

Getting to “We”: Examining the Relationship between Geographic Scale and Ingroup Emergence in Collaborative Watershed Planning

Antony S. Cheng

Department of Forest, Rangeland, & Watershed Stewardship
Colorado State University
Fort Collins, CO 80523-1470
USA¹

Steven E. Daniels

Department of Sociology, Social Work, & Anthropology
UMCC 8355
Utah State University
Logan, UT 84322-8355
USA²

Abstract

We examine the relationship between geographic scale and the emergence and transformation of “ingroup” effects using data from a qualitative comparative case study of two collaborative watershed planning efforts in Oregon. Evidence of ingroup effects is far stronger in the small watershed planning group where stakeholder perceptions of and patterns of interactions with one another centered on common group identifications. In the large-scale planning group, stakeholders perceive and interact with one another based on organizational affiliation. Furthermore, the geographic scale of the watershed planning process influences how watershed issues are framed. In the small-scale watershed group, watershed issues are framed as a direct relationship between watershed health and community well-being. As a result, stakeholders began to view themselves as members of a shared community, a new ingroup. In the large-scale watershed group, watershed issues are framed in terms of regional conservation efforts, with no direct link between watershed health and community well-being. As a result, community stakeholders view organizational representatives as belonging to a different, opposing group. Our examination suggests that the relationship between geographic scale and ingroup effects can contribute to mutually acceptable outcomes among stakeholders. As such, the geographic scale at which collaborative resource planning efforts occur merits attention.

Keywords: *collaborative planning, watershed planning,*

scale, group identity, conflict management, stakeholder analysis

Introduction

In 1993, at the height of the conflict over the northern spotted owl and old-growth forests in the U.S. Pacific Northwest, the Applegate Partnership started getting noticed. The Applegate was a unique group of environmentalists, timber industry representatives, private landowners, local elected officials, and federal natural resource managers working collaboratively to address declining forest conditions in the Applegate watershed of southwestern Oregon (Sturtevant and Lange 2003). When members of the Applegate Partnership made public appearances to talk about their experiences, they each wore a round button that had the word “Them” with a red slash across it. The button symbolized a change in the “us” versus “them” psychology that seemed so ingrained in environmental conflicts; it was an expression that old enmities could be transformed through a common cause.

In the parlance of social psychology, us-versus-them perceptions and behaviors are known as *ingroup-outgroup effects* (Tajfel 1982). An ingroup is defined as an esteemed group to which an individual perceives membership and attributes loyalty and a sense of belonging. Ingroup members tend to perceive one another as trustworthy and correct in their motives. To individuals of the ingroup, an *outgroup* consists of individuals who are perceived to have goals and values opposing the ingroup and, therefore, are perceived to be unworthy of trust and have malicious motives. Ingroup-out-

group effects are the perceptions, attitudes, and behaviors expressed by ingroup members towards individuals perceived to belong to outgroups. Stereotyping, derogatory attitudes, distrust, and outward hostility are examples of ingroup-outgroup effects. Ingroup-outgroup effects are recognized as integral to conflict management and negotiation across a wide spectrum of situations, including environmental conflicts (Pruitt and Carnevale 1993). What made the Applegate Partnership so remarkable was that individuals from environmental and pro-timber groups intentionally sought to overcome years of ingroup-outgroup effects to essentially *create a new ingroup* formed around common goals and desired futures associated with a landscape that they all valued.

Since 1993, there has been an explosion of collaborative natural resource partnerships similar to the Applegate. A common thread across many of these partnerships is a “place-based” focus—a watershed, plateau, or unique landscape feature. That the place is an organizing principle for these collaborations is significant, with some observers suggesting that place-based collaborative processes have a stronger likelihood of transforming ingroup-outgroup effects and giving rise to a new ingroup (Cestero 1999; Cheng et al. 2003). Such observations raise further empirical questions about the factors contributing to the emergence and transformation of a perceived ingroup.

This paper focuses on one factor in particular: the geographic scale of the place in question. Why? Prior studies suggest that ingroup-outgroup effects among stakeholders can change significantly as the geographic scale of the situation enlarges. For example, case studies by Jones (1999) suggest that moving from a small-scale neighborhood to a large-scale landscape produces a higher degree of strategic interests in outcomes, a higher sensitivity to planners as “outsiders,” and more pronounced power dynamics. Large-scale watershed planning efforts tend to alienate stakeholders from one another and from the watershed itself, leading to the creation of smaller-scale sub-basin groups to address issues that are more tangible and comprehensible to the stakeholders (Thomas 1999).

In this paper, we continue this vein of inquiry by examining the interaction between geographic scale and the emergence and transformation of a new ingroup in the context of collaborative watershed planning. This interaction is important for two reasons. First, governments, non-governmental organizations, and communities alike are increasingly experimenting with collaborative approaches to address persistent conflicts over natural resource management by more intensively engaging stakeholders in problem-solving (Wondolleck and Yaffee 2000). Most research on collaborative resource management focuses on structural and process features, such as group composition, funding, planning process,

decision rules, and facilitation (Bentrup 2001; Griffin 1999; Michaels 2001; Schuett et al. 2001; Selin and Chavez 1995; Williams and Ellefson 1997). Nevertheless, there is a paucity of studies that draw on the applied social psychological research found in conflict and negotiation studies and that explore if and how ingroup-outgroup effects are manifested in natural resource collaborations. Examining the social psychological environment of collaboration can supplement analyses of structural and process features, and advance understanding and practice of collaborative resource management.

A second reason for examining this interaction is that a large number of these collaborative efforts are being initiated at the watershed scale (Kenney 1999). Because of how watersheds are organized, from small sub-basins to large drainages, an immediate problem arises: at what geographic scale should a collaborative effort be organized? Lee and Stankey (1992) refer to this problem as a paradox of scale. On the one hand, the geographic scale should be large enough to truly address systemic problems, such as endangered species conservation and water quality. On the other hand, the geographic scale should be sufficiently small to accommodate the participation and active involvement of diverse stakeholders throughout the watershed. Research on the Klamath Bioregional Project in California found that the size of the Klamath Bioregion was too big to serve as the guiding principle for holding regular meetings involving diverse community stakeholders (Thomas 1999). Many stakeholders formed councils around smaller-scale sub-regions within the Klamath Region which were, in large part, citizens’ reaction against agency-defined geographic boundaries. The social and political implications of choosing one geographic scale over others still remain unexplored, although the importance of making this choice is frequently mentioned in general terms (Anderson et al. 2003; Griffin 1999; Leach et al. 2002; Thomas 1999; Webler and Tuler 1999; Woolley and McGinnis 1999). Given that such choices are increasingly being made as government policies and community-based initiatives expand collaborative watershed planning, the timing is ripe to critically examine the role of geographic scale on the social and political dimensions of collaborative watershed planning.

For this analysis, we draw on data from a qualitative comparative case study of two watershed councils in Western Oregon. The objectives of the paper are to: 1) identify dimensions and patterns of stakeholder group identities at different geographic scales of place; and 2) analyze how these dimensions and patterns may affect collaboration among stakeholders. The paper is organized into four sections. The first reviews and synthesizes relevant literature and presents the propositions that inform this examination. The second

describes the case study, data collection, and data coding procedures. Coding results are interpreted in the third section. The interpretation is supplemented by quotations from case study participants to tell a richer story. Finally, we present a discussion relative to the propositions and the broader context of collaboration in natural resource planning.

Literature Review and Propositions

Taking into account multiple geographic scales in natural resource planning is a fundamental principle of ecosystem management (Grumbine 1994). Nevertheless, little is known about the social dimensions of changing the geographic scale of natural resource planning. This section provides an overview of the literature on group identity and ingroup-outgroup effects as a key social dimension of many natural resource planning efforts. Also reviewed are analyses of how delineating the geographic scale of natural resource issues can influence decision processes and how stakeholders in the decisions interact.

Ingroup Effects in Group Decision-making

Group identity has long been identified as an influential factor affecting social behavior. Shibutani (1955) proposed that individuals psychologically judge themselves and others based on reference groups—a social group to which an individual perceives a common affiliation, such as race, religious affiliation, political party, occupation, and gender. Reference groups are powerful means by which individuals organize the social world and through which they find a sense of belonging and identity. Tajfel et al. (1971), using experimental methods, discovered that group identities and resulting ingroup-outgroup perceptions and behaviors can form very quickly and lead to highly competitive social situations. Even when research subjects are divided solely on eye color, ingroups and outgroups immediately appear (Brewer 1979).

To further explain these findings, John C. Turner (1982) developed a cognitive-motivational model of group identity as a fundamental driver of social behavior. Turner proposes that humans are intrinsically motivated to identify themselves by social groups in order to feel included and to provide order to an otherwise chaotic world. Social group identifications are necessary for individuals to distinguish themselves and others, and to know how to interact with others. Individuals who perceive membership to a common ingroup are more trusting of one another and place one another in high esteem. Consistent with Turner's propositions, experimental and field studies of group decision-making demonstrate that an ingroup produces positive social outcomes, even in the absence of a definable outgroup. Individuals who perceive a common ingroup identity are far more likely to collectively take action

to avert resource shortages than those who do not (Brewer and Kramer 1986; Kramer and Brewer 1984). Members of a common ingroup also exhibit higher degrees of trust for one another (Batson et al. 1995; Brann and Foddy 1988; Kramer et al. 1993).

So important is group identity that Dawes and his colleagues (Dawes et al. 1988), upon reviewing over one thousand studies of collective action in experimental resource dilemmas, claim that it is one of the most consistent variables across social conflict situations that accurately predicts rates of cooperation and non-cooperation. Group identities are often observed in natural resource planning conflicts (Brandenburg and Carroll 1995; Daniels and Walker 1995). Nevertheless, aside from a very small number of descriptive case studies, there is an absence of research on the development and transformation of group identity and resulting ingroup-outgroup behaviors in natural resource planning.

Geographic Scale of Place and Ingroup Effects

We have proposed elsewhere that a geographic place can provide the basis for group identities in natural resource politics (Cheng et al. 2003). Places are physical settings imbued with social and cultural meaning. As such, groups intent on conserving or using certain types of places are, in effect, organized around certain place *meanings*. In some cases, a social group emerges to conserve a specific place, such as a "friends" group composed of citizens organized to protect a specific ecologically or culturally significant landmark. In many other cases, social groups form around generic place meanings, such as "roadless areas" on federal public lands (i.e., The Wilderness Society), "critical habitat" for any and all threatened and endangered species (i.e., Endangered Species Coalition), "commercial timberland" (i.e., American Forest & Paper Association), or "national parks" (i.e., National Parks Conservation Association). Individuals belonging to such a group not only share an abiding interest in how these places are used or protected, but also perceive a shared membership and identification to the group. This can be characterized as a place-based common group identity, where a place and the meanings it holds are the organizing principles for a cohesive social group that will fight to defend the place (Grosby 1995; Miller 1992).

Implicit in a group's place meanings is the geographic scale of the place. For example, environmental organizations concerned with biodiversity generally refer to very large regions, from multi-state river drainages to continents, whereas a local "friends" group is focused solely on the conservation of a specific site or resource in their backyard. Defining the geographic scale of a natural resource issue can be highly contentious. Geographer Paul Starrs (1994) contends that when managers define the boundaries and, therefore, the

scale of an ecosystem to manage, they are implicitly defining which values are important to consider. *Who* defines the geographic boundaries, then, is as political as *how* the boundaries are defined. In his study of the Klamath Bioregion Project, Thomas (1999) observed an immediate split between government agency staff ecologists and local stakeholders over how the geographic boundaries of the region were drawn. While the staff ecologists wanted the project to focus on the entire Klamath region, the local stakeholders quickly broke the region into smaller sub-regions.

Defining geographic boundaries is especially significant in watershed planning because watersheds occur at multiple geographic scales, from small tributary streams to large river basins. Homeowners and local community residents may willingly come together to learn about and address declining water quality in the small-scale tributary watershed they inhabit. But they may find themselves on opposing sides in debates over environmental protection versus resource development at the large river basin scale. In defining the boundaries and scale of watershed analysis and planning, scientists and resource managers can influence the ways in which citizens interact with one another (Lovell et al. 2002; Sneddon 2002).

Propositions

The preceding literature review provides the foundation for analyzing and interpreting how geographic scale may influence the emergence and transformation of ingroup effects in the context of place-based natural resource management. From this review, we developed a series of propositions to guide the analysis of ingroup-outgroup effects and ingroup emergence from a comparative case study of two collaborative watershed partnerships in western Oregon.

P1: Stakeholders involved in collaborative planning efforts identify themselves and one another in terms of dominant reference groups (e.g., loggers, environmentalists).

P2: Stakeholders involved in collaborative planning efforts at small geographic scales are more likely to view one another as belonging to a shared, place-based ingroup than stakeholders involved in place-based planning processes at large geographic scales.

P3: Stakeholders involved in collaborative planning efforts at small geographic scales are more likely to reach agreement over problems affecting the place and solutions to those problems than stakeholders involved in place-based planning processes at large geographic scales.

These propositions articulate a set of relationships between group identity, geographic scale, and conflict or cooperation in collaborative natural resource planning. Rather than hypotheses to be tested, and accepted or rejected, these

propositions helped focus our analysis of the relationship between geographic scale and the emergence and transformation of new ingroups in the context of place-based collaborative natural resource planning.

Methods

The relationship between geographic scale and ingroup emergence in place-based collaborative resource planning is readily observable in the context of watershed planning efforts. Two nested watershed councils in western Oregon, the McKenzie Watershed Council (McWC) and the Mohawk Watershed Planning Group (MoWPG)³, provide empirical data for this examination. We collected data using a case study approach between October 1997 and March 1999. The Mohawk River watershed, at 283 km² (46,510 ha), is a sub-basin of the McKenzie River watershed which is 2,080 km² (345,340 ha) (Figures 1 and 2). Douglas-fir forests comprise the uplands, which are primarily owned and managed by the USDA Forest Service, Bureau of Land Management, and forest industry (see Table 1). Agricultural lands and expanding residential development occupy the lowlands of both watersheds. The Mohawk River flows into the McKenzie just outside of Springfield, Oregon.

The watershed councils were formed in response to policy debates over development along riparian areas, forestry practices, recreation, and domestic drinking water quality and quantity. In the past, such debates have been conducted through administrative appeals, litigation, media campaigns, or the ballot box. A collaborative watershed council ap-

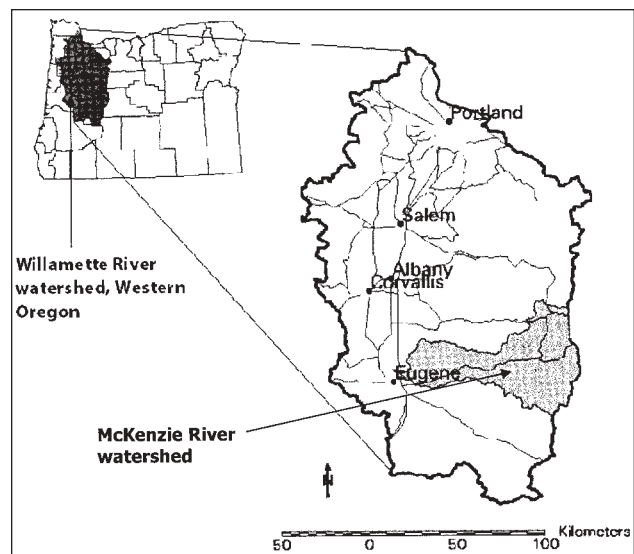


Figure 1. Geographic location of the McKenzie River watershed, western Oregon (Map developed by Douglas R. Oetter, Forest Science Laboratory, Corvallis, OR, August 1999).

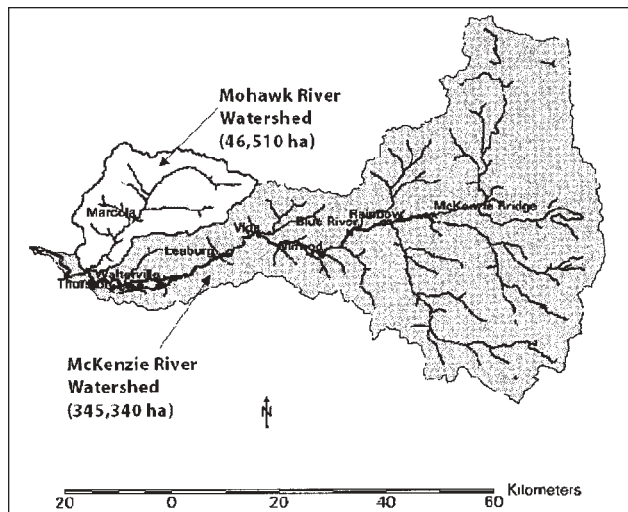


Figure 2. Geographic location of the Mohawk River watershed, western Oregon (Map developed by Douglas R. Oetter, Forest Science Laboratory, Corvallis, OR, August 1999).

proach emerged because no single group or organization had sufficient power or resources to resolve all of the issues driving these debates. The McWC was established in 1993 and has 20 members, an Executive Committee composed of seven members, and two paid staff. The MoWPG first convened in 1996 and has 12 members, an advisory technical team, and a paid coordinator. The missions, by-laws, and diversity of stakeholder perspectives and interests are similar across the MoWPG and McWC. Stakeholders in both councils include residents, landowners, elected officials, local interest group

Table 1. Land use and ownership distribution in the Mohawk and McKenzie watersheds.

	Mohawk watershed Hectares	McKenzie watershed Hectares
Total land area	46 510	345 340
Land use (% of total area)		
Forest	39 068 (84)	321 166 (93)
Agriculture	6 046 (13)	13 814 (4)
Urban ^a	1 395 (3)	10 360 (3)
Ownership (% of total area)		
Federal	11 162 (24) ^b	234 831 (68) ^c
Industrial forest	28 371 (61)	86 335 (25)
Large agriculture	6 046 (13)	No data
Private individual	930 (2)	20 720 (6)

^a Urban land use includes residential, industrial, and commercial uses.

^b Federal lands in the Mohawk watershed are exclusively managed by the U.S. Department of the Interior, Bureau of Land Management.

^c Federal lands in the McKenzie watershed are primarily managed by the U.S. Department of Agriculture, Forest Service.

Sources: McKenzie Watershed Council (<http://www.mckenziewatershed-council.org/>). Date accessed: January 28, 2003) and the Mohawk Watershed Draft Assessment (Natural Resources Conservation Service 1999).

representatives, and technical staff and decisionmakers from public natural resource agencies. Council meetings are held monthly and other gatherings, such as field trips or community events, are common.

Central to each watershed council is a watershed assessment and action plan. A watershed assessment describes existing conditions and evaluates natural processes, human activities, and land uses within the watershed; a watershed action plan characterizes the conditions in the watershed and identifies priority areas based on the watershed assessment for restoration and protection. In short, a watershed assessment identifies problems affecting a place and an action plan proposes solutions to those problems. Both documents require the input and support of all stakeholders in the watershed councils which, in turn, require those stakeholders to work collaboratively. Because the MoWPG and McWC are organized around different geographic scales of watershed, they are exemplary opportunities for examining the propositions of this paper.

Data Collection

Group identity-based perceptions and behaviors in the watershed councils were uncovered through semi-structured individual interviews, participant observation of council meetings, and content analysis of watershed council reports, newspaper articles, and related documents. Semi-structured, open-ended interviews ranging between 30-150 minutes were conducted with 18 individuals from the MoWPG and 29 individuals from the McWC. We selectively sampled three categories of interview subjects: watershed council members, individuals who regularly attended council meetings but are not council members, and individuals to whom more than one referral was made. The population of both watershed councils were interviewed, 12 from the MoWPG and 20 from the McWC. An additional 15 non-council members were identified through chain-referral and interviewed. We asked questions about personal background, perceptions of the state of the watershed and desired outcomes, perceptions of the role of the watershed council, and perceptions of the relationships within the watershed council.

Over 65 hours of watershed council meetings were recorded through structured observation notes and text coding (Adler and Adler 1998). This comprises every council meeting between October 1997 and March 1999. The notes included verbatim statements and exchanges during recurring controversies, and contain detailed accounts of observed behaviors. Written reports, memoranda, and meeting minutes were used as a third source of data to supplement the interviews and field notes. Approximately 1,800 pages of documents were examined using the content analysis protocol described in Weber (1990).

Data Coding and Analysis

We followed the protocols in Strauss and Corbin (1990) and used Ethnograph 5.0, a computer-assisted qualitative research tool, to code and analyze the texts. Using an iterative, inductive process, we organized text data into principal elements and dimensions with graduated levels of detail. The first round of coding produced 88 coding labels that were assigned to specific words, phrases, sentences, paragraphs, and even entire texts for all MoWPG and McWC interviews and documents. Coding labels essentially summarize the text contents around specific concepts and themes. As each additional text was analyzed, the coding labels were modified and often combined to reduce redundancy. These 88 coding labels were then grouped into six primary themes in an “axial coding” process (Strauss and Corbin 1990): purpose and outcomes of the council; stakeholder perceptions of self; stakeholder perceptions of others; patterns of stakeholder interaction; framing watershed issues; and future directions of the council. Axial coding generates cross-cutting themes across the initial coding labels, lumping the labels into broader categories. Table 2 displays the primary theme and examples of axial coding statements under each primary theme.

In a third, more selective coding procedure, we applied these primary themes back on to the text data to uncover dimensions of each theme. As its name implies, the selective coding process was a more strategic effort to identify and categorize specific elements in the text data. Selective coding draws on both the text data as well as theoretical and empirical literature to create a typology among commonly occurring expressions, perceptions, and events for each primary theme. The selective coding process is iterative and involves the creation and adaptation of coding labels, and the elimination of redundancy among labels. For example, the text data that fell under the “Stakeholder Perceptions of Self” primary theme were re-coded and assigned new labels indicating a specific dimension of this theme, such as “non-affiliated resident,” “technical expert,” or “newcomer” versus “long-time resident.”

The selective coding drew upon Turner’s (1982) cognitive model of social group identification because it directly relates to the emergence and transformation of group identities evident in stakeholder interactions. For the purposes of this analysis, the primary themes to which the selective coding was applied are Stakeholder Perceptions of Self, Stakeholder Perceptions of Others, Patterns of Stakeholder Interaction, and Framing Watershed Issues (see Table 2). The first two themes are relevant because they articulate stakeholders’ identification to the watershed and to one another. The analyses of these themes across the two watershed councils provide a basis for understanding the relationship between the geographic scale of the watershed and group identity. The

Table 2. Primary themes and examples of axial coding statements.

<p>Theme 1: Expected Purpose and Outcomes of Council</p> <ul style="list-style-type: none"> • Forum for community dialogue about watershed conditions vs. information-sharing among agencies • Monitoring biophysical indicators vs. social-economic indicators of “watershed health” • Sharing knowledge vs. policy recommendations • Focus on site-specific vs. whole watershed • Community outreach and education
<p>Theme 2: Stakeholder perceptions of self</p> <ul style="list-style-type: none"> • Resident only vs. representative of organized interest • Community member vs. representative of organized interest • Technical specialist/expert vs. layperson • Actively representing interest vs. attending solely for information
<p>Theme 3: Stakeholder perceptions of others</p> <ul style="list-style-type: none"> • Resident only vs. representative of organized interest • Conservation interest vs. resource user/development interest • Community member vs. “outsider” • “Newcomer” vs. long-time resident • Technical specialist/expert vs. layperson
<p>Theme 4: Patterns of Stakeholder Interaction</p> <ul style="list-style-type: none"> • Fixating on who represents what organization/interest group • Defining watershed problems/causes-and-effects • Defining watershed priorities/need for changes • Focus on site-specific vs. whole watershed • Legitimacy/standing of non-affiliated citizens vs. organizational representatives • Legitimacy/standing of technical specialists/experts vs. laypersons • Legitimacy/standing of newcomers vs. long-time residents • Tensions between conservationists and resource users and managers
<p>Theme 5: Framing Watershed Issues</p> <ul style="list-style-type: none"> • Information based on quantitative data and analysis • Informed opinion of specialists/experts vs. laypersons • Knowledge gained through direct experience • Knowledge gained through community social networks • Compliance vs. non-compliance with laws and regulations • Insufficient laws and regulations governing land/resource use • Inadvertent/accidental vs. intentional resource damage
<p>Theme 6: Future Directions of Council</p> <ul style="list-style-type: none"> • Stakeholders’ commitment to council purpose and process • Sustaining support from technical specialists/experts • Transitioning of new council leadership, facilitators, and membership • Answering “So what?” questions when interpreting data and information • Willingness to commit to actions • Legitimacy/standing of council in broader community • Conflicts with private property owners

third theme, Patterns of Stakeholder Interaction, encompasses the various ways in which watershed council stakeholders communicate with and perceive one another, including in-group-outgroup behaviors and perceptions.

Lastly, Framing Watershed Issues is a germane theme for two reasons. First, the framing of issues in any collective decision-making endeavor sets the stage for conflict and collaboration among participants to the decision (Gray 2003). An issue frame is essentially a narrative of how an issue came

to be, and the benefits and risks of taking certain actions to resolve the issue (Schon and Rein 1994). Issue frames are reflections of how individuals perceive and understand reality. Issue framing is strongly associated with ingroup-outgroup effects since individuals who share similar frames tend to view each other as being members of an ingroup, while individuals with divergent frames are seen as members of outgroups (Aquino et al. 1992; Brewer and Kramer 1986; Fleischman 1988). Second, central to framing resource management issues is the scale at which these issues occur (Lovell et al. 2002). The scale at which issues are framed sets the stage for who is involved (Norton and Hannon 1998; Sneddon 2002), what information and analysis is brought into the decision process (Cheng and Daniels 2003; Lovell et al. 2002), and potential winners and losers (Cutter et al. 1996; Morrill 1999). As a result, the geographic scale at which watershed issues are framed are likely to give rise to certain patterns of stakeholder interaction, including ingroup-outgroup effects and new ingroup emergence.

Results

In this section, we present the results of the data analysis under two broad headings: Geographic scale and stakeholder interactions, and Geographic scale and issue framing. We underscore the coding results with selected quotations from the interview texts that speak more fully to the story. Pseudonyms are used to protect the anonymity of the informants.

Geographic Scale and Stakeholder Interactions

The selective coding process clearly reveals group identity and ingroup-outgroup effects in the two watershed councils (see Table 3). The coding results are presented as a per-

centage of texts (rather than total number of texts) to facilitate a more direct comparison between the two watershed councils. The most significant pattern worth noting is that stakeholders' self-perceptions and other-perceptions are based on multiple group identifications. Stakeholders appear to wear and perceive many "hats" in their participation in the watershed council, indicating that identities may be transitory and malleable, depending on the context.

Table 3 also indicates a relationship between the geographic scale of the watershed and how stakeholders perceive one another ("other-perception"). Stakeholders in both watershed councils identify one another based on their perceived technical expertise in matters affecting the watershed (68% of MoWPG texts and 90% of McWC texts), specifically, their affiliation with a specific profession, such as a hydrologist, soil scientist, silviculturalist, wildlife biologist, and other "-ists." Also present is the traditional stereotype of loggers-versus-environmentalists in the MoWPG (53%) and to a lesser extent in the McWC (46%). Where the two watershed council stakeholders differ are their perceptions of others as members of a shared community. Stakeholders in the smaller-scale MoWPG tend to focus on their respective status as a community member without any organizational affiliation (84%). Despite being divided along length of residence, "newcomers" to the community versus "long-time residents," MoWPG stakeholders explicitly acknowledge one another as a member of a shared community (79%). By contrast, stakeholders in the larger-scale McWC tend not regard one another as non-affiliated community members (31%) and do not view each other as being members of a shared community (21%). Instead, McWC stakeholders tend to perceive each other primarily as organizational representatives or as individuals affiliated with a specific organization (86%).

Not surprisingly, self- and other-perceptions have a di-

Table 3. Percentage of texts containing each stakeholder perception category for the Mohawk Watershed Partnership Group (MoWPG) and the McKenzie Watershed Council (McWC).

Stakeholder perception dimension	Percentage of texts*			
	MoWPG (n=56)		McWC (n=68)	
	Self-perception	Other-perception	Self-perception	Other-perception
Non-affiliated citizen or resident	79	84	62	31
Organizational representative	21	26	57	86
Technical expert	32	68	50	90
Layperson/non-expert	58	37	39	14
Environmentalist	26	53	29	46
Resource manager/professional	47	21	46	86
Newcomer	32	58	14	14
Long-time resident	53	53	57	43
Member of shared community	79	79	50	21

* The total number of texts is the sum of interview texts, participant-observation notes, and documents from each watershed council, such as meeting notes, reports, and other publicly-available written documents.

rect bearing on how watershed council stakeholders interact. The selective coding indicates the diversity of stakeholder interactions characterized by six pairings of competing group identities as shown in Table 4. These pairings were selected because they were the most commonly occurring types of interactions observed in the data. There are clear differences between the smaller-scale MoWPG interactions and the larger-scale McWC interactions. The McWC tends to emphasize organizational representation and affiliation (64% of McWC texts) to a much larger extent than the MoWPG (16% of MoWPG texts). Stakeholders in the MoWPG tend to interact with each other much more as fellow community members (74% of MoWPG texts) than McWC participants (21% of McWC texts), but also experience conflicts between newcomers and long-time residents (63% of MoWPG texts).

Table 4. Percentage of texts containing each dimension of stakeholder interaction for the Mohawk Watershed Partnership Group (MoWPG) and the McKenzie Watershed Council (McWC).

	Percentage of texts	
	MoWPG (n = 56)	McWC (n = 68)
Pattern of stakeholder interaction		
Technical expert vs. layperson	72	69
Environmental vs. intensive resource management	79	50
Organizational representative-to-organizational rep	16	64
Organizationally-affiliated vs. non-affiliated stakeholders	21	76
Community member-to-community member	74	21
Newcomer vs. long-time resident	63	36

In the interviews, the size of the Mohawk watershed plays an important role in defining a shared sense of community and, therefore, how stakeholders interact with one another. One of the MoWPG members, Ann, claims that,

The Mohawk is more of a 'human scale,' you know what I mean? We're only 177 square miles, not 1,300 [the size of the McKenzie watershed]. There's still agriculture. The school is still the heart of the community. People know each other up and down the valley. The local restaurants feed the residents, not the tourists; it's always been an independently-focused community.

This idea of a 'human scale' articulated by Ann highlights a relationship between the physical size of the watershed and the relative closeness of its residents. This social closeness spills over into watershed council affairs and interactions. According to Larry, a forestry professional who has lived in the Mohawk watershed for 11 years,

A watershed group needs ways to come together; to work collectively on matters that are important to all

of us. We've done planting, fencing, and some restoration projects where people from the community can access to participate and learn. It's right in their backyard—not an hour's drive away. They drive by it everyday to and from work or school. They can see it and it gets people talking at the coffeeshop or at church. Working together on these smaller projects has really improved some relationships.

Because of the relatively small scale of the Mohawk watershed, MoWPG stakeholders know and interact with one another fairly regularly in contexts outside the MoWPG. This appears to contribute to a shared sense of community membership, an ingroup based on a shared inhabitation of a place. In turn, this shared membership may lead to a tempering of ingroup-outgroup effects associated with "technical expert vs. layperson," "environmentalist vs. intensive resource management," and "newcomer vs. long-time resident" interactions among stakeholders.

The geographic scale of the McKenzie River watershed also plays a role in how McWC stakeholders identify and interact with one another. A federal land management agency employee and resident of the area for 14 years, Rita, states,

I think we never were really a true 'community-based' group, even though we claim we are. We've been lacking a physical presence in the watershed, holding most of our meetings in town [Eugene or Springfield] rather than in the upriver communities—mostly because it's too far to drive for most of the council members. The physical distance has led to a kind of cultural distance, where there's this defensive posturing going on between the technical, agency people on the council and the community members.

A state resource management agency employee and resident for 18 years, Holly, speaks more directly to the relationship between geographic scale and patterns of stakeholder interaction centered on organizational affiliation:

In many ways it's inevitable that the council pits organized groups against each other because of the scale of issues we're dealing with. When you talk about watershed impacts from all these land uses, everyone is going to advocate something and everyone is going to resist actions that affect their interests. From an agency standpoint, even though I've lived in this watershed for 18 years and my kids went to school up here and my husband is on the local volunteer fire department, I'm still viewed as an agency employee, not as a community resident or private citizen. It's very much an us-versus-them kind of thing.

The large size of the McKenzie watershed, relative to the Mohawk, translates to large physical distance between McWC stakeholders. Hence, their only knowledge of and interaction with one another tends to be based on their organizations' positions on land and natural resource management issues. They share little or no sense of membership to the same community, corresponding to Rita's observation of a "cultural distance" between stakeholders. Indeed, there is a pervasive sense among stakeholders that they share little in common, which is exemplified by the dominant pattern of stakeholder interaction based on organizational affiliation in Table 4. In turn, organizational affiliations give rise to in-group-outgroup effects, as articulated by Holly's quote.

Geographic Scale and Issue Framing

The selective coding uncovered six types of issue frames (Table 5). The first frame, "Legitimacy and utility of experiential vs. technical/analytical knowledge," is aspatial, in that it does not directly relate to the geographic scale of the watersheds. Nevertheless, it was a source of persistent tension in the groups, especially between laypersons and technically trained resource specialists (Cheng and Daniels 2003). The remaining five issue frames are directly related to geographic scale and are associated with group identity and in-group-outgroup effects. Issues identified in the MoWPG are framed as being specific to small-scale areas, such as a specific road segment or housing development adjacent to the river (77% of MoWPG texts), rather than covering the entire watershed (27% of MoWPG texts). Specific problems affecting the watershed also directly affect community health and well-being (75% of MoWPG texts). These issues are seen as a result of a lack of community education and communication about land use impacts on the watershed (63% of MoWPG texts).

Table 5. Percentage of texts containing each issue frame for the Mohawk Watershed Partnership Group (MoWPG) and the McKenzie Watershed Council (McWC).

Issue Frame	Percentage of texts	
	MoWPG (n = 56)	McWC (n = 68)
Legitimacy and utility of experiential vs. technical/analytical knowledge	72	69
Site-specific focus of issues, problems, and priorities	77	18
Linkage between watershed health and community health	75	21
Entire watershed or regional focus of issues, problems, and priorities	27	88
Lack of community education and communication leads to degraded resource conditions	63	34
Improved interagency scientific analysis and coordination leads to improved resource conditions	11	90

From the stakeholder interviews, two specific issues were frequently identified. The first was abnormally high readings of *E. coli* bacteria from citizen water quality monitoring sites. The high readings indicated a persistent inadequacy of septic systems of housing developments along the river. Water quality monitoring studies above and below certain points along the river were able to pinpoint the specific developments contributing *E. coli*. The second issue was older logging roads in the upper watershed that deposited large amounts of sediment during heavy rains, especially during the summer when river levels were low. The ability of the MoWPG to come together around these two issue frames was due, in part, to the small scale of the Mohawk watershed. According to Mark, an employee of a local forest products company:

The E. coli. issue is a prime example of why it's important to work at a community level, you know? The watershed is small enough so that we know where the impacts are coming from and we can respond quickly. It's amazing how we've come together to work on the landowner self-assessment workshops and toolkit.

Mark's sentiment is echoed by Rebecca, a self-proclaimed 'non-affiliated rural greenie' and 25-year resident of the watershed:

This watershed is like a big teabag, see. And it's not as big as the McKenzie, so you don't have the dilution you'd get with a bigger watershed. Our impacts are felt immediately. And when you get these high levels of bacteria, it affects all of us because our kids swim in the river and our wells are recharged by the river. This is exactly what we're here for, working together as a group despite our differences.

With regard to the sedimentation from the old logging roads, Susan, a resident of the area for 12 years, expressed how the impacts are felt quickly and throughout the community:

These flood pulses come very quickly because it's only a few miles or so from the upper part of the watershed to where people live. It really gives us a feeling of vulnerability, especially after the '96 flood. It makes us all realize how tied we all are to the fate of this watershed... When that mudflow came down from [industry] lands [on July 4, 1998], it was another one of those galvanizing events and people were saying, 'Oh no, not again!' Everyone in the group was concerned and we were there talking with the industry people with a single community voice. It was quite impressive.

The framing of watershed issues as being site-specific and linked to community health is due in large part to the relatively small geographic size of the Mohawk watershed. The issue frames have broad agreement among MoWPG stakeholders and are reinforced because of their direct, felt impact to the local community. The centrality of community health is a feedback loop to stakeholder patterns of interaction which usually indicate a common ingroup.

Watershed issues in the McWC are almost exclusively framed in terms of the entire McKenzie watershed and larger regional ecological concerns (88% of McWC texts) rather than at a local, site-specific scale (18%). The primary issue frame is water quality for imperiled salmon and steelhead in the Willamette River and much larger Columbia River basin. Hence, stakeholders in the McWC tend to frame issues in the context of regional species conservation efforts rather than linking issues to community health and well-being (21% of McWC texts). This framing reinforces the patterns of stakeholder interaction centered on organizational affiliation in the McWC, because addressing this regional issue is a function of interagency coordination and scientific analysis (90%). Community education and communication is recognized but is not prevalent as an issue frame (34%).

The framing of McWC issues has produced divergent perspectives on the role and value of the McWC. Sheila, an employee for a federal land management agency in the watershed, states,

The council seems to be torn between spending its energy on larger regional issues like salmon in Columbia basin and smaller citizen-driven issues, like land uses in the riparian area. I definitely lean towards larger issues. In many ways, it keeps things simpler because the sheer number of specific land use issues in a watershed this large can be overwhelming and we can end up spending all of our time on every nit-picky issue that a local might bring up.

Sheila's assessment is shared by Rick, an employee for a state resource management agency:

I think we've got to stick with looking at these larger issues like fish and wildlife recovery. Everyone can support fish and wildlife recovery. But if we start getting into specific land use issues, you start messing with property rights and then a group of local people get all fired up and derail the process. Getting into the more human, community level issues, it gets more personal. We can't have all this animosity built up. It's best for us to stick with issues we can all agree on.

For public resource agencies especially, the larger-scale issue frame of species conservation is simpler, less divisive at the local level, and is already consistent with their programs. For community residents like Abe, who regularly attends McWC meetings, the issue frame is overly exclusive:

There are clearly different visions for what this council needs to be doing. The approach that has the broadest support is an analytical, policy-based approach, looking at large scale ecological issues. I think it's the wrong approach because it's not about the community level, getting out and getting your hands dirty and digging to plant trees. This is where I think the council's going astray. To me, they're just a bunch of bureaucrats and interest group reps making decisions for the rest of us. Well, they don't represent me or anyone I know, that's for sure. I'm not sure I can trust them.

The lack of connection with watershed residents and community members troubles Thomas, who has grown up along the river his entire life and is on the McWC:

My criticism is that we don't get enough into issues. I mean, we spent two or three years doing this watershed assessment and action plan and it lays out a lot of important issues for us to deal with. But we never get down to the ground level. We're always stuck on pretty abstract, big picture stuff. Sure, if you look at the entire 1300 square miles of the watershed and just look at water quality, everything is fine. We have clean water. Great. But there's stuff happening all over this watershed that we should learn about and start focusing on some action, and it never happens. These agency people are totally disconnected from the regular citizens and land-owners up here and as a result there's no support from the community. I don't know how much longer I'll be staying.

For stakeholders like Thomas and Abe, the issue frames embraced by the McWC perpetuate ingroup-outgroup effects, not only within the council where organizational affiliations dominate, but between the council and community citizens. Without a strong community connection in its issue frames, the McWC has bred a degree of distrust among community members that are not affiliated with an organization or agency. The result is dominant stakeholder interactions based on organizational affiliations which, in turn, tend to perpetuate ingroup-outgroup effects as demonstrated in the previous section.

Discussion

We start this discussion by examining the results in light of the propositions guiding the case study. The first proposition contends that stakeholders involved in collaborative planning efforts identify themselves and one another in terms of dominant reference groups. This proposition was well supported by case study results, although this is hardly surprising—dominant reference groups like “environmentalists” and “loggers” are persistently observed and appear to be an inherent aspect of any natural resource conflict. The second proposition declares that stakeholders involved in collaborative planning efforts at small geographic scales are more likely to view one another as belonging to a shared, place-based group than stakeholders involved in large-scale planning processes. In the MoWPG, a common place-based group identity among stakeholders was clearly observed. MoWPG stakeholders tend to know and interact with one another as members of a shared community, which can be attributed to the relatively small geographic scale of the place in which they live. McWC stakeholders are relatively anonymous to one another except for their organizational affiliation. Because of the size of the McKenzie watershed and the physical distances that separate them, McWC stakeholders do not perceive one another as members of a shared community. Their connections to one another are based on their formal participation as organizational representatives to the council.

The third proposition states that stakeholders involved in collaborative planning efforts at small geographic scales are more likely to reach agreement over problems affecting the place and solutions to those problems than stakeholders involved in place-based planning processes at large geographic scales. We found this to be the case. The MoWPG stakeholders generally agreed on issue frames that connected watershed health and community health. The MoWPG issue frames received broad consensus because of the direct impact that poor water quality (i.e., *E. coli* bacteria) had on themselves and the community. This impact was well-understood by MoWPG stakeholders due in large part to the relatively small geographic scale of the watershed. Issue frames in the McWC primarily encompassed the entire watershed and larger, regional concerns over endangered species. Water quality for salmon and steelhead was the primary focus for the McWC, with no direct connection to local community health and well-being. There was a clear rift between community members who were not affiliated with an organization or agency, and individuals affiliated with an organization or agency. There were also indications of a rift between the community at large and the McWC because of the emphasis on larger-scale ecological concerns rather connecting watershed health with local community health and well-being.

In sum, geographic scale played an observable role in influencing ingroup-outgroup effects and the emergence and transformation of a new ingroup in this comparative case study analysis. It must be noted that this case study, like any case study, is limited in its ability to generalize to the larger population of collaborative watershed planning groups. The main weakness of this study’s methods is that we only examined one set of nested watershed councils. To increase the confidence in our conclusions about the relationship between geographic scale and ingroup emergence and transformation, multiple sets of nested watershed councils would need to be studied. Additionally, the inductive approach to analyzing the text data is based on our subjective interpretations of themes and patterns. We attempted to verify our interpretations by presenting tentative findings to interview subjects and the councils as a whole for review, feedback, and clarification.

One of the strengths of the case study methodology is that, by using the iterative, inductive coding process, we discovered patterns of interaction and issue frames that are generally not discovered through mail surveys. We were able to bring to light and examine the collaborative planning process as the participants perceive and experience it. Furthermore, by using multiple sources of data and multiple methods (interviews, content analysis, and participant observation), we are constantly able to check tentative findings from the analysis of one set of data against analyses of the other data sources. The patterns we found across data sources and analyses are more compelling and reliable than if there was only one method and one data source, such as a survey.

We feel that this analysis is consistent with and contributes to the growing body of research and practice in collaborative watershed planning. Foremost, this analysis substantiates the importance of *process*. This follows the line of inquiry taken by Webler and Tuler (2001) who, in their research on how participants in a watershed management planning process define a ‘good’ public participation process, conclude that participants have “different expectations about what a public participation process should look like and what it should achieve” (Webler and Tuler 2001, 36). Our study shows that the choice of geographic scale at which watershed planning occurs can strongly influence the kind of process stakeholders want by influencing how issues are framed and how stakeholders interact. In small geographic planning areas, stakeholders are more able to identify concerns over the interconnection between watershed and community health, and know and interact with one another as members of a shared community. In the face of threats to watershed and community health, an ingroup can emerge and lead to mutually-agreed upon decisions and actions. In large geographic planning areas, stakeholders are more likely to iden-

tify regional environmental issues and base their knowledge of and interactions with one another solely on organizational affiliations, rather than as members of a shared community. This predictably leads to ingroup-outgroup effects because individuals tend to personalize and protect their organization's values and positions in the face of competing organizational values and positions.

This study also supports previous claims that conveners of collaborative watershed planning processes (planners, managers, community leaders, non-governmental organizations) can influence how stakeholders perceive themselves and one another, how they interact, and how they frame issues (Cheng et al. 2003; Lovell et al. 2002; Sneddon 2002). To a certain extent, they are able to induce positive ingroup behaviors and minimize negative ingroup-outgroup behaviors depending on the choice of geographic scale. Ingroup-outgroup effects are not necessarily inevitable but can be managed by engaging stakeholders in defining the geographic scale of the planning area. Indeed, we found that watershed council stakeholders hold different self-perceptions—they wear different “hats”—that may be quite malleable. The MoWPG experience demonstrates how stakeholders who redefined the geographic scale of the planning area (from the McKenzie to the Mohawk) can produce mutually agreed-upon goals and actions, and give rise to a new ingroup. They did this despite having very different environmental values and interests and, therefore, potentially opposing group identifications. This suggests a real opportunity to establish and sustain nested, sub-basin watershed groups within large-scale watershed planning processes. Such findings supplement observations made by Thomas (1999), who saw an immediate split between agency managers and local citizens over the geographic scale of the Klamath Bioregion. Although involving local stakeholders to set the geographic scale of watershed planning is controversial among ecologists, it is beginning to be recognized as a fact of life in watershed restoration (Anderson et al. 2003; Rhoads et al. 1999; Webler and Tuler 1999).

In conclusion, defining the geographic scale for watershed planning is not a straightforward process best left to scientific and technical experts. Setting the geographic scale of the planning area can, in turn, set in motion a social dynamic driven by positive and negative group identity-based behaviors. By intentionally beginning a collaborative watershed planning process with a dialogue about the appropriate geographic scale, process conveners can begin shaping positive, collaborative behaviors. We concur with McGinnis et al. (1999) that one of the core values of watershed planning is to rebuild a sense of community within a watershed. Watershed groups organized around small-scale sub-basins nested within large-scale planning processes can facilitate this community-building. The emergence of a new ingroup, as demon-

strated in the MoWPG case, becomes a community “asset” which makes it possible for diverse stakeholders to develop a common vision, build trust, and expand social networks (Smith and Gilden 2002). The fracturing of large-scale watershed planning processes into smaller, sub-basin groups should not be resisted but encouraged, for this multi-scalar approach can bring the principles of ecosystem management closer to reality. Community and watershed activists should strategically advocate for policies and programs that put resources into sub-basin watershed groups nested within a large-scale watershed program. Such groups can reconnect citizens with their natural environment and cultivate community stewardship ethics over time. Lastly, natural and human ecologists should embrace the problem of geographic scale as a shared endeavor. Both are attempting to re-imagine the relationships and interactions between ecological and human communities. Part of this imagining is already happening with small-scale, community-based watershed collaborations leading the way.

Endnotes

1. Author to whom correspondence should be directed:
E-mail: Chengt@cnr.colostate.edu
2. E-mail: Sdaniels@ext.usu.edu
3. In April 1999, the Mohawk Watershed Planning Group changed its name to the Mohawk Watershed Partnership. Since the research was conducted from October 1997 to March 1999, the findings in this paper reflect the group's name as the MoWPG. Collectively, the two groups are referred to as “councils.”

Acknowledgements

Research supported in part by the Dorothy D. Hoener Memorial Fund Fellowship and Mary J.L. McDonald Fellowship, College of Forestry, Oregon State University. Special thanks to individuals from the Mohawk Watershed Planning Group and the McKenzie Watershed Council for their cooperation on this project, especially coordinators Lorna Baldwin and John Runyon, respectively.

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