide training and linkages to council staff and members to fill these roles. It is likely that other groups see councils providing other roles. K-12 have seen watershed councils as opportunities to educate children with hands-on projects. The more roles a council can capture or provide adequate connections for, the greater their reach into the community.

Also, the on-going need to understand new ideas and technology make continuing education a must for council members and staff. As the front line in the watershed councils' restoration efforts, council members and staff need to be aware of the latest programs, science, and techniques. Providing opportunities for continuing education can link practitioners with regional experts and knowledge that they have little or no other ability to access.

Fostering Landowner Involvement

What policies and knowledge might aid councils in facilitating projects on private land? Based on our data, we were able to identify five. The first is related to the way in which councils fund their activities. One concern that landowners have regarding councils is that they are too bureaucratic. Project funding requires the coordinator to write a grant, seek council approval to submit, submit to the grantor, wait a few months, and then find out if they can move forward. If councils submitted blanket grants for common practices (i.e., stream fencing, riparian planting, etc.), they could have a pool of money available to meet a landowner's request in a timely manner. Once again, accountability will be essential. Unspent money should be returned to the grantor.

An alternative approach might be a "line of credit" where a council submits a blanket proposal and the grantor holds the money in escrow until needed. This way the grantor maintains control, while having money available to the council when needed. Such approaches would allow councils to quickly address straightforward requests in a timely fashion. If more complicated projects are requested, funding could proceed on a more traditional grant basis. By delivering timely assistance on minor projects, the councils can establish a relationship with landowners. With positive rapport, landowners might be willing to engage in future joint action.

The second is the empowerment of council members and coordinators to engage other community members. Given the different ways that landowners (and likely others) involve themselves, councils will need to proactively engage others to expand their influence on the landscape. To be effective, council staff and members must have the skills to communicate with others. The advantage of a council is that it taps local people to address local issues. To expand influence beyond that small subset of 10-30 people, the social networks of each individual must be used to reach out to other landowners. Conversations with neighbors about sensitive topics (e.g., cows in the stream) are difficult to broach. Providing the skills to at least attempt such interactions should be a priority in educational offerings.

Third, minimum standards must be maintained. Given that all landowners will likely never be part of a watershed council, regulations will always provide a baseline level of adequate management. However, in trying to enhance watersheds, councils must offer something in return for people's willingness to go beyond the minimum standard. Cost-share and partial-to-complete funding (not available to an individual working alone) have enticed some landowners to cooperate. Landowners have suggested that the programs offered by watershed councils and others are too bureaucratic; there are too many strings attached. To offset this perception, a fourth idea is to reduce the bureaucracy surrounding council involvement.

For example, under the EPA's newly proposed CWA rules for Total Maximum Daily Load (TMDL) some silvicultural activities may require a permit where previously none was required. While still unknown, site inspections could be a viable tool in enforcement as it is under some forest practices acts. Perhaps (documented) involvement with a watershed council could provide landowners benefits not available to non-participants. For example, a participating landowner might be exempted from all but one inspection, a final site visit.

Fifth, the more active councils in our study noted that landowners might be willing to do some things, but not others. Concerns over cost, loss of control, and potential risk were often cited as reasons affecting the willingness of landowners to participate. Incentives and cost-share programs should provide a suite of options for landowners to pick their level of comfort with corresponding levels of support. For example, placing large woody debris is beneficial for fish habitat. Most biologists prefer placing wood in the stream and allowing the flows to bring it to a final resting place. For landowners, this can be a risky proposition. The movement of the log in the stream might disturb acres of productive ground. The landowner may also be concerned about downstream liability. Perhaps the owner could choose between stream placement and biologist placement options with a differing cost-share or in-kind (money, labor, materials) support. The decision to allow stream placement might limit the landowner's liability.

Conclusions

The Oregon Plan with its reliance on voluntary collaboration is one example of growing societal interest in private forestry. It is difficult to envision a future without continued social interest and public involvement. The ecosystem approach is here to stay, at least for the foreseeable future, as is its implied call for cross-boundary management. The question is how to develop programs and policies that protect the interests and concerns of private landowners while fostering a landscape perspective. Our suggestions are, by no means, definitive, but represent what *The Oregon Plan* has taught us. *The Oregon Plan* is young and growing pains are evident in our work and that of others. Only time will tell if watershed councils continue as a major player in natural resource issues.

In addition to the tools suggested above, two points require stating. First, *The Oregon Plan* is three years in progress. Commitment to the future is essential for efficacy. Uncertainty over the future of natural resources and the nature of watershed councils is enough without the added concern for the support of councils. Uncertainty over future government support or whether the groups will be here tomorrow can only drive potential collaborators to seek alternative opportunities. Despite desires to the contrary, watershed councils compete with other uses of time both resource-related and otherwise.

Second, to provide the security and openness needed to discuss potential difficult and sensitive questions, watershed councils should not be seen as having an enforcement or regulatory role (beyond the social pressure it might exert). Watershed councils are not the silver bullet solution to resource problems. They are a part of the solution. By maintaining a well-defined role, they can provide a useful forum for discussion and action. The suite of other non-council specific incentives, programs, and regulations should inform the council and its actions. Councils should work closely with others to communicate new information and ideas. The councils should not administer such programs, however.

Perhaps, more than ever, ownership matters. Society's increasing interest in the management of private land will likely continue and ownership will matter more. The days of obscurity have passed and the sun is shining. Landowners have a lot to be proud of, but there are also areas that need some work. Landowner participation in collaborations like watershed councils offers an opportunity to tell their stories and learn in a potentially friendly manner. Nevertheless, society must also have the will to be supportive.

Summary

The Back Window

Through the three manuscripts that preceded this chapter, we presented the case of woodland owner involvement in Oregon's watershed councils. In manuscript 1, we described watershed councils and offered a perspective on the challenges they face in addressing spatial participation. Manuscript 2 focused on understanding watershed councils from the landowner's world view and value system. Four salient values -- stewardship ethic, perception of others, need for control, and action-orientation -- were identified and applied to landowner participation on and with watershed councils and how they adapt councils to their needs. Manuscript 3 used the data and analyses from the first two to frame policy and educational alternatives for fostering council and landowner actions to address growing societal interest in private forestry.

The difficulty in a manuscript format is that the manuscripts lack the synergy and depth that might be more forthcoming in the *magnum opus* format. The individual articles draw the reader into specific discussions, but do not span the entire effort. They are three separate windows on the topic as opposed to one large bay window. This should not diminish their value, since they may provide perspectives and angles that the bay window does not allow. However, it does require that the manuscripts be tied together.

If there is an unstated theme that pervades this work, it is scale. Each manuscript presents a different scale of analysis. Manuscript 1 focuses on watershed councils and the ways that community action is bounded by landscape patterns. Manuscript 2 illuminates how individual landowners form their relationships to watershed councils. In manuscript 3, we combine our two scales into policy recommendations for yet another scale: the state of Oregon.

Decisions and actions at one scale determine opportunities and inform decisions and actions at another scale. As our illustrations of spatial participation suggest, an individual landowner deciding to work or not work with the council shapes the options that a council might successfully pursue. However, individual owners do not make their decisions in a vacuum. The success of council activities elsewhere in the watershed, other people's opinions of the council, alternative opportunities, and council membership can all affect how a landowner sees the council.

The scales have both social and geographic components. Moving from individual owners to watershed councils broadens both the social and geographic scale. Each becomes wider, more interconnected, and more complex. In much of the research on social capital or collective action, those who do not partake can be ignored or forgotten as long as the desired outcome is achieved. Once the community park is created, who did or did not participate is important, but was not critical to the park's creation. Only when a project fails or does not meet expectations that participation may become a significant issue. When geography is important, the location of specific ownerships and the involvement of specific owners are of substantial concern from the start.

Watershed councils, unlike previous approaches in natural resource management and policy, critically depend on the geographical distribution of owners, ownerships, and natural processes. Councils are currently concerned with improving water quality and salmon habitat, so they are most interested in owners of the riparian areas. Issues and concerns change; before salmon there was the spotted owl and its need for interior forests. The future may see new emphases that again shift the spotlight from streams to some other parts of the ecosystem. Despite these shifts, what we know about councils and how they work should remain useful. While the issues are different, the fundamental social process and spatial dependency are the same.

Future Research

Yet, what we have learned is still inadequate to the task of understanding landowners, watershed councils, or their interactions with the landscape. Research typically generates new research questions and ideas. This project has yielded several research questions that future studies might consider. Through the process of completing this research and in thinking about landowners and collaborative efforts more broadly, three areas of research seem relevant and potentially fruitful from both an intellectual and a practical perspective. The four broad areas are: value systems and world view, spatial participation, watershed councils as community, and collaborative decision-making. The questions are presented to stimulate the thinking of other researchers.

World View & Human Values

In manuscript 2, we introduced the anthropological concept of world view (Kearney 1984) and the related idea of value systems (Rokeach 1973) to describe how landowners frame their relationship to watershed councils. As we noted in that manuscript, both are useful because they shift attention from a particular program, event, or phenomenon to how it plays out in the lives of landowners (or anyone else). This is a deviation from other approaches to understanding policy changes where a particular policy may be of interest or a specific aspect of landowner consciousness (e.g., economic decision-making, land management). We developed four salient values that seemed useful in describing how woodland owners understand watershed councils. Future research might consider:

- To what extent are the values described here, present elsewhere?
- Do these (or other) values affect management on-the-ground? Are their linkages between portions of world view and value systems and management decisions (like Bliss and Martin's 1989 use of ethnicity)?
- How do the salient values play out in other settings and in dealing with other programs and situations?

- Is it possible to construct a landowner world view or value system that has meaning in understanding a broad range of factors in land management?
- How do world view and value systems compliment alternative approaches to understanding woodland owners?

Spatial Participation

Introduced in manuscript 1, spatial participation was developed to show the disconnect between social capital and the spatial reality of a privately-owned landscape. As was defined earlier, spatial participation is a spatially explicit aspect of social capital. The different ways in which individual owners choose to participate may create a landscape of varied sensitivity to ecosystem and landscape concerns. Additional work could consider several directions.

- Future work could further refine the definition and develop tools for assessing participation across a landscape.
- What tools could be used to enhance spatial participation?
- How does the use of a spatially explicit social capital differ from non-spatially explicit uses?
- How can spatial participation differentiate between membership in planning forums, cooperative action, and individual action in pursuit of social goals?

Community

The initial theoretical basis for manuscript 1 was a quote in Wilkinson's (1991:75 emphasis added) treatise on community field. "Social and individual well-being cannot be achieved . . . except in ways that also promote *ecological* well-being." He posits a tenuous and largely unsubstantiated relationship between community well-being and ecological well-being. Under this theoretical model, watershed councils are community-based forums to address ecological concerns. This basis was abandoned mainly because the data were insufficient to the task. The research questions and data collection were too far away to allow sufficient rigor in addressing Wilkinson's postulate. However, the question remains quite viable and interesting.

- Do rural communities that protect or enhance their environment have greater well-being?
- Community is a spatial phenomenon that has largely been considered in contrast to other communities or the "outside world." How does what we know about community, social capital, and community activism translate to within community spatial relationships (i.e., between owners)?
- How do within community ties affect owners' management activities (if at all)? This question is based on a conversation that the author had with a landowner in Massachusetts who refused to enroll his property in a tax abatement program because it would shift the burden to other people in his community.

Questions About Collaboration

Central to watershed councils is the willingness of individuals to engage a process. In this case, that process is usually consensus-based decision-making and action by interested individuals and institutions. Collaborative frameworks are seen by some as a panacea for environmental ills and decried by others. Our research suggests that several questions require additional consideration.

- Given the consensus approach of most watershed councils, what are the pressures on individuals when they decide to say no and block an action. How often can one person disagree before they are seen as disruptive and, potentially, ignored or ostracized?
- How do councils (or their representatives) learn about new information? Informal questioning show little targeted efforts toward councils and council members and staff. What might be useful approaches for delivery?
- How is council membership established? The local control over the decision may have significant influence over who is included and excluded?
- Who is excluded from council membership?
- What is the viable range of topics, issues, and problems that councils can effective engage? The consensus nature of the groups makes some issues too contentious to address. Where is the line?
- As councils grow, how do they maintain capacity and support over time?

Viable Venues?

As was noted toward the end of manuscript 3, a constant question that we faced during presentations and conversations about this work was concerned with the effectiveness of councils. This study did not assess the effectiveness of councils, either on the ground or as a decision-making forum for local environmental issues. It was designed to evaluate the willingness of one interested stakeholder group, private forest landowners, to involve itself. However, this work and observations of council work does suggest questions worth asking in assessing council effectiveness. Along with that presented in manuscript 3, the following are insightful.

First, any question of effectiveness is based on perspective. From whose perspective is effectiveness being judged? Are watershed councils to be assessed as tools in species recovery? Are they tools for local involvement? Both questions are equally valid, but have very different responses. A further delineation is who asks the question. Are councils to further federal, state, or local agendas? While federal and state entities are concerned with species recovery and water quality improvement, local communities may have concerns that are quite different. This difference is just what Robinson and Ambrose (1996) meant when they noted that government must support the decisions of local communities despite potential contradictions with desired policies. To do otherwise, is to invalidate councils and show them to be just another extension of federal or state control.

This is not to suggest that government should not provide guidelines or limit the scope of projects they are willing to support. Society has desirable outcomes it is seeking to achieve. Grants and incentives should be structured to seek those outcomes. However, councils should not be compelled to engage in those activities nor penalized for failing to do so. If a council picks a different route and can fund such actions through alternative opportunities, so be it. For this reason, councils are one of several policy tools that should be part of species recovery and water quality improvements.

To envision watershed councils as the sole instigator of improvements is to make the same failures as those who saw regulations as the only way. There are no single solutions. If watershed councils can engage new people and provide some improvements, then they have a role in the solution. Whether they are efficient, is a separate question whose response is likely premature. *The Oregon Plan* was instituted in 1997. It is a new way of doing business and will likely have several iterations over time. However, this should not prevent us from developing the tools for assessing its progress, both as ecological change agents and social institutions.

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Appendices

Appendix A: Watershed Council Survey Materials

Hello, My name is Mark Rickenbach and I'm calling from Oregon State's Extension Service. We're conducting a survey of Oregon's watershed councils and watershed-related organization. Our purpose is to understand who we might better target educational programs for watershed councils, members, and stakeholder groups. This interview should take between fifteen and twenty minutes.

2. Is this a good time?

YES **NO**

   a. If yes, continue
   b. If no, could we schedule a time that works for you?

This interview will have three parts. First, I'll ask some questions about your organization. Next, I'd like to learn how your group fits into the overall watershed picture. Third, I'd like you to tell me a bit about what your organization is doing.

Before we begin, You should also know that the data collected, while not attributed to you personally, will be attributed to your specific watershed council or group. Hence, the group's responses will not be confidential. Information on individual councils will be made available to the OSU Extension Service and the Governor's Watershed Enhancement Board.

Although I cannot predict how the data might be used, it is feasible that the data will be used to better understand watershed councils and target information, education, and other programs.

Finally, you should know that you and your group's participation in this survey is voluntary. If you decide you do not want to participate or, if after completing a portion you don't wish to continue, please stop me. There are also no repercussions or penalties for not participating.

If you have any questions about this study, you can call me or Scott Reed at 541-737-3700.

3. Would you like to continue?

YES **NO**

4. What is your group's full name?

5. Who is your group's point-of-contact?

6. What is this person's mailing address?

7. Is this the best phone number to reach that person?

8. Does the group have a fax number?

9. Does your group or point-of-contact have an e-mail address?

10. Approximately, how many acres does your watershed or sub-basin encompass?

11. Is ownership mostly private, mostly public, or about equal?

PRIVATE PUBLIC EQUAL

12. Is the land mostly forests, mostly agricultural, mostly residential, or some combination [circle those that apply]?

FOREST AGRICULTURE RESIDENTIAL

13. What year did your group first meet?

19_____

14. Do you have a mission statement?

YES NO

15. Do you have a charter and/or bylaws?

YES NO

16. What interests, agencies, or groups are represented?

17. Is there anyone missing?

18. Is your group officially recognized by local government?

YES NO

  a. If yes, what year?

19___

19. Has your group conducted a comprehensive watershed assessment?

YES NO

20. To your knowledge, has another organization conducted a comprehensive watershed assessment of your watershed?

YES NO

  a. Did either include private lands?

YES NO

21. Has your group drafted a watershed action plan?

YES **NO**

22. Do you have a technical advisory group?

YES **NO**

23. What agencies or organizations do you look to for technical assistance?

24. What's missing in this area?

q98. Do you have 501c3 non-profit status?

YES **NO**

25. Does your group use a consensus-based decision-making process?

YES **NO**

a. If yes, How does your group define consensus?

b. If no, how does your group reach decisions?

One of the things we're trying to understand is the organization of watershed groups across the state. The next set of questions will help us understand how your group fits into the big picture.

25. Would you consider your group a sub-group of some larger organization?

YES **NO**, go to #26

a. If yes, what is the name of this organization?

b. How would you describe your relationship to this organization [e.g. steering committee, go through for funding, etc.,]?

26. Does your group have subcommittees or sub-basin groups?

YES **NO**, go to #27

a. If yes, what are the names of these subgroups?

b. Are they functionally or geographically defined?

FUNCTION **GEOGRAPHY**

c. How would you describe your relationship to this organization?

27. What do you feel are the top three successes of your group in the last year

28. What do you need to be more effective?

29. Is there anything else about your watershed council that you would like to share?

30. Would you like a copy?

YES **NO**

   a. If yes, get contact information

If you have anything else to share with me about your council, you can leave a message on my voice mail at 541-737-7951. Thank you and have a good day.

30 July 1998 [ON OSU FORESTRY EXTENSION LETTERHEAD]
<first> <last>
<council>
<address>

Dear <first>:

Over the last several weeks, I have been conducting phone interviews with watershed councils and groups from across Oregon. The intent of the interviews has been twofold. First, we are updating the contact list that the Governor's Watershed Enhancement Board [GWEB] provided us to reflect the most current information. Second, we hope to learn a little bit about your group and your activities so we might better target Extension programs in those areas.

You are receiving this letter for one of two reasons. [1] Your phone number was missing from the initial GWEB list. Or, [2] Your phone number was present, but I was unable to reach you at that number.

Enclosed is a questionnaire which covers most of the same information from the phone interviews. If you could take a few minutes to complete it and return it via the enclosed envelope by **15 August 1998**, I would greatly appreciate it. Your responses will become part of our growing knowledge around watershed councils and help us better meet your needs.

Later in August, we will prepare the results of the phone and questionnaire responses. This will include a revised contact list for watershed groups across Oregon and a summary of your efforts and those of other councils. My hope is that this will provide a resource for your group as it grapples with new and existing issues.

If you have any questions regarding this survey, please contact me [541-737-7951]. Thank you for your assistance.

Sincerely,

Mark G. Rickenbach
Research Assistant
rickenbm@ucs.orst.edu

Enclosure.

Some Questions
About Your
Watershed Council or Group

A Mail Survey Conducted by Oregon State University's
Extension Forestry Program

119 Peavy Hall
Corvallis, OR 97331

INSTRUCTIONS

Please answer only those questions you feel comfortable answering. A pre-addressed envelope is provided. If you misplace the envelope, please send the completed questionnaire to Mark Rickenbach, OSU Forestry Extension, 119 Peavy Hall, Corvallis, OR 97331. If you have questions, please call Mark at 541-737-7951.

1. Who is the group's point-of-contact [usually the coordinator or whoever fills a similar role]?

2. Please provide the following contact information for the watershed group?

   Address:

   Phone number:

   Fax number:

   E-mail:

   Web site:

3. Approximately how many acres or square miles does your watershed or sub-basin encompass?

   __________ *Sq. miles* OR __________*Acres* OR __________*Hectares*

4. Please estimate the percentage of public land [federal, state, and local] in the watershed.

   __________*%*

5. Please estimate the approximate breakdown between the different land-uses below?

   *Forest:*______*%* *Agriculture/Range:*______*%* *Other:*______*%*

6. What year did the group first meet?

   *19*____

7. Does the group have a mission statement? [Please circle the appropriate response.]

   YES *NO*

8. Does the group have a charter and/or bylaws?

   YES *NO*

9. With what groups, organizations, or agencies, or are your members affiliated [e.g., U.S. Forest Service, Trout Unlimited, Small Woodlands Association, Irrigation District, etc.,]?

10. Is the group officially recognized by local government?

YES *NO,* Go to #12

11. If yes, what year?

*19*____

12. Has a comprehensive watershed assessment been conducted for the watershed?

YES *NO,* Go to #14

13. Did it include private lands?

YES *NO*

14. Has the group drafted a watershed action plan?

YES *NO*

15. Does the group have 501c3 non-profit status?

YES *NO*

16. Does the group have a technical advisory group?

YES *NO*

17. What agencies or organizations do you look to for technical assistance? This could include organizations represented on the technical advisory board or others that provide such information.

18. Which statement best describes the how the group makes a decision? [Please circle the appropriate letter.]

   a. *Everyone must agree before the project or item is approved. One or more dissenters result in halting the project or item.*

b. *A simple [i.e., half +1] or super majority [i.e., 2/3, 3/4, etc.] is needed to approve the project or item.*

c. *The agreement of all members is normally sought. However, if that is not possible, a simple or super majority is needed to approve the project or item.*

d. *The nature of the group is such that decision-making is not a part of its purpose.*

e. *None of these describe the group's decision-making process. We make decisions as follows:*

19. Does your group have subcommittees or sub-basin groups?

YES *NO*, Go to #22

20. If yes, what are the names of these subgroups?

21. Are they defined by function [i.e., monitoring, education, steering, etc.,] or by sub-basin?

FUNCTION *SUB-BASIN* *BOTH*

22. What do you feel are the top three successes of your group in the last year?

[1]

[2]

[3]

23. What does the group need to be more effective?

24. Is there anything else about your watershed council that you would like to share?

25. Would you like a copy of the summary results?

YES *NO*

If you have anything else to share with me about your council, please call Mark Rickenbach at 541-737-7951. Thank you very much for your participation.

6 August 1998

Dear <First>:

Last week I mailed you in hopes of learning about the <council>. As of this date, I have not received your completed questionnaire.

If you have already sent it in, thank you for your assistance in helping us learn about watershed councils across the state.

If you have yet to complete the questionnaire, please take a few minutes to do so. Your response will help us better design Extension programs for groups like yours. If the questionnaire has been misplaced, please call me at 541-737-7951 and I will send you a replacement.

Once again, thank you for your help!

Sincerely,

Mark G. Rickenbach, OSU Forestry Extension

Appendix B: Interview Materials

INFORMED CONSENT DOCUMENT

(On OSU Forestry Extension Letterhead)

Title: Understanding Landowner Opinions and Attitudes toward Watershed Councils

Investigators: Mark Rickenbach, Graduate Research Assistant & Scott Reed, Professor & Associate Dean, OSU Forestry Extension Program & College of Forestry

Purpose: The purpose of this study is to understand how and why private landowners involve or do not involve themselves in watershed councils.

I UNDERSTAND THAT AS AN INTERVIEWEE THAT . . .

1 I will be interviewed and that the interview will be tape-recorded. The interview will last between 20 and 60 minutes, but may go longer. The purpose of the recording is to assist the investigators in accurately reflecting my comments and statements. I may request that the interview not be tape-recorder.
2. I will receive no payment for participating in the study.
3. My interview will be kept confidential. A pseudonym (fake name) will be used to identify any statements I've made. The only persons who will have access to the tapes, transcripts, and field notes will be the investigators and only pseudonyms will be used in any summaries or publications.
4. My participation in this interview is voluntary and that I may either refuse to participate or end the interview before it is completed.

My signature below indicates that I have read and that I understand the procedures described above and give my informed and voluntary consent to participate in this study. I understand that I will receive a signed copy of this consent form.

______________________________	______________________________
Interviewee's signature	Interviewee's name
______________________________	______________________________
Date	Interviewee's address
______________________________	Mark G. Rickenbach
Interviewer's signature	541-737-7951

Interview Protocols

Landowners

- Personal history
- Reasons and objective for land ownership
- Land-use history
- Issues you face as a landowners
- Opinions about salmon and other endangered species
- Thoughts on *The Oregon Plan*
- Affects of fish issue on your management
- Familiarity with watershed councils
- Views on landowner representation
- Participation on watershed councils
- Others to talk to

Watershed Council Members

- Personal history
- Role and participation on watershed councils
- Reasons for participation
- Key issues
- Thoughts on how watershed councils are doing
- Opinions about salmon and other endangered species
- Thoughts on *The Oregon Plan*
- Views on private forest landowner participation, representation, and involvement
- Others to talk to

Other Informants

- Personal history
- Relationship to woodland owners and watershed councils
- Expectations for participation on or assistance to watershed councils
- Key issues facing watershed council and woodland owners
- Thoughts on how the watershed councils are doing
- Opinions about salmon and other endangered species
- Thoughts on *The Oregon Plan*
- Views on private forest landowner participation, representation, and involvement
- Others to talk to

Appendix C: Additional Watershed Council Results

[This appendix includes the text of a published factsheet, only the formatting has been changed.]

A Point in Time: Oregon's Watershed Councils

Mark Rickenbach and Scott Reed
Oregon State University Forestry Extension
30 September 1998

Overview

During late spring and summer of this year, Oregon State University's Forestry Extension Program conducted a survey of Oregon's watershed councils. Our goal was to learn about watershed councils throughout the state to better inform the design and content of the courses we offer. We wanted to share the results with watershed councils and others to illustrate the diversity and potential of these local, collaborative efforts.

Research Methods

We obtained a list of watershed councils the Governor's Watershed Enhancement Board (GWEB).

We collected data in two ways. First, we conducted phone interviews of representatives from watershed councils or groups. Due to wrong numbers or similar barriers, we mailed a questionnaire to those councils we could not reach by telephone. The questionnaire posed similar questions to those used in the telephone portion of the study. Additional, supporting data was gathered via the Internet and through other publications and documents. Our phone interviews and mail survey focussed on groups that were recognized by local government. Hence, we did not target groups established under some broader watershed council, unless that group was also recognized by local government.

Questions focused on five areas: 1) contact information for the group, 2) current status of the group, 3) decision-making protocol, 4) recent successes, and 5) barriers to greater effectiveness. This overview explores areas 2-5. Contact information for watershed councils is available in a separate, updated list.

Representatives (i.e., coordinator, chair, other officer, etc.) from 59 recognized watersheds were interviewed by phone, while another 11 responded by mail for a total of 70. By the end of the data collection, we estimated that there were 83 watershed councils and calculated our response rate to be 84%.

Current Status

In assessing the current status of councils, we asked several questions that looked at the mileposts by which most watershed councils pass. Below, these mileposts are listed with the number of councils to reach them. Because not everyone answered every question, the number in the parentheses is the number of councils that responded to the question.

- Recognized by government under the guidelines set forth in HB3441: 59 (out of 64 or 92%).
- Mission statement: 58 (out of 64 or 91%)
- Bylaws: 51 (out of 64 or 80%).
- Use subcommittees or sub-basin groups to divide tasks: 45 (out of 65 or 69%)
- In the process of completing or have completed a watershed assessment: 31 (out of 62 or 50%).
- In the process of developing or have developed a watershed action plan: 31 (out of 62 or 50%).
- Have or are seeking nonprofit status under either state or federal law: 12 (out of 65 or 18%).

Decision-making

The groups surveyed tend to fall into the following five styles of decision-making. Those five, as well as the number reporting that style, are provided below.

- Everyone must agree before the project or item is approved. One or more dissenters result in halting the project or item. 35 (out of 62 or 57%).
- The agreement of all members is normally sought. However, if that is not possible, a simple or super majority is needed to approve the project or item. 17 (27%)
- A simple (i.e., half +1) or super majority (i.e., 2/3, 3/4) is needed to approve the project or item. 6 (10%)
- The nature of the group is such that decision-making is not a part of the group's purpose. 2 (3%)
- None of these describes the group's decision-making process. 2 (3%)

Successes

In trying to understand the role and activities of watershed councils in their local communities, we asked each council to identify two or three important successes they had in the last year.

Of the more than 160 successes, nearly half the comments described on-the-ground activities. Many noted the completion of their watershed assessment or stream and habitat surveys. Others identified projects on private land (e.g., stream fences, tree planting). Although most emphasized fish habitat, some focused on improving streams listed under Section 303-d of the Clean Water Act. One group adopted a local creek. Another received in-stream water rights. Others formed partnerships with local groups and agencies to achieve stream improvements.

Projects were not the only achievements noted. Almost a third of the comments focused on group dynamics, interaction, and formation. For some councils, bringing people to the table or surviving another year were significant milestones. Others focused on building alliances between the councils and other local entities (i.e., government, associations, landowners). The ability to communicate well and build capacity was also noted. Several councils stated that they had recently formed a subcommittee or sub-basin group to address specific concerns or issues within the watershed.

Two smaller categories each representing just over 10% of all comments were financial achievements and outreach efforts. Many councils noted the acquisition of grants through GWEB. Others found money through federal agencies or other programs (e.g., EQIP). Funds were primarily for projects, but some were for coordinator positions as well. Education efforts ranged from internally focused efforts such as attracting keynote speakers to externally oriented efforts that included tours, demonstration areas, and workshops.

Barriers

Respondents identified over 110 barriers to future or continued success. These concerns fell into seven broad categories.

Roughly 20% of the barriers addressed the need for either initial or continued financial support of watershed council projects, outreach programs, and administrative support. Many stressed the need for stable sources of funding. Adequate funding was viewed as essential for expanding or continuing efforts.

On a closely related topic, another 20% focused on the need to better develop the group's administrative capacity. For some this meant hiring a coordinator to provide the organizational and administrative skills to facilitate the day-to-day needs of the council. A new or continued administrative function was viewed as a key element to a council's ability to seek additional financial opportunities and collaboration with others.

The next significant grouping (15%) concerned the need to continue council actions on the ground. Some comments were general in nature (e.g., "get projects done!"), while others identified specific activities or goals (e.g., developing tools to address SB 1010 or monitoring projects on a particular stream).

Ten percent of the comments identified technical needs including estuary management, culvert placement, and legal liability concerns. Another 10% identified internal barriers such as problems in defining the council's role and poor communication skills.

The remaining two categories (less than 10% each) encompassed expanding council membership and involvement, and the need for outreach and education of the community.

Need More?

Oregon's watershed councils are a diverse blend of people, places, and opportunities.

If you'd like to learn more about our study, please contact the Mark Rickenbach or Scott Reed at OSU Forestry Extension, 109 Richardson Hall, Corvallis, OR 97331.

If you'd like to learn more about Oregon's watershed councils or get involved, please contact the Governor's Watershed Enhancement Board, 255 Capitol St. NE, Third Floor, Salem, OR 97310.

Funds

Funds for this study were provided by the Oregon Forest Resource Institute and the Renewable Resources Extension Act with additional, technical support from GWEB.

Oregon State University Extension Service offers educational programs, activities, and materials without regard to race, color, national origin, sex, age, or disability as required by Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. Oregon State University is an Equal Opportunity Employer.

Table 8. List of interests represented on the Oregon watershed councils, 1998 (n=52).

Interest	*Number of councils with this interest*	*Percent of councils with this interest*	*Interest*	*Number of councils with this interest*	*Percent of councils with this interest*
Local government (city, county, etc.)	35	67%	Industry (not forest-related)	7	13%
Environmental and conservation	29	56%	Recreation	6	12%
Forest and wood products industry	28	54%	Regional government or quasi-government	6	12%
Private landowners	27	52%	Sub-basin groups or representatives	6	12%
Agriculture	24	46%	US Fish and Wildlife Service	6	12%
Miscellaneous	21	40%	Farm Bureau	5	10%
US Forest Service	21	40%	Non-governmental organizations (trusts)	5	10%
Recreational fishing	19	37%	Contractors or developers	4	8%
Soil and Water Conservation District	19	37%	Oregon Department of Environmental Quality	4	8%
Oregon Department of Fish and Wildlife	18	35%	Oregon Department of Water Resources	4	8%
US Bureau of Land Management	16	31%	Port authority	4	8%
Commerce or small businesses	13	25%	Public utilities	4	8%
Woodland owners	13	25%	Technical expertise	4	8%
Education (k12, education centers)	12	23%	US Army Corps of Engineers	4	8%
Ranching	12	23%	Gravel	3	6%
Special Districts (irrigation, flood, etc.)	12	23%	Oregon Department of Agriculture	3	6%
Native Americans	11	21%	Oregon State Police	3	6%
Oregon Department of Forestry	11	21%	Real estate	3	6%
OSU Extension Service	11	21%	US Bureau of Reclamation	3	6%
Public or at-large citizen	11	21%	Federal lands (agency unspecified)	2	4%
Natural Resource Conservation Service	8	15%	Neighborhood groups	2	4%
Commercial fishing	7	13%	Nurseries or Christmas tree growers	2	4%