TRIBAL PARTICIPATION IN COLLABORATIVE WATERSHED MANAGEMENT

A COMPARISON BETWEEN THE DESERT SOUTHWEST AND PACIFIC NORTHWEST

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ABSTRACT

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Within every watershed there are countless cultural, ecological, social, and political issues. Collaborative decision-making has become a popular model of solving multifaceted watershed based problems. Collaborative watershed management is a forum for stakeholders to come together to address controversies, and arrive at shared solutions. The virtues of collaboration include breaking deadlock, relationship-building, creative problem-solving, incorporating all types of knowledge, and sometimes cost efficiency. At the same time collaborative watershed management has risen in popularity throughout the United States, Native American tribes have been working toward self-determination, and sovereignty. While tribes have many reasons to be involved in collaborative watershed planning, they often do not participate in collaborative management groups. This research investigates the factors that influence tribal participation in collaborative watershed management.

Using case study methodology, three cases of watershed collaboration are compared; two in the Pacific Northwest and one in the Desert Southwest. Of the cases, the Pacific Northwest groups have benefited from active tribal participation while the Southwest case has experienced nominal or no tribal involvement. Emerging from the research are the following interrelated factors that influence tribal participation: tribal cultural connection to aquatic resources, political clout and legal standing of tribes, relationships between tribal and nontribal communities and relevant agencies, recognition of the benefits of collaboration, consistency and vision of tribal leadership, and the availability of resources to tribes. Consideration of these factors yields recommendations for communities, agencies, and tribes to work toward productive partnerships in collaborative watershed management.

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PREFACE

This thesis is comprised of five chapters. Chapter I is an introduction followed by a literature review in Chapter II. Chapters III and IV are manuscripts and have been submitted to *American Indian Quarterly* and *Society and Natural Resources* respectively. The final chapter presents some reflections and conclusions. Due to the untraditional nature of this thesis, there are not explicit results or discussion chapters. Rather research results and a discussion can be found in Chapters III and IV. A complete list of references can be found at the end of the thesis. With the exception of Chapter III, which is formatted with footnotes the entire thesis follows the University of Chicago Manual of Style Author/Date system. On a final note, some repetition may occur owing to the necessity of including similar background material in Chapters II, III, and IV.

CHAPTER I. INTRODUCTION

The American West is defined by its landscape. As Wallace Stegner, Marc Reisner, and others have observed, the western states are further distinguished by their aridity. With increasing pressures from population growth in the West, water now is and will continue to be, the economic, environmental, and social issue of the twenty-first century. Conventionally, water and watershed controversies span a broad array of social, ecological and cultural issues and have been settled using litigation and regulation. In the last few decades however, the American West has experienced a significant shift in the way water and other natural resource disputes are settled. The collaborative conservation model has emerged as an alternative to deadlocked negotiations and protracted court battles over natural resource management decisions. The management of local watersheds is a frequent focus for collaborative management groups. Collaborative groups by nature are comprised of participants who represent a diverse range of interests, but it is widely acknowledged that some stakeholders are missing from the process.

Simultaneous to the rise of collaborative management is a rise in the self-determination of Native American tribes. The role that American Indian tribes play in negotiations for managing watersheds and water resources is relatively unexplored and is the focus of this research. My first step is a thorough literature review of work relating to water collaboration and Native American tribes. The subsequent discourse considers work in the fields of; collaborative conservation, watershed planning, environmental justice, participatory democracy, indigenous sovereignty and background on three case studies. Comparative analysis will consider varying levels of tribal participation in

collaborative watershed management with the aim of addressing a formidable gap in the literature of tribes and watershed collaboration.

Research Questions

Much has been written about the origins, function, process, and outcomes of collaborative watershed groups; however, few attempts have been made to examine the stakeholders, actual or potential as the case may be (Kenney et. al. 2000; Moote et.al 2000; Sommarstrom 2000). The success of collaborative management groups relies on representative stakeholder participation (Born and Genskow 2000). Typical participants include agency personnel, elected officials, industry representatives, large landowners, and environmental groups. The participation of Native American tribes, though in many cases they have considerable stake in the watersheds on the table, is less common (Kenney 2000). The planning process is often initiated at the community or agency level and watershed collaboratives may be at a loss as to how to include Native American tribes. Native American tribes have long been recognized as essential partners for land management in the western United States, yet at the same time cultural barriers are often acknowledged as impeding potential partnerships (Varela 2001). Leaving stakeholders out of the process necessarily limits accomplishments and which is particularly evident when major watershed landowners, such as Native Americans, do not partake (Foster 2002).

In a summary of the Udall Center's workshop on community-based collaboratives, participants placed emphasis on the questions: "Who participates in community-based collaborative groups, who does not, and why or why not? How can participation be encouraged and sustained?" (Moote et.al. 2000). Identifying who does

and does not participate and the reasons driving involvement are crucial to achieving the goals of collaborative watershed management. Among scholars of collaboration, there is a concerted voice for additional research on the intricacies of participation. This study hypothesized that by identifying essential factors influencing tribal involvement in collaboration, the quality of participation could be improved.

With this in mind, the question driving this study is: **What factors encourage or discourage tribal involvement in collaborative watershed management?** To support this inquiry, I will also consider the role of western and traditional ecological knowledge in collaborative watershed management. Scientific expertise is often touted as the foundation for collaboratives- the objective information that relationships are built on. A second key question is **how does tribal science, both western and traditional ecological knowledge, inform collaborative watershed management?** This inquiry uses a case study approach in comparing watersheds in the Pacific Northwest and in the Southwest United States. This study considers three case studies. Two of these cases are in the Pacific Northwest and have benefited from tribal participation. They are the Dungeness River Watershed and the Walla Walla River Watershed. The third case is the Verde River Watershed in Central Arizona, with minimal or no tribal participation in collaborative watershed management.

My results are summarized in six broad factors that influence tribal participation in collaborative watershed management. In brief, the factors include 1) tribal cultural ties to fisheries for culture and economy, 2) existence of political clout among particular tribes, 3) Indian and Anglo past and present relationships, 4) acknowledgement of the benefits of collaboration as a problem-solving tool, 5) foresight, and follow-thorough of

tribal leadership, and 6) accessibility of financial, personnel and technical resources to tribes. These factors are followed by recommendations for tribal and nontribal entities in Chapter V.

Objectives of Research

The goals for my research are multifaceted. I hope to contribute to our understanding of how and when tribes are involved in collaborative watershed management. The outcome of my work has the potential to promote broader inclusion in watershed planning and provide much needed documentation on building bridges across cultures to involve tribes in the collaborative management process. In a broader sense, agency staff, the public, tribes, and communities throughout the country stand to benefit by bringing more voices to the table of watershed planning. Most western watersheds are characterized by a patchwork of land ownership, each with the potential to impact local water supplies. Irregular patterns of ownership have often forced a random approach to implementation, in which only willing landowners participate. Increasing the number of people involved in planning has the potential to lead to more widespread implementation. The ultimate objective of this research is to increase inclusion in stakeholder-based watershed management and encourage better stewardship from all stakeholders in the watersheds of the American West. It is my hope that this research, through its various forms of dissemination can be of assistance to practitioners and academics.

Secondary Research Questions- Factors Influencing Tribal Participation in Collaborative Watershed management

Six questions were developed to address the primary research question, *what factors encourage or discourage tribal involvement in collaborative watershed*

management? These questions are aimed at identifying the potential factors that influence Native American tribal participation in collaborative watershed management and were developed prior to fieldwork based on personal observation and literature review.

1. How do funding and resource constraints affect tribal participation in collaborative watershed management?

Foster writes, "Collaborative decisions-making is most apt to work…where resources (that is time, money, and expertise) are adequate to support the frequently lengthy process" (2002 p. 150). With this in mind, a lack of infrastructure for natural resource management within tribal governments may limit staff time at planning meetings. There may not be tribal staff with the time or expertise to participate in collaborative watershed efforts. Insufficient funding to coordinate meetings may also contribute to low turnout (Reike and Kenney 1997). Without adequate financial support, meeting coordinators may not be able to publicize meeting times, distribute meeting minutes and materials or provide adequate meeting facilities and facilitation of meetings. Access to sufficient financial resources is repeatedly cited as one of the most important factors in partnership success (Leach and Pelkey 2001; Wondolleck and Yaffee 2000).

2. How does the presence of supportive leadership affect tribal participation in collaborative watershed management*?*

"Capable leaders appear to be essential not only for initiating, but more importantly for sustaining a watershed partnership" (Born and Genskow 2000 p. 49). While leadership of the collaborative effort is often touted as essential for success (Leach and Pelkey 2001; Born and Genskow 2000), internal tribal leadership may play a role in

encouraging or discouraging tribal staff or representatives from attending meetings and actively participating.

3. How can communication barriers impede the success of collaborative watershed management?

Collaborative problem solving approaches depend on the flow of frequent and clear communication between all involved parties. Challenging the road to success are several types of potential communication barriers. Lack of funding to adequately advertise or attend meetings can result in a communication barrier. Personnel issues may also present communication barriers if individuals do not have a history of working together, or for unknown reasons are deliberately uninterested in communicating. Foster notes, "many disadvantaged (economically, socially, or politically) communities complain of being excluded from environmental land use and natural resources planning processes because they are often not aware that a decision-making process is under way or because the logistics of the process effectively exclude them from participating in the process" (Foster 2002 p. 43).

Within the watershed management field there is a jargon of terms and acronyms, which are used frequently and are often left undefined. Use of this watershed planning language may prevent representatives from effectively understanding the process and participating during meetings. The vernacular of watershed management may lead to frustration and cause representatives not to attend future meetings. Tribal representatives with considerable experience in watershed planning may be better prepared to participate. Watershed groups that deliberately make an attempt to define terms and make material accessible may experience increased involvement.

4. How does actual or perceived lack of control and issue salience influence tribal participation in collaborative watershed management?

Lack of interest or perceived stake in issues being addressed at watershed planning group meetings may drive tribes away from meetings. For example, if water quantity is the actual or perceived focus of watershed planning groups and a tribe has secured in perpetuity an adequate water supply, then they may perceive no incentive to be involved. Born and Genksow write, "An issue(s) must have a high salience in the eyes of prospective partners…in order to provide the motivation for pursuing, undertaking, and sustaining a collaborative watershed effort" (2000 p. 43). A genuine lack of control or the perception of lack of local control over resources or decision-making may also discourage tribes from participating. An additional variable is the potential lack of financial incentives for participation in the collaborative watershed group if the process fails to open doors for future funding opportunities. All of these factors may also work in the reverse to bring participants to the table, provided there is sufficient funding and an opportunity to garner further funds for implementation through participation in the watershed group.

5. How does the presence or absence of trust between participants contribute to collaborative watershed management?

The historical relationships between tribes and the federal and state agencies informs research and influences present interactions. Many tribes find themselves, in the past, or presently in disagreement with states or local jurisdictions (Pevar 2002). An established trust relationship between tribes and the mainstream is necessary for initiation of dialogue on issues that are often highly controversial (Cole and Foster 2001;

Wondolleck and Yaffee 2000). Wondolleck and Yaffee observe, “Lack of trust also translates into suspicions about others’ motives and methods, and even the veracity of each other’s data and approaches to analysis” (2000 p. 59). Underlying skepticism may also explain a slow getting-to-know-you process. In addition, the timing of invitations to join a collaborative group may contribute to trust development. Tribes may be more apt to participate if they are consulted in the beginning of group formation and in a manner that respects their standing as sovereign nations, distinct from other “interests”. Keen attention to the history of trust and or mistrust between tribes and initiating governments or nongovernmental groups may be imperative to predicting future successes of collaborative efforts.

6. How do cultural differences affect participation in collaborative watershed management?

There are distinct cultural differences between tribes and the mainstream culture as well as tremendous cultural diversity between individual Native American tribes. An emphasis on science without enough recognition of cultural concerns may discourage involvement. McCool writes, “Another problem is a result of potentially different perceptions of the issues, which can be due to contorting cultural traditions, differences in the use of and meaning of language and the inevitable influences of bias and self-interest” (McCool 2002 p. 80). The agenda of watershed planning can be dominated by the scientific and policy driven concerns of water resource management. In this context, it may be difficult to address cultural concerns that are tied to water, which may be of primary concern to some tribes.

In addition to these questions aimed at identifying the factors influencing tribal participation, two primary questions were chosen to investigate the second key question, "how does tribal science, both western and traditional ecological knowledge, inform collaborative watershed management?"

7. To what degree is the tribe actively engaged in natural resource management?

First and foremost we must address this question to determine the level of natural resource management capacity developed by each of the tribes in this study. Second, it is important to investigate the relative independence or dependence of the tribe in terms of its reliance on external resources for management including- funding, staff, and other resources.

8. How are cultural values or traditional ecological knowledge integrated into tribal environmental management?

When and how cultural material or traditional knowledge are integrated into management decisions is crucial to determining the interplay between western scientific and traditional ecological knowledge. Perception of alternative types of scientific information within collaborative watershed groups also plays a role.

Methodology

Case study methodology is appropriate for studying one or a few entities within a real-life context (Yin 2003; GAO 1990). The case study draws on a variety of information sources including direct observation, interviews, artifacts, and documents and is ideal for examining contemporary phenomena. The emergent and place-based nature of watershed collaboratives makes them well suited to the case study research model. In a summary of a workshop on community-based collaboratives, sponsored by

the Udall Center for Public Policy, it was noted that, "At a minimum, [research] should involve on-site work, so that all the information is not gathered from answers to written questionnaires or telephone inquires by long distance researchers" (Moote et. al. 2000). This study of collaborative watershed groups was conducted on-site when logistically possible and draws on a numerous sources of information.

A plethora of single case studies of individual watershed collaborative groups exist and primarily focus on describing the structure and function of these groups (Kenney et. al. 2000; Moote et. al. 2000; Sommarstrom 2000). Less common is the utilization of multiple case studies, also known as "comparative case studies" (Yin 2003), to investigate similarities or differences and identify patterns between watershed collaborative groups. More in-depth synthesis and comparative analysis has been identified as a need in the field of environmental collaborative research. A participant at the Udall Center's workshop on *Assessing Research Needs* observed that, "The down side of case studies is that without a commitment to look for a common set of phenomena, factors, relationships, etc., we lose the ability to make meaningful comparison, and building on previous knowledge is slow and cumbersome" (Moote et.al. 2000 p. 4). These three cases on Native American tribal participation in collaborative watershed groups will identify the general factors shaping participation in collaborative groups. Scholars of collaborative research have voiced the need to study the motives of organizations or individuals involved in collaborative undertakings (Moote et.al. 2000).

Yin defines three categories of research questions; exploratory, explanatory, and descriptive research questions (Yin 2003). Exploratory analysis is employed to increase understanding of a little known study unit, while explanatory investigations seek to

explain phenomena and identify causal relationships (Johnson and Joslyn 1995). Descriptive research studies are most appropriate when the objective is to describe or predict events or phenomena. The research questions for this study are exploratory, explanatory, and descriptive. The driving research question is explanatory: What factors encourage or discourage tribal involvement in collaborative watershed planning? To answer this question, more specific exploratory and descriptive analysis is required. I begin by describing the nature of each of the three case studies in attempt to identify similarities and contrasts. In the words of King, Keohane, and Verba, 1994 (p. 44), "it is pointless to seek to explain what we have not described with a reasonable degree of precision." I explore the conditions under which Native American tribes participate in collaborative watershed management and how science informs the collaborative planning process and how tribes use western science and traditional ecological knowledge. The following factors vary among collaborative watershed groups and are assessed through personal interview responses, websites, and supporting documents.

- Goals and objectives and method of determination (Kenney and Reike 1997; Weber 2003)
- Level of funding (Kenney and Reike 1997)
- Decision-making authority (Kenney and Reike 1997)
- Initiation, geographic scope (Kenney and Reike 1997)
- Life-span
- Group demographics and point in time in which tribes became involved (Kenney and Reike 1997;Weber 2003)

Case Selection

The three cases for this research, the Verde River Watershed, The Walla Walla River Watershed, and the Dungeness River Watershed, were carefully chosen based on several criteria. There is one or more established collaborative group in each watershed; these include the Dungeness River Management Team, the Walla Walla Basin Watershed

Council, and the Yavapai County Water Advisory Group in the Verde Watershed. All three watersheds include current tribal land ownership and substantial ancestral territory. The assumption is made that water resources will be of greater concern to tribes in watersheds in which they own land. Issues of water quality and water quantity exist and are topics of discussion in all three cases. Stakeholder participation has also not been the subject of any major academic research in any of the watersheds. Selection of units of analyses within a case study should be driven by the initial research question (Yin 2003). Investigation of the factors that encourage or discourage tribal participation in collaborative management directed the selection of cases for this research including watersheds with and without tribal participation.

It is important to note that this study represents a limited sample of cases. While findings from this research provide some answers to the research questions they are not definitive. This methodology is further limited by time and resource constraints for collecting data and conduct of the research by a nonnative. While I made an effort to develop positive relationships prior to the interviews, as an outsider I may have received less than candid responses from the interviewees in some cases.

Reliability of the interviewees is a major criticism of case study methodology (Yin 2003). To improve the accuracy of data collection, I utilize three sources of documentation; open-ended interviews, official documentation from watershed initiatives, and personal observation of planning group meetings. Research occurred from March 2004 through May 2005.

Interviews were conducted either in-person or by phone. Approximately one week prior to the scheduled interview time, interviewees were mailed or emailed

depending on personal preference a two page introductory letter that described the focus and intent of the research, the major questions of interest, an explanation of procedures, and the confidentiality policy. The letters familiarized the interviewee with the research and encouraged her or him to think about the factors influencing tribal participation before sitting down to talk. In several cases, interviewees were prepared with written responses to the questions at the start of the interview. This extra effort on the part of the interviewee provided direction during the interview and was helpful documentation for the researcher.

I approached each interview with a list of ten to twelve questions each designed to address the motivating research question; however interviews were also tailored to individuals. Not all questions were appropriate nor useful to ask of all interviewees and often discussion drifted to unanticipated topics given the flexible, conversational style. A sample of interview questions is included in Appendix A. Questions are distinguished between questions for tribal affiliated interviewees (ie. tribal staff that may be or may not be tribal members or tribal councilpersons or chairpersons) and nontribal affiliated interviewees (other members of the collaborative watershed group, city and county managers, farmers, environmentalists etc.) Authorization for this research was obtained through the Northern Arizona University Institutional Review Board July 15, 2004.

Personal observation of planning group meetings was conducted when logistically feasible. Observation of meeting proceedings and dynamics as well as conversations with participants before and after meetings also occurred. Official documentation was obtained regarding water resource management from participating groups, including Yavapai County, the Yavapai-Apache Nation, Clallam County, the Jamestown S'Klallam

Tribe, the Walla Walla Watershed Council, and the Confederated Tribes of the Umatilla Indian Reservation.

A total of thirty-one people were interviewed at a variety of locations and these interviews consisted of focused, open-ended questions. Length varied considerably, with interviews ranging from 35 minutes to 90 minutes. Discussion was generally conversational and often times diverge from pre-set questions. At least once for each watershed case, field visits accompanied the interviews, during which informal dialogue occurred. As soon as possible after each interview, I reviewed and clarified hand written notes and or audiotapes and followed up with the interviewee on additional questions that may have arisen. Some interviewees were contacted by email and phone on multiple occasions throughout the duration of this research. The number of interviews was eleven in the Verde and Walla Walla watersheds and nine in the smaller Dungeness watershed.

Participants were informed of the confidentiality of responses to interview questions prior to the interview. Participants were also given the option of using a pseudonym for any and all reporting purposes as well as the option not to tape record the interview. Audio taping devices were only used when the participant agreed in advance and appeared comfortable with the procedure during the interview. All information gathered during interviews including notes, transcripts and/or audiotapes, were kept in possession of Amanda Cronin throughout the duration of the study. After the completion of the project the above materials are to be stored by David Ostergren Ph.D, in a secure location on the Northern Arizona University campus in Flagstaff, Arizona, as per protocol.

Official documentation from the counties, tribes and others involved in the collaborative watershed groups was obtained via internet and library research as well as through direct contact with coordinating offices. Information was photocopied on and off site. In some cases, documentation was emailed or sent directly to me. Personal observation was conducted of watershed group meetings. When attending meetings I took hand-written notes that were reviewed soon afterwards. Attendance of meetings also presented the opportunity to interact informally with watershed group participants. Information garnered from these interactions may be noted but individual quotations will not be used without permission. Copies of publications from this research will be distributed to participants in each of the cases.

CHAPTER II. LITERATURE REVIEW

The Collaborative Conservation Movement

Over the past decade, within land and natural resource management there has been a fundamental shift in the way decisions are made in the United States. Communities, nongovernmental organizations, land management agencies, and landowners are turning to collaborative decision-making, rather than top-down, agency oriented planning. Collaboration has emerged as the preferred strategy of government agencies and organizations in a plethora of management domains. Collaborative approaches to complex policy and management scenarios are applauded by representatives of both major political parties (Fischer 2000). Some in the environmental community have deemed the cooperative trend a "collaborative movement" (Snow 2001). "Although it is conceivable that the collaboration movement is a passing phenomenon, it seems much more likely that it has become, as Wallace Stegner predicted, a fundamental feature of western political culture" (Kemmis 2001 p. 151). But what exactly does this translate to in terms of people and resources and land management? To generalize, collaboration implies a group of people with diverse interests committed to developing solutions that transcend individual wants towards shared solutions (Gray 1989). One type of cooperative decision-making is manifest in thousands of small watershed planning initiatives across the United States, each group specific to place and unique in approach.

Collaborative Watershed Management Groups

Diversity of and justification for a focus on collaborative watershed management groups

In the American West the collaborative conservation movement consists of many types of cooperative or collaborative partnerships that are known by various monikers; they include community-based conservation (Meffe et. al. 2002), public-private partnerships (Wondolleck and Yaffee 2000), collaborative conservation (Cestero 1999), watershed initiatives (Kenney et. al. 2000), and grass-roots ecosystem management (Weber 2003). These resource management strategies may have political boundaries or may be limited to specific watersheds or river basins. Each group varies by breadth of participation, funding, goals and objectives. A common thread between all collaborative initiatives is a focus on diverse participation; all rely on local input to come to solutions for land management. Furthermore, these groups share the similarity of foregoing past models of land management in favor of new approaches. With these likenesses in mind, it is important to note that there is no cookie cutter template for watershed groups. Each watershed group is inherently dynamic. Changes in structure, leadership, participation, direction, and organization are not uncommon in collaborative watershed efforts (Born and Genskow 2000). In fact, the tendency of academia to neatly define natural resource management collaboration as a tidy series of groups across the landscape unnecessarily simplifies the metamorphic character of collaborative watershed management. This literature review is concerned with collaboration as a tool in environmental management, more specifically the utilization of collaboration to manage watersheds or river basins.

Definitions

This study concentrates on collaborative watershed management groups, which are only one aspect of the collaborative movement. For the purposes of this research, **collaborative watershed management groups** are defined as the voluntary association

of stakeholders, these may include local community leaders, state, and federal agency employees, elected officials, tribal, environmental, and industry representatives, and community members. Participants are unified geographically by a watershed or political boundary and work together to solve natural resource management issues within their watershed. Groups may be a direct result of community interest and thus be considered "grassroots" initiatives, or they may be a result of an agency's effort to involve local stakeholders, or more likely a complex conglomeration of both. Funding for planning and implementation efforts comes from a variety of sources including local, state, and federal agencies, private foundations, and tribes. As adapted from Meffe et. al. in *Ecosystem Management* (2002), a **stakeholder** is defined as anyone who resides, makes a living, recreates, or worships in a given watershed or ecosystem, anyone who is interested in the use of the resource(s) of discussion, and government representatives with legal authority in the area of consideration.

Why Collaboration?

A new paradigm where nothing else has worked

The United States Department of Interior website proudly boasts a link to its recent "Cooperative Conservation Initiative." The initiative is touted as the brainchild of Secretary of the Interior Gale Norton, and President George W. Bush and boldly proclaims, "through cooperative conservation, we can achieve healthy lands, thriving communities and dynamic economies" (US DOI 2004). Simultaneous to the federal emphasis on collaboration, the Nature Conservancy "often employs community based conservation as its central strategy" and asserts that, "community-based conservation represents a proven means of achieving enduring, tangible conservation results" (The

Nature Conservancy 2004). The Enlibra principles of the bipartisan Western Governor's Association articulate the desire to try a new style of environmental management for the Western United States. Enlibra call(s) for greater participation and collaboration in decision-making; a focus on outcomes, as well as programs; and recognize(s) the need for a variety of tools beyond regulation to improve environmental management" (Western Governor's Association 2004). What is it about cooperation and collaboration that make them the champion of traditional adversaries in the environmental field? To understand the current collaboration movement, it helps to examine its historical context.

Collaboration grew out of a frustrated era of environmental management in which regulatory and bureaucratic approaches to environmental problem-solving were the norm. During the 1980's, environmental issues escalated to the point of aggressive polarization among environmentalists, farmers, timber workers, ranchers, and agency representatives (Brick and Cawley 1996). Among the opponents in these hard-fought battles, many of which culminated in expensive court cases, was the sentiment that "no one is winning." "(T)here was a problem of gridlock: by the mid-1980's most actors in the nation's and the West's environmental debates came to realize that regardless of their political positions or constituencies they represented, positive advancement of agendas had become stalled" (Snow 2001 p. 4). On the heels of this stalemate, in the late 1980's and into the 1990's the western United States experienced a simultaneous coevolution of attempts at negotiation and cooperation among natural resource stakeholders in lieu of litigation (Snow 2001; Weber 2003). Since the early 1990s, hundreds of decentralized, cooperative, and participative groups involving diverse stakeholders have sprung up, with goals of reaching shared solutions on tough environmental issues. Reacting to these

primarily grassroots efforts is a body of literature that both extols and critiques the collaborative approach to environmental management.

Leads to better management

Among those applauding collaboration, be it not without critical analysis, is Douglas Kenney. He writes, "I believe that the watershed movement is the most exciting and significant innovation in natural resources in a quarter of a century" (Kenney 1999). Kenney's enthusiasm for watershed collaboration stems from its promise to improve on the environment management paradigms of the past. In particular, "the new style of management helps to build a sense of shared ownership and responsibility for natural resources by moderating a top-down style of government agencies that has tended to disempower landowners and local interest groups" (Wondolleck and Yaffee 2000 p. 5). This shared ownership mentality has led to better cooperation from private landowners for implementation efforts and improved understandings between the public and managers of public lands. "There are literally hundreds of success stories" of independent collaborative watershed efforts (Wondolleck and Yaffee 2000 p. 4) most of them concentrated in the western United States. These successes stem from the creation of solutions that could not otherwise be reached and the results are often more long-lasting and rewarding (Kemmis 2001; Wondolleck and Yaffee 2000). One of these "success stories" is the Malpai Borderlands group, a collaboration between ranchers, environmental groups, state and federal land managers, nonprofits and universities. As Kelly Cash tells it, "ranchers concerned about the future of cattle ranching banded together in the early 1990s to form the Malpai Borderlands Groups, a nonprofit organization. Through a series of front-porch meetings and serendipitous relationships,

these ranchers have created one of the largest experiments in what scientists call "ecosystem management" in America today" (Cash 2001 p. 113). Although the criteria for success are subjective and of considerable debate among practitioners and academics, one virtue of the collaborative phenomenon that has received widespread celebration is its grassroots, democratic nature.

Forum for stakeholder participation, an essential of democracy in a pluralist society

"Solving shared problems together on behalf of a shared place is the essence of democracy" (Kemmis 2001 p. 153). Daniel Kemmis and others interpret collaboration as the quintessential solution to decades of bureaucratically driven, public-infuriating, and polarizing land management. Recent critiques of environmental management in the traditional framework of liberal pluralism point out the lack of democratic deliberation and public participation on environmental issues (Fischer 2000; Foster 2002; Schlosberg 1999; Weber 1998). Both Weber and Schlosberg describe an imperfect pluralist process dominated by national environmental groups and exclusive of the grassroots (Schlosberg 1999; Weber 1998). Within the traditional pluralist system there are also innate equity concerns. In particular, avenues to power are through economic means, political standing, and access to technical expertise, all of which potentially discriminate against minority groups (Foster 2002). These analyses account for the apparent enthusiasm over the emergence of the collaborative movement as a solution to thirty or more years of interest-group-dominated environment management.

Indeed, there is a widespread awareness that the activities of the general public have changed with respect to natural resource management, particularly in rural areas. On a weekday evening in some parts of the United States, people are just as likely to be

participating in a watershed planning meeting as bowling with a community league. What makes this shift significant is not simply that neighbors and in some cases adversaries are talking to each other; rather, it's the decision-making power of these people and the repercussions of their interactions. In Kemmis's mind "the most strongly democratic statement a group of people can make" is "if we are going to do all this work, we are going to make the decision" (Kemmis 2001 p. 153). A democracy for and by the people depends on meaningful public contribution. However, as is discussed subsequently, placing decision-making power in the hands of a small group of locals is paradoxically a chief criticism of environmental collaboration.

There is inherent value in the participatory aspect of environmental collaboration. Many authors have cited a strengthening of community as a consequence of citizen's deliberation on regional and local issues (Born and Genskow 2000; Snow 2001). More specifically, through participating in meaningful dialogue and contributing to decisions of consequence, individuals begin to come to conclusions with their community in mind (Weber 2003). The ensuing positive benefit for the community at large is part of the substantive promise of grassroots collaboration. Successful collaborations also engender a sense of trust between participants. Born and Genskow observe, "the ability to positively affect problem-solving capacity, with an emphasis on increased ability to implement proposed solutions within the socioeconomic, cultural, and political context of a particular watershed, is one of the most significant features of new watershed approaches" (Born and Genskow 2000 p. 47). In an era of increasing disillusionment with government, trust and relationship-building are necessary components of achieving change at the ground level.

In the tiny Paradise Creek watershed of north Idaho and eastern Washington, relationship building has been the key to achieving field level improvements in land management. Through the formation of the Paradise Creek Watershed Advisory Group, conservation district representatives, a local environmental group, the University of Idaho, farmers, and local government leaders came together to consider the health of their watershed. The watershed advisory planning process generated improved trust between stakeholders. Positive relationships in the Paradise Creek Watershed have lead to the widespread implementation of lower impact agricultural practices and cooperative installation of over forty riparian and wetland restoration projects (Cronin 2003). In this case, trust relationships were contagious and landowners unaffiliated with the watershed group began following the lead of their counterparts in working with the conservation district and a local environmental group upon observing the success of pilot projects. Paradise Creek is just one example of the ripple effect collaboration can have on a community and ultimately on the health of a watershed.

Arguments against collaboration

For each of the virtues of the collaborative planning process, there is a corresponding criticism. Many of the arguments against environmental collaboration revolve around the distribution of decision-making power into the hands of local people. National environmental groups are the most vocal skeptics of collaborative groups (Coggins 1999). Some land managers and academics join them. Their central argument stems from the belief that local people are not only incapable of managing watersheds, but also that local governance is inherently undemocratic as it leaves out consideration of the larger public good (Coggins 1999). Shifting control from agencies to local

stakeholders, they say, is not representative of the American public (McCloskey 2000), and is even considered unconstitutional (Coggins 1999). Michael McCloskey, past Chairman of the Sierra Club wrote that collaborative approaches to environmental management, "suggest that government is simply another stakeholder, not the body that represents all stakeholders. Apparently, government is no longer viewed as having any right to exercise authority by virtue of the democratic process that chooses the office holders who direct government" (2000 p. 426). This argument runs counter to the claims of Kemmis and Weber and has its roots in the highly contested debate over the representative versus more participatory forms of democracy. McCloskey contends that "moving away from representative democracy is a bad idea" (2000 p. 426). While Kemmis counters that, "this vibrant democratic movement in the West cannot finally allow the ultimate decision-making power over so much of the region's territory and its future to continue to reside in Washington "(2001 p. 153). This criticism is advanced in regards to the regulation of private lands but the strongest opposition arises surrounding the collaborative management of public lands. Given that the bulk of Americans live in urban areas, shifting the power to rural areas discriminates against the majority of Americans when it comes to making decisions about land management (McCloskey 2000)

Beyond the analysis of collaboration as undemocratic is the contention that the process is inefficient (Rossi 1997; McCloskey 2000) and produces no measurable outcomes (Coggins 1999). Furthermore, when consensus is achieved so-called win-win solutions are said to be watered down versions of the environmentally preferred alternatives (McCloskey 2000). This scenario is particularly likely when membership to

collaborative watershed groups is open to an unlimited amount of stakeholders. Inclusive participation may sound idyllic in rhetoric, but in the field, it may result in an imbalance of power. For example, the state of Idaho maintains a system of watershed advisory groups (WAGs), which are a forum for soliciting local stakeholder input for the state in the development of TMDLs (Total Maximum Daily Load) and implementation plans (IDEQ website). Although the WAG does not write the TMDL or the implementation plan, local contribution is given considerable weight by the state environmental quality agency. The North Fork Clearwater WAG members included two from federal agencies, one from a tribe, six from various state agencies, five from county departments, two from the timber industry, one from a city government, two from environmental organizations, two private landowners, two ranchers, one motorized recreationist and one citizen at large. In this group, the weight of the environmental voices was effectively weakened as a result of trying to include everyone. On the other hand, increasing the number of industry representatives and government representatives at the table can be an opportunity to educate and build relationships. In fact, this is considered one of the major achievements of collaboration; as long as mechanisms are in place to balance the regulatory and educational power of agencies and industries, collaboration is a management method that can achieve its ideals.

Literature on Collaborative Watershed Management

Research on the role of participation in collaboration

The democratic promise of collaboration rests on inclusive participation by all affected parties. Within the body of research on environmental decision-making there are assessments of public and grassroots stakeholder participation which may prove valuable

in evaluating tribal involvement in watershed collaboratives. Recent work in environmental justice concentrates on the specific inequities Native Americans face in contributing to environmental planning and policy. The relatively newer field of collaborative environmental management provides a few broad characterizations of the specific challenges of involving tribal governments. This review of this literature demonstrates that there have been few if any attempts to identify the particular factors that influence tribal involvement in collaborative watershed efforts.

Acknowledgment of the importance of participation

Participation by all involved parties is widely recognized as integral to achieving the substantive goals of watershed collaboration (Born and Genskow 2000). Among the critiques of collaborative watershed initiatives is their failure to achieve diverse participation. Born and Genskow note that "the direct involvement of Native American tribal governments and environmental/conservation interests are examples of more equitable representation" (2000 p. 47). Furthermore, their research identified "broad inclusive participation" as one of nine factors identified as "contributing to success of" six case studies (2000 p. 47). The authors conclude by offering a list of recommendations for Congress, the EPA and states aimed at "strengthening the functioning and effectiveness of emerging watershed-management initiatives" (Born and Genskow 2000 p. 59). Absent from this list is any mention of the role of tribes in watershed initiatives or suggestion for Congress, the EPA, or states to promote the involvement of tribes in watershed initiatives. Given their earlier emphasis on diverse stakeholder involvement and considering the prominent role of local tribes in two of their case studies this omission is surprising, however not uncommon. A review of the

literature suggests that those who write about collaboration often endorse broad participation but rarely is attention devoted to the role of tribes.

In their well-respected and often cited book, *Making Collaboration Work,* Wondolleck and Yaffee (2000) note the importance of cultural sensitivity with regard to the initiation of watershed partnerships. They provide one tribal example but their analysis does not elaborate on the obstacles tribes or agencies face in attempting collaboration and does not acknowledge a need for further research. The book is designed to "provide a set of lessons for practitioners and others who want to understand the role of collaboration in resource and environmental management and how to make it work…and is based on ten years of research" (Wondolleck and Yaffee 2000 p. xi). With this in mind, the lack of attention to the position of tribes is a certain weakness in the book's applicability.

Of some concern is the tendency of writers to group together tribal interests with environmental interests, thus assuming parallel missions. Propst and Culp write that; American Indian Nations are among the "sectors of the public who logistically should be conservation's allies" (Propst and Culp 2001). This simplistic and homogenous view of tribes is indicative of the pervasive misunderstanding the non-Indian public holds of Native American tribes. In reality, the issues that tribes bring to the table of environmental problem-solving are based on distinct cultural, ecological, and economical beliefs. Increasing emphasis on self-determination and goals of economic independence also drive tribes as they seek to make their voices heard. McCool divides the relationship between environmentalists and tribes into two categories. In a historical sense, tribes are viewed as "natural allies" of the environmental movement due to their

shared respect for the land. McCool notes that much of the theory of the American environmental movement was founded on the ideas of harmony and stewardship embraced by native peoples. When taken into context however, the missions of tribes become much more complex given their struggles to survive in a world different from pre-colonization. Given the present day reservation scenario, McCool notes that environmentalists often view tribal lands as "the last refuges" in need of maximum protection. The tribes, on the other hand, are attempting to balance the needs of land preservation with economic development to further their autonomy (McCool 2002). For these reasons, it is imperative to acknowledge the truly unique perspective of individual tribes, as well as develop mechanisms of increasing understanding between tribal representatives and the mainstream.

Some collaborative processes have deliberately excluded specific individuals or groups from the process, based on histories of conflict and distrust. This practice defies the recommendations of much of the collaborative literature (Foster 2002) and puts into question the true collaborative nature of such exclusive processes. Nonetheless, there is an understandable tendency to strategically exclude those who may inhibit the process- as in the case of the New York City Watershed Agreement. Gray writes that, "the processes through which the agreement was formulated were facilitated by city officials in ways that sometimes strategically excluded groups as they sought to overcome historic barriers of distrust and build bridges of understanding among critical stakeholders" (Kusel and Adler 2003 p. 8). Gray credits the New York City official's strategic approach of inviting select stakeholders to specific meetings as leading to a landmark agreement with rural watershed residents. While not necessarily collaborative, the New York City

Watershed agreement illustrates the delicate nature of relationships in the success of community-based planning groups.

Public and stakeholder assessment in participatory and discursive democracy theory

The fields of participatory democracy and discursive democracy are responses to the failings of traditional pluralism and liberal democracy. Dryzek, a leading thinker in current democratic theory, wrote in 2000, "The essence of democracy itself is now widely taken to be deliberation, as opposed to voting, interest aggregation, constitutional rights, or even self government…" (Dryzek 2000 p. 1). New deliberative approaches advocate a revitalization of the public sphere in which citizens, including traditionally marginalized groups, voluntarily deliberate on social and environmental issues. Discursive designs favor non-hierarchal decentralized approaches to power and regulation (Barber 1984; Dryzek 1990; Fischer 2000). This contrasts with liberal representative democracy, which is distinguished by bureaucratic decision-making and participation that is almost exclusively dominated by interest group participation that often alienates the grassroots (Barber 1984; Dryzek 1990; Fischer 2000). Within the renovations of western democracy are assessments and suggested reforms for the public's role in policy development and decision-making.

Frank Fischer praises citizen participation as the "touchstone of the democratic system" (Fischer 2000 p. 37). As the touchstone of democracy, citizen participation contributes three important goals: participation implies thoughtful deliberation of socially significant issues, participation "legitimizes policy development and implementation", and participation can contribute to "professional inquiry" (Fischer 2000 p. 2). However, Fischer warns that resurrecting citizen participation is hardly straightforward and is

further challenged by increasing complexity of environmental problems. More specifically, he writes, “speaking the language of science, as well as the jargon of particular policy communities, becomes an essential credential for participation” (Fischer 2000 p. 23). This observation is particularly applicable to the role of citizens and non-scientist tribal representatives in collaborative watershed management. Inviting previously uninvolved tribes to the table necessitates addressing the specific language and technical content of the discussion.

Over the last ten years, research has emerged on the specific role of citizens in environmental policy (Busenberg 2000) and even more specifically their role in watershed planning initiatives (Duram and Brown 1999). Duram and Brown identify five factors of importance for the evaluation of citizen participation. The factors include: the type of management approach, the stage of the process in which public participation is sought, the method(s) of soliciting public involvement, the level of participation, and the overall outcome(s) of the process. Even though these factors are not constructed with tribes in mind, their conclusions may have some relevance to tribal participation in watershed planning. In addition, a limited number of recent publications in the genre of watershed collaboration have focused on the role of citizen stakeholders with regard to the success of the collaboration. Lubbell observes that cooperation from local farmers, ranchers and loggers, whom he refers to as “grassroots stakeholders”, is essential to the success of implementation efforts (Lubbell 2004). Indeed others have recognized that trust and a perception of fairness between land managers and local people are essential ingredients in the success of any collaborative effort (Welsh and Gray 2002). Native

American tribes do not fit neatly into the category of local stakeholder or the community at large; they are simultaneously landowners, land managers, and sovereign governments.

Native Americans, tribes, and collaboration in environmental justice literature

Despite a relative abundance of work aimed at addressing collaboration and communication between managers, bureaucrats and local stakeholders, there is almost no attempt to scrutinize the specific role of tribes in collaborative watershed management. Within the literature of environmental justice, there exists a broader analysis regarding the role of Native Americans in environmental decision-making. However, much of the literature of this arena examines the experience of individuals and groups of Native Americans rather than sovereign tribes. Yet, some of the observations from this work are applicable to tribes.

Institutional procedures often exclude Native Americans and other disadvantaged minorities from playing an active and meaningful role in the environmental decision-making process. Foster writes, "many disadvantaged communities complain of being excluded from environmental land use and natural resources planning processes because they are often not aware that a decision-making process is under way or because the logistics of the process effectively exclude them from participating" (Foster 2002 p. 143). Lack of tribal resources, tribal personnel, inability to communicate in the jargon of watershed policy (Fischer 2000), and lack of existing trust relationships with managers and other stakeholders may also contribute to the exclusion of Native Americans (Foster 2002). At the same time the unique sovereign status of tribes makes them unfit to be considered simply as another case of environmental injustice. The umbrella of

environmental justice should expand to include support for tribal self-determination (Krakoff 2002).

Critiques of the current pluralist systems argue that traditional pluralism does a poor job of including difference (Schlosberg 1999; Foster 2002). Authors recommend a reform of our current pluralist system to be more participative and deliberative to address the diversity of voices excluded in the past. Schlosberg notes, "Through public participation, activists, and communities may accomplish both more equitable distribution of environmental risks…and the recognition of various communities, cultures, and understandings of environmental health and sustainability (Schlosberg 1999 p. 13). While desirable, Sheila Foster questions the ease with which inclusive representation can be achieved. In particular, Foster warns "disparities in representation and influence among interest in collaborative processes are inextricably linked to the same set of social relations that make pluralistic decision-making processes problematic. Without attention to these issues, the entire participatory process is placed in jeopardy…" (Foster 2002 p. 156).

Missing from these analyses is specific consideration of the role of tribes in a participatory approach to pluralism. Many address the challenges faced by Native Americans, often equating them with all other victims of environmental injustices. Addressing the specific challenges involved with bringing tribes to the table requires an in-depth consideration of the unique status of tribes and understanding. Chief Justice Marshall remarked in *Cherokee Nation vs. the State of Georgia* 1831, "The relationship of the Indians to the United States is marked by peculiar and cardinal distinctions which exist nowhere else" (Cherokee Nation v. State of Georgia, 1831).

With its optimism for increased stakeholder participation, the new paradigm of collaboration is nonetheless constrained within an inequitable social structure (Foster 2002). Foster observes that "the unequal representation and influence that underlie conventional decision-making processes" (2002 p. 150) are carried over into efforts at collaboration. Certainly, the first step in achieving collaboration must be to recognize preexisting barriers to achieving success and Foster does well to characterize these; however, she offers no functional recommendations towards forming successful collaboratives with Tribes. Thus, it seems from the literature that participation of tribes is desirable, while problematic.

Tribes and Collaboration

Later work by Azelzadeh, Bryan, and Yaffee (2003) contributes to a framework to address tribal participation in watershed collaboration. In a short unpublished document the three authors provide "a broad overview of the issues associated with tribal involvement in collaborative natural resource management" (Azelzadeh, Bryan, and Yaffee 2003 p. 1). The working document was prepared for a workshop on tribal consultation and collaboration within a broader collaborative resource management course (Yaffee 2004). Addressed in the paper are brief explanations of tribal sovereignty, trustee responsibility, consultation with tribes, sacred sites, environmental justice, tribal politics, tribal distinctiveness, limited resources of tribes, tribal customs, existing public land paradigms, separation of church and state, traditional ecological knowledge, and science and communication (Azelzadeh, Bryan, and Yaffee 2003). Despite their brevity, these descriptions contribute to the framework for developing the hypothesis of this research.

Another short paper, posted on the Center for Community-Based Collaboratives website, addresses the unique problem of involving sovereign entities in collaborative efforts (Rollins and Warren 2004). As Rollins and Warren point out, collaborative groups are based around an idea that every stakeholder has an equal voice at the table. Treating federally recognized Indian tribes as just another stakeholder is at odds with the sovereign nation status of tribes (see section on The Nature of Tribal Sovereignty p. 43). Increasing awareness and recognition of sovereign tribal nations is a crucial aspect of addressing the initial research question of this study. However, what Rollins and Warren fail to address is that while equity and power balances are stressed (particularly in the literature on what collaboratives should strive for) complete fairness is ultimately not possible. At the same time that equity is being encouraged, the practicality of including governments, tribal and otherwise, necessitates that some stakeholders will have much more power in actualizing management outcomes.

With regard to other work specific to tribes and natural resource collaboration, Donoghue and Thompson presented a paper at the Community-Based Collaborative Research Consortium's 2003 conference entitled "Characterizing Tribal-Federal Collaborative Resource Management". Donoghue and Thompson subdivide tribal-federal relationships into five categories (comanagement, contractual, cooperative, working relationships, and conservation easement). They also note that, "cultural values…were explicitly recognized in all of the projects and played a key role in the formation of the institution for collaboration" (Donoghue and Thompson 2003 p. 4). However, the authors have yet to publish this research (Ellen Donoghue personal communication: August 16, 2004). In a 2001 paper entitled, *(Re)Claiming Space and*

Place Through Collaborative Planning in Rural Oregon, Waage identifies the development of a shared ideology between Nez Perce Tribe and local landowners and local government as the secret to success of the Wallowa County/Nez Perce Salmon recovery Plan. According to Waage the glue of this collaborative effort lay in the articulation of mutual values of "identity, independence and self-determination" between Tribal representatives and Anglo ranchers, loggers, and county officials (Waage 2001 p. 850).

Beyond the United States, there is a body of research seeking to characterize and improve conservation relationships between Aboriginal and Anglo Australians. Despite continental differences between Australia and the United States and dissimilar histories of the relationship between the native peoples and Europeans, Lane identifies seven factors influencing tribal participation that are significant for this study. Five of the seven factors can be traced to a lack of respect and misunderstandings between Aboriginal peoples and European-Australians, including misconceptions of aboriginal interests and their views on environmental management and confusion over Aboriginal social organization. Furthermore, the author observes that, "Western notions of delegation and representation are often inappropriate in Aboriginal domains" (Lane 2002 p. 830). Following a review of three institutional approaches to the governance of natural resources Lane concludes that a hybrid of institutional, reticulist, and community-based approaches to environmental management is best suited to including indigenous peoples. He writes, "there are advantages to the community-based approach to land management… these include developing approaches that enable local Aboriginal groups

to conduct their own affairs and minimize the extent of institutional intervention in their lives" (Lane 2002 p. 841).

In a comparative analysis of relationships between indigenous peoples and national preserve management in Australia, the United States, and Russia, Poirier and Ostregren (2002) conclude in the wake of a century of exclusion of indigenous peoples from parks, institutions are slowly beginning to become more inclusive. Consultation with native peoples on land management of their ancestral homes is indicative of a slow but changing consciousness of the validity and significance of Indigenous culture and livelihood by dominant cultures. Importantly, consultation is not a one-way street; tribal efforts to engage agencies may represent self-determination in revival of Native American ceremony and tradition (Ruppert 2003). The traditional use of resources on public lands and opening the door to joint management with indigenous peoples are crucial components of achieving goals of social and environmental justice and the restoration of culture. The rise of dialogue between tribes and the Park Service in the United States and elsewhere is not analogous to the relationships of collaborative watershed management, but together they are pieces of a wider phenomena of tribal autonomy in natural resource management.

Tribes as an essential component to successful collaborative processes

There are myriad reasons for tribes to be involved in collaborative watershed management. First and foremost is that federally recognized Indian tribes exist as sovereign nations within the United States. The federal government has two primary responsibilities to Indian tribes. The United States is accountable for promoting and supporting self-determination and the economic and social health of all tribes. The

federal government is also the fiduciary agent throughout much of Indian country. This obligates the federal government to manage these lands in the best interest of each tribe (Pevar 2002). The trust responsibilities of the United States to sovereign tribal nations renders tribes essential participants in collaborative watershed management.

In addition to the implications of trust responsibilities, tribes are major stakeholders in many of the watersheds throughout the country, managing approximately 95 million acres of land (Boyle 2002). For a truly democratic approach to collaboration all stakeholders must be included. Beyond the goal of inclusiveness, tribes provide a unique perspective to the discussion of watershed planning. Although each tribe is distinct, one commonality between tribes is a historical and intrinsic connection to land that permeates their modern way of life (Boyle 2002). Traditional ecological knowledge (TEK) describes the centuries of tradition and experience by Native Americans for subsisting off the land. TEK is slowly gaining western recognition as a valid and integral component of ecosystem management (LaDuke 1994; Martinez 2003). While some writers caution against direct applicability of management based on TEK (Graber 2003), Martinez views integration of TEK as vital to a global reconciliation with indigenous peoples. "All this is occurring at the very time when the earth and its inhabitants are most in need of healing. Native culture although badly fragmented by the impacts of industrial societies, still hold onto significant ecological wisdom based on long ecological experience in particular places. To ignore that millennia-long local experience and knowledge is to risk doing poor science" (Martinez 2002 p. 250).

The extent to which tribes choose to rely on TEK in their management decisions varies considerably; nonetheless tribal ties to the land extend into the future and the past

indefinitely. This perspective can yield a greater commitment to a frequently decade-long watershed management process. In a time where staff turnover in government agencies is at its peak, tribes can provide continuity and long-term commitment to watershed planning and implementation activities. This long-standing perspective is imperative to the success of watershed planning and restoration, given the tendency of these efforts to be multi-phased and span the course of ten or even twenty years. Given that implementation is usually a product of watershed planning, tribes may be instrumental with on the ground restoration and water quality improvement projects. The Nez Perce Tribe of northern Idaho is one such example; as an active member of the Clearwater Basin Advisory Group, the Tribe has instigated numerous salmon recovery projects in the Clearwater Basin. Their efforts include obliteration of 60 miles of abandoned logging roads, riparian restoration, and construction of a state of the art fish hatchery to assist with restoration of wild chinook, steelhead, and bull trout (CRITFC 2004). At this point, clarification of the nature of sovereign nations may inform this discussion.

The Nature of Tribal Sovereignty

Tribal Sovereignty and Trust Relationships

Federally recognized Indian tribes exist as sovereign nations within the United States. As sovereign nations, they retain power to govern from their people (O'Brien 2002). At the same time, tribal governments must operate within the existing legal structure of the federal government and the federal government has a responsibility to protect Indian tribes and serve as a trustee. This is the fundamental paradox of the relationship between the United States and Indian tribes that has arguably existed since

1776; on one hand tribes are independent sovereign nations and on the other hand tribes are the beneficiary of the federal government (Emenhiser 2002). This peculiar relationship is also referred to as the "twin doctrines of trust relationships and tribal sovereignty" (Emenhiser 2002), and was first expressed by Chief Justice John Marshall in 1831 and 1832. Justice Marshall declared that based on the United States' callous treatment of Indians, the federal government has a duty to protect and assist tribes to regain self-sufficiency (Emenhiser 2002). The relationship between tribes and the federal government is neatly characterized by the "the doctrine of trust responsibility" that was later articulated by the Supreme Court in 1983. Pevar notes the Supreme Court's language in 1983 as "the undisputed existence of a general trust relationship between the United States and the Indian people" (Pevar 2002 p. 32). This relationship is best understood by identifying two primary responsibilities of the federal government to Indian tribes. The United States is accountable for promoting and supporting self-determination and the economic and social health of all tribes. Secondly, the federal government is the fiduciary agent throughout much of Indian country; this obligates the federal government to manage these lands in the best interest of the tribe (Pevar 2002). Despite the powerful nature of the trust doctrine, the specific responsibilities of the federal government to tribes are not clear.

Concurrent with the trust relationship between Indian tribes and the United States is the initial nature of agreements established between the federal government and some tribes. Just after the end of the Revolutionary War in 1783, it was in the best interest of the newly established states to avoid further battles of any kind (Pevar 2002). Pevar notes that "the official position of the U.S government following the revolutionary War was to

regard Indian tribes as having equal status with foreign nations, and efforts were made to maintain good relations with them" (Pevar 2002 p. 6). Despite this proclamation of concord, the devastation of Indian peoples and their lands that began with European settlement in the Americas and accelerated through the Revolutionary War continued after the War. Emenhiser notes that in 1832 Chief Justice Marshall further articulated the sovereign status of tribes:

> From the commencement of our government, Congress has passed acts to regulate trade and intercourse with the Indians; which treat them as nations, respect their rights, and a firm purpose to afford that protection which treaties stipulate. All these acts…consider the several Indian nations as distinct political communities, having territorial boundaries, within their authority is exclusive, and having a right to all lands within those boundaries, which is not only acknowledged, but guaranteed by the United States….

As evidence to the parallel nation status of tribes and the United States, almost four hundred treaties (Pevar 2002) have been signed between tribes and the federal government. Treaties supersede state laws and maintain the same power as federal laws. Treaties made between the United States and tribes were signed in what as known as the treaty era from the end of the Revolutionary War in 1776 until Congress prohibited the signing of any new treaties in 1871 (McCool 2002; Pevar 2002). Each treaty is unique, but the general premise is the relinquishment of the ancestral lands from specific groups of Indians to the United States government in exchange for the promise of welfare of the Indian people including, the designation of reservation lands, food, clothing and services (Pevar 2002) and hunting and fishing rights. The specific nature of treaties signed between the tribes of this study will be discussed later.

Increasing Assertions of Tribal Sovereignty

Over the last century and a half, United States Indian policy has flip-flopped between reaffirming the sovereign status of tribes and attempts to undermine tribal independence. The termination era, from 1953-1968 was particularly devastating for tribes (Pevar 2002). Under the Eisenhower administration, the federal government sought to abandon their tribal trust relationships and thus save money by ceasing all federal Indian assistance programs (Pevar 2002). The goal was to assimilate Indians into the non-Indian society. Many tribes were terminated during this time and thus denied their autonomy. Some were later reinstated but not without significant losses (Clow and Sutton 2001). Nineteen sixty-eight marked the beginning of the current period of self-determination for tribes (Pevar 2002). This is marked by the development of several national Indian organizations (McCool 2002), increased emphasis on maintaining autonomy by tribal governments (Getches 2001), and improved Indian policy from the federal government (Pevar 2002). Over the past thirty years, most of the presidential administrations have reaffirmed the importance of supporting tribal sovereignty (Pevar 2002). New federal Indian programs such as the Indian Development Business Fund and the Indian Child Welfare Act have assisted some tribes in regaining their ability to support social services, education and economic development (Pevar 2002). The Clinton Administration was particularly attentive to tribal self-determination (Pevar 2002; Wilkins 2002). President Clinton outlined a plan to address the guarantee of rights, economic development and health care for Native Americans (Wilkins 2002). He also issued an executive order requiring all federal agencies to conduct their business with tribes on a government to government basis (Pevar 2002). In general, national and

presidential emphasis on tribal sovereignty and trust relationships have contributed to a more supportive environment for tribal environmental management.

Collaboration, Science, and Implications for Tribes

Collaborative watershed management is often used interchangeably with the term ecosystem management. Yaffee et. al. notes Edward Grumbine's 1994 definition of ecosystem management. "Ecosystem Management integrates scientific knowledge of ecological relationships within a complex sociopolitical and value framework toward the general goal of protecting native ecosystem integrity over the long term" (1996 p. 3). Following Grumbine's definition it may be most useful to think of collaborative watershed management as one tool of ecosystem management. As a means for implementing ecosystem management, collaborative groups must incorporate "good science" based on the best available data. In Born and Genskow's evaluation of watershed groups, a strong science base was integral to success. They write, "Biophysical and socioeconomic monitoring programs provide the basis for assessing watershed problems and designing interventions, and for feedback and adaptive management" (Born and Genskow 2000). Born and Genskow also point out that science must be accompanied by cultural and economic values in the development of management and implementation plans. Collaborative watershed groups face several challenges concerning the integration and communication of scientific and technical knowledge in management decisions. For example, there is substantial dialogue on the way the public interprets science and the mechanisms experts use to communicate technical knowledge to a largely non-expert public (Fischer 2000). Reciprocal communication of social, cultural, and moral values from the nonscientific public is also

important. Fischer observes that the tendency of scientific experts is often to downplay the role of citizen input, yet new ecosystem management and collaborative strategies require equal consideration of cultural and scientific analyses (Fischer 2000).

Public awareness of water resource issues vary between watersheds and may be dependent on past public planning processes and historic and ongoing outreach efforts, as well as the constituency of the watershed (i.e percentage of citizens with college degrees or percentage with jobs in the natural resource sector). Tribal representatives in the collaborative process represent an entirely distinct range of perspectives from public stakeholders. Reliance on traditional ecological knowledge for resource management or the use of western scientific expertise cannot be generalized amongst tribes in the western United States. Some tribes have substantial natural resource staff that approaches the level of a state agency, while other tribes may lack natural resource staffs entirely and may depend on tribal council members or others to participate in cooperative efforts. Staff from tribes with relatively well-supported natural resource programs may be sufficiently prepared to participate in the watershed dialogue and even used as a source of technical expertise. To the contrary, non-scientist tribal representatives may interpret and weigh scientific information presented at watershed meetings completely differently. For some tribes, science may not be the most important factor in natural resource decision-making, while for many western communities science may be viewed as the driving force for management. Reiterating the importance of avoiding generalizations and stereotypes, the size of tribal natural resource staff is not necessarily proportional to an individual tribe's dependence on western or indigenous scientific paradigms for management. Balancing cultural and scientific information and values is one of the more problematic

aspects of tribal decision-making and of watershed collaboration. “The challenge ahead is not just more science but rather how to understand the interactions between science and ideology- facts and values- and most importantly how to integrate them systematically in a more comprehensive analysis” (Fischer 2000).

Understanding some of the formative federal and state level statutes relevant to tribes and collaborative management is essential for examining the particulars of the cases in this study. I now turn to a discussion of salient laws and polices before delving into specific background on each of the three cases.

State and Federal Water Resource Management Statutes Relevant to Tribes and Collaboration

Federal Level Water Management

The most significant legislation regarding tribal rights to water is known as the Winter’s Doctrine. In a legal tangle involving the Tribe of the Fort Belknap Indian Reservation, the Montana State legislature and Anglo farmer’s bordering the reservation, Supreme Court Judge Henry Winter delivered a decision in 1908 on Indian water rights that remains the law of the land today (McCool 2002). Upholding the position of the tribes, Judge Winters confirmed that the creation of reservations by the federal government implied the right to water for the municipal, agricultural or other uses on reservation lands (McCool 2002; Colby, Thorson, and Britton 2005). The implications of the *Winters* decision are federal reserve water rights and because they date back to the original treaties between tribes and the federal government they hold senior status to most Anglo water rights. A further distinction of reserved rights is that they are legally

contrary to the dominant water law, of prior appropriation in the Western United States (McCool 2002).

The law of prior appropriation can be summed as 'first in time first in use' however, Winter's rights are legally senior to even the most senior Anglo water rights. In addition, Winter's rights do not depend on 'beneficial use' to be claimed (Colby et. al. 2005), meaning the old axiom 'use or lose it' does not apply to Native American's federal reserve rights. While Native American rights are superior to all other types of water rights, many tribes do not actually have access to 'wet water', instead their Winter's rights remain unquantified and inaccessible. As a result, tribes across the West remain in battles to claim their reserved rights and the ardent Anglo opposition to Indian water rights that began at Fort Belknap continues to this day.

Water quality is regulated federally under the Clean Water Act. Of particular importance is the national watershed clean-up program under section 303(d) of the Clean Water Act. Section 303(d) is explicitly dedicated to the management of nonpoint source pollution in watersheds across the country and although strategies vary state by state, management plans are developed cooperatively between local stakeholders, state agencies and the EPA. This cooperative process results in the development of a TMDL, or Total Maximum Daily Load for each nonpoint source pollutant in the watershed. TMDL's specify the quantity of a pollutant, for example sediment, that may enter a water body without impairment, each pollutant is also addressed in an implementation plan, better understood as a water quality clean-up plan. The TMDL program is concerned primarily with surface water pollution and is not required to address groundwater resources which are regulated almost solely by the states.

State Level Water Management

Active participation in the management of fishery and water resources by tribes in Washington and Oregon is secured by several state and national statutes, starting with the treaties signed by the individual tribes in the 1850s. Both the Jamestown S'Klallam Tribe and the Confederated Tribes of the Umatilla singed treaties in 1855. Half a century later, the Winters Decision, confirmed the senior status of tribal water rights over junior non-Indian rights. However, the most significant legal hammers that the treaty tribes of the Pacific Northwest have are, *United States vs. Oregon*, 1969 and *United States vs* Washington, 1974 (the Boldt decision). Both were a result of federal lawsuits on behalf of the tribes against the states. The rulings elucidated the intentions of the 1855 treaties by mandating comanagement of the fishery between the states and tribes. Furthermore, the Boldt Decision which has proven precedence setting world wide, guaranteed the treaty tribes of Washington's Puget Sound area with fishing rights to half of the total harvest. Political clout of the Washington tribes was further strengthened with the passage of Washington State law 384 F Supp 312 that clarified that the right to harvest half of all fisheries implied sufficient protection of fish habitat.

Cooperative planning received the endorsement of Washington State legislators in November of 1990, when the Chelan agreement was signed (EPA website). The Chelan agreement was the product of a series of negotiations and a retreat at Lake Chelan in eastern Washington and signaled the adoption of localized alternative dispute resolution for water management policy in Washington State. Under the Chelan agreement, two pilot watershed planning projects were initiated as a collaborative effort between state agencies, counties, tribes, cities, environmentalists, and other water users. The Methow

River in Northeastern Washington and the Dungeness and Quilcene River's were chosen as demonstration projects. From 1992 until 1994 members of eight caucuses representing the interests in the Dungeness-Quilcene Watersheds worked together to develop the Dungeness-Quilcene Water Resources Management Plan which addresses surface and ground water in eastern Jefferson and Clallam counties. The Jamestown S'Klallam Tribe was the administrative lead in this effort and prepared the plan in cooperation with others.

Following in the footsteps of the Chelan agreement, an additional legal driver for Pacific Northwest tribal involvement in collaborative efforts appeared in 1998, with the passage of the Watershed Management Act (RCW 90.82 also known as House Bill 2514) in the Washington State legislature. Bill 2514 provided direction to Washington's sixty-two Watershed Resource Inventory Areas (WRIA) to "develop a more thorough and cooperative method of determining the current waters situation in each water resource inventory area of the state and to provide local citizens with the maximum input concerning their goals and objectives for water resources management and development." More specifically, Bill 2514 provides a framework for each WRIA to develop a management plan, after which they become eligible for implementation funding up to $300,000 per WRIA. The WRIA planning process is directed by the "initiating governments" which includes counties, cities, and tribes. Tribes that own reservation lands within the WRIA must be invited to join the planning unit as "initiating governments". Tribes with federal fisheries-resource rights, reserved water-rights or federally approved water quality standards in the WRIA are considered "affected tribes" and must be consulted by the "initiating governments" in the WRIA process.

The State of Oregon has taken a slightly different approach to salmon restoration and watershed planning. In 1999, the legislature established the Oregon Watershed Enhancement Board (OWEB), a carry-over from the 1987 Governor's Watershed Enhancement Board. OWEB has cabinet level status and continues to work under the direction of the *Oregon Plan for Salmon and Watersheds* by contributing upwards of $33 million every year towards watershed assessment, habitat restoration, monitoring, outreach and support of a statewide system of watershed councils. The Walla Walla Basin Watershed Council is in part supported by OWEB.

Furthermore, in 1980 Congress passed the Pacific Northwest Electric Power Planning and Conservation Act, creating the Northwest Power Planning and Conservation Council (NWPPCC), which represents the Idaho, Montana, Washington, and Oregon. "The Council is in effect an interstate compact, a form of government organization that shares both state and federal authority" (Lee 1993 p. 33). The Council's responsibility is to "protect, mitigate and enhance fish and wildlife, including related spawning grounds and habitat, on the Columbia River and its tributaries…affected by the development, operation and management of hydroelectric projects while ensuring the Pacific Northwest an adequate, efficient, economical, and reliable power supply (Walla Walla Subbasin Plan 2004). To achieve its mission the Council has initiated a subbasin planning process for the 62 subbasins of the Columbia Basin. The council has completed plans which are developed by collaborative process and used to designate future funding from the Northwest's primary power utility, the Bonneville Power Administration.

Water management in Arizona is dominated by problems of over allocation and contentious groundwater policy, which render water quality concerns secondary to

quantity and distribution. The most significant piece of legislation was the passage of the 1980 Groundwater Management Act, which was highly influenced by powerful agricultural, mining, and municipal interests (Smith 1985). The crux of the Groundwater Management Act was to designate four active management areas (AMAs). Of concern to this research is the Prescott area AMA whose interests have generally been viewed as contrary to those of the users in the Verde Valley Watershed. Tribal water politics in Arizona are dominated by a desire to settle federal reserve water rights. The State of Arizona leads the nation in having the highest number of negotiated water settlements (8) with federally recognized tribes (McCool 2002).

The right to instream flow remains one of the only state level policy tools for protecting water for ecological purposes in Arizona. The idea of instream water rights was first tested in a successful lawsuit by the Nature Conservancy in 1979. Since that time, instream flow rights have been established in several watersheds throughout the state, including the Verde River which holds the largest amount. Unlike Oregon and Washington, Arizona has not taken action to set up, a state-wide watershed-based management program for ground and surface water resources. The collaborative management forums in the Verde Valley are a local exception and are discussed in the preceding section on the Verde watershed.

Case Study Background

Dungeness Watershed

Dungeness Watershed Overview

When rain clouds form off the coast of Washington State, they move east towards the Olympic Peninsula. After colliding with the Olympic Mountains, the bulk of this

water is dropped as rain. The rainfall gradient decreases steadily moving west to east, with the western coastal rainforest receiving up to 140 inches of rain a year and the rain shadow city of Sequim collecting a scant 16 inches (Jamestown S'Klallam 2003). The Dungeness River has its origins near the heart of the Olympic Range, where small streams are born from glacial runoff, snowmelt, and rainfall. Gravity guides Gray Wolf Creek, Cameron Creek, Royal Creek, and Heather Creek to the northeast and they come together to form the Dungeness River. The Gray Wolf River, the largest tributary of the Dungeness River, enters at approximately river mile 16. Canyon Creek is another significant tributary. The upper Dungeness watershed flows through the Olympic National Park and Olympic National Forest land (some of which is administered as USFS Buckhorn Wilderness) and is thus relatively unimpacted by human activity. Land use changes dramatically around river mile twenty-two as the river crosses through privately owned foothills comprised mainly of irrigated agriculture and rural residential development.

In the middle watershed, the bulk of the precipitation falls as rain, forming small tributaries that flow through developed and forested land. In the lower watershed, the river makes its way towards Dungeness Bay just west of the city of Sequim. Land use includes commercial and residential, forested, rural residential, and agriculture. Despite its relatively short length of 32 mainstem river miles (Jamestown S'Klallam Tribe 2003), the Dungeness is characterized by significant elevation, climatic, and ecological variation and supports a diversity of land uses. Agriculture, forestry, and development and have combined with ocean conditions to negatively affect salmon in the Dungeness, resulting

in the designation of three runs as “threatened” under the Federal Endangered Species Act (Jamestown S’Klallam Tribe 2003).

Jamestown S’Klallam People

Archeological evidence estimates that people have inhabited the Olympic Peninsula for at least 12,000 years- not long after the glaciers receded (Warren 1982; Jamestown S’Klallam Tribe 2003). Compared to other regions of the North America, native peoples of the peninsula subsisted on a relative bounty of marine, riverine and upland resources, most notable of which were four species of salmon runs, Chinook, Chum, Coho and Pink (Stauss 2002). Nisqually elder Willy Frank declared that, “when the tide goes out the table is set” (Wilkinson 2000 p. 22). Several groups of Native Americans filled distinct niches across the Peninsula. Today’s Jamestown S’Klallam people are descendants of a larger Klallam group including the Elwha Klallam, and the Port Gamble S’Klallam (Wray et. al. 2002). Early S’Klallam villages on the north Olympic Peninsula near the mouth of the Dungeness River and the Straits of Juan de Fuca have been documented to 8,000-6,000 years ago. Just prior to the arrival of white settlers 400-1200 people were estimated to being living off Dungeness Salmon and other local resources. Only 150 years later, it is fitting that the Jamestown S’Klallam people have made a commitment to restoring their salmon runs, appropriately referring to themselves as the “people of the river” (Jamestown S’Klallam Tribe 2003).

Arrival of Outsiders

The exact arrival of explorers on the Pacific Coast is estimated to be around the 1500s (Wray et. al. 2002). However, it wasn’t until the 1700s that the French, Russian, Spanish, British and Americans began to explore the Olympic Peninsula more

thoroughly, each claiming ownership over parts of the region. By 1846, the United States and Britain were the sole remaining colonialists on the Peninsula and in that year they signed an agreement to deed land north of the 49th parallel to British and South to the Americans. This line is now the international border between Canada and the United States. Pre-statehood, the territory of Washington was governed by Governor Isaac Stevens 1853-1857, who was given the tremendous task of negotiating land ownership with the Indians of Washington territory. The first of the Olympic Peninsula treaties was the Point-Non-Point signed on January 26, 1855 between the tribes of the Juan de Fuca and Hood Canal areas. The treaty was signed by the various bands of the S'Klallam, Twana, Skokomish, and Chemakum[1] and specifically relinquished "to the United States all their right, title, and interest in and to the lands and country occupied by them…" (Strauss 2002). Article two of the treaty arranged for the reservation of land near mouth of the Hood Canal for members of all four tribal bands. The "right of taking fish at usual and accustomed grounds and stations…together with the privilege of hunting and gathering roots and berries on open and unclaimed lands" is further guaranteed to the Point-No-Point tribes in article four of the treaty. In the years following the signing of Point-No-Point the S'Klallam continued living in the Dungeness and relying on marine resources for their livelihood (Stauss 2002).

In the mid 1800s, conflict arose between white settlers and the inhabitants of three S'Klallam villages near the mouth of the Dungeness River (Wray 2002). Tension over land escalated and upon the threat of forced internment in 1874 at the Skokomish reservation on the Hood Canal, a group of fifteen Dungeness S'Klallam families pooled their gold coin and purchased 210 acres near the mouth of the river in 1874 (Wary 2002;

[1] Tribal names are referred to in their English versions using the spelling preferred by each tribe/nation.

Stauss 2002; Jamestown S'Klallam Tribe 2003). The 210 acres were named Jamestown after James Balch (Stauss 2002; Wray 2002; Jamestown S'Klallam Tribe 2003). The families of Jamestown, with assistance from the United States government, began to develop the land. Dungeness S'Klallam people joined the local police force and built the first schoolhouse, which doubled as a church and served the non-Indian population as well (Wray 2002). Despite increased assimilation, the S'Klallam continued to rely in part on their traditional economy of salmon and shellfish from the Dungeness (Strauss 2002 and Seiter et. al. 2000). "Over the next the seven decades, however, the S'Klallam were increasingly recognized for their adoption of non-native ways, good relations with neighbors (despite attempts to force them onto the Skokomish Reservation) and overall economic well-being" (Stauss 2002). The tendency of the Jamestown S'Klallam to adapt and absolve continuous persecution by settlers and the United States government is a remarkable character trait and may be playing a role in the cooperative success of the tribe in recent years.

Current Scope of Watershed Management in the Dungeness & Accomplishments

As noted by Born and Genskow (2000) in a case study of the Dungeness River, management in the watershed is a nonlinear combination of partnerships. Today management is centered around a collaborative entity, the Dungeness River Management Team, however the current effort is a product of nearly two decades of cooperative labors. As discussed in the previous section, the 1991 Chelan agreement designated the Dungeness one of two watersheds in Washington as a demonstration project in collaborative water resource planning (Nelson 1994). This effort produced the Dungeness-Quilcene Watershed Management Plan. Another milestone was the signing of

a formal Memorandum of Understanding (MOU) in 1998 between the Dungeness Irrigators Association and the Washington State Department of Ecology. The agreement between the State and the irrigators effectively guaranteed the instream use of at least fifty percent of the river at any time despite existing legal water rights that allocated more water for the irrigators. "The agreement reduced uncertainty regarding tribal claims to instream flows and as a result of the agreement, irrigators receive assistance for efficiency improvements on their aging irrigation system, partly in the form of federal salmon habitat improvement grants through the tribe" (Born and Genskow 2000 p. 18). The Jamestown S'Klallam Tribe was instrumental in negotiating this agreement. In addition the Tribe has taken the lead on numerous habitat improvement projects in the lower watershed including streambank stabilization and floodplain restoration on the mainstem and its tributaries, intensive monitoring efforts, and a massive public education and outreach campaign that has facilitated the construction of a River Center and resulting in several publications on the watershed (Born and Genskow 2000; Jamestown S'Klallam Tribe 2003).

Walla Walla Watershed

Walla Walla Watershed Overview

The Walla Walla Watershed encompasses five counties in Southeast Washington State and Northeast Oregon. Precipitation falling on the north side of the Blue Mountains makes its way north and west to form the north and south forks of the Walla Walla River. The north and the south forks come together east of the town of Milton-Freewater. Precipitation primarily falls between October and March with the Blue Mountains collecting 40 inches annually and the lowlands receiving only 10 inches (Walla Walla

Subbasin Plan 2004). The Touchet River, the Walla Walla's most significant tributary, enters from the northwest in the lower Walla Walla River which empties into the Columbia River at Wallula gap. Like the Dungeness, the upper Walla Walla watershed includes considerable public land managed by the United States Department of Agriculture, except on the North Fork. However, the majority of the middle and lower sections of the river are privately owned. Land uses include rural residential, agriculture, and grazing. The urban areas include Milton-Freewater Oregon and Walla Walla, nearly 75% of which is built in the floodplain of Walla Walla River tributary Mill Creek. Prior to 2001, the mainstem of the Walla Walla was sucked dry for irrigation from approximately June through October. Insufficient instream flows, non-point and point source pollution contributed to the dubious distinction of being one of America's Most Endangered Rivers in 1998, according to the nonprofit group environmental America Rivers. Anadromous species of concern include summer steelhead (*Oncohynchus mykiss*), pacific lamprey (*Lampetra tridentata*) and stray spring Chinook (*Oncohynchus tshawytcha*), nonanadromous species include bull trout (*Salvelinus confluentus*), and redband trout (*Oncorhynchus mykiss*) (Walla Walla Subbasin Plan 2004).

Umatilla, Walla Walla, and Cayuse People

> In the beginning of time for Umatilla, the Walla Walla, and the Cayuse people;
>
> " 'water was created first, life and land were created next, land promised to take care of all life, all life promised to take care of the land'. A long time ago, the Indian people also promised to protect the land and have the responsibility to care for her. Water represents an integral link in a world view where water is sacred and extremely important in preserving precious balance. Water is the origin of, and essential for, the survival of all life" (CTUIR Website 2004).

For over 10,000 years the Umatilla, the Walla Walla, and the Cayuse have inhabited the southeast portion of Washington State and the northeast corner of Oregon.

With close attention to the seasons, the three groups of people relied on salmon from the rivers of the region including the Grande Rhonde, the Umatilla, the Walla Walla and the Columbia. They collected berries, roots and other plant materials and elk were hunted in the upland areas of these three basins. The significance of water to these three groups cannot be overstated. The rivers were used for transportation and, as illustrated from the quotation, water holds a special meaning in the religious and ceremonial practices of each group. Prior to the arrival of the Lewis and Clark expedition of 1804 there were an estimated 8000 Umatilla, Cayuse, and Walla Wallas living in their ancestral homeland.

Arrival of Outsiders

The 1830's brought the arrival of American missionaries. Marcus Whitman was responsible for building a mission near the present city of Walla Walla (CTUIR website 2004). In 1847 tensions peaked and a group of Cayuse killed Marcus and his wife Narcisiss. The "Whitman Massacre" was the commencement of the so-called Cayuse War from 1847 to 1850, which was primarily a series of small battles between defensive Cayuse and the Oregon Territorial Militia (CTUIR website). Motivations for the Whitman murders are debated and several books have been published on the event. However, the Indian perspective adheres to the story that the killings were a result of the diseases brought by the white missionaries (which nearly halved the Indian population), increased encroachment and trespass on Indian land, infringement on Indian trade routes, and a general dislike of Marcus Whitman as the bringer of disease (CTUIR website). The wars ended gravely with the hanging of five unconvicted Cayuse men in 1850.

On June 9th of 1855, the Umatilla, the Walla Walla, and the Cayuse, three previously unaffiliated groups, reluctantly signed a treaty with the United States under

the observation of Governor Isaac Stevens (CTUIR website). The three groups formed the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). The treaty reduced tribal sovereignty from 6.4 million acres to a 500,000 acre reservation. Their land base was further reduced in the late 1800s; today's CTUIR land consists of 172,000 acres. Within article one of the treaty were the following provisions, "the exclusive right of taking fish in the streams running through and bordering said reservation …and at all other usual and accustomed stations in common with citizens of the United States, …the privilege of hunting, gathering roots and berries and pasturing their stock on unclaimed lands" (Treaty with the Umatilla, Cayuse, and Walla Walla 1855). The CTUIR are still involved in efforts to realize their original treaty rights. The CTUIR constitution was signed in 1949. In the 1970s and 1980s the tribes began to make progress on their goals of self determination, establishing success housing programs, health care system, education improvements, and a full service Department of Natural Resources. The tribe currently employees 1,100 employees- 86 of which are in the Department of Natural Resources (CTUIR website 2004). The WallaWalla is one of three watersheds that fall within the ancestral homeland of the tribes. The CTUIR have received national attention for their accomplishment of restoring salmon to the Umatilla Basin.

Current Scope of Watershed Management & Accomplishments in the Walla Walla

The Walla Walla Basin Watershed Council is the primary forum for collaboration between stakeholders. However, the Walla Walla Watershed Alliance is an additional grassroots effort that fills the niche of connecting bi-state representatives and disseminating the concerns of stakeholders at the regional and national levels. Several individuals are involved in both the Alliance and the Watershed Council. The mission of

the Walla Walla Basin Watershed Council is "to protect the resources of the Walla Walla Watershed, deal with issues in advance of resource degradation, and enhance the overall health of the watershed, while also protecting, as far as possible, the welfare, customs, and cultures of all citizens residing in the basin" (WWBWC Website). The Watershed Council is directed by a thirteen person Board of Directors including representatives of the CTUIR, wildlife, range, dryland agriculture (extension agent), up-river, range up-river, irrigated agriculture, industry, fisheries, ecology, city, and a member at large and the council chair. Implementation of council objectives has occurred through parallel and cooperative efforts. The CTUIR have engaged fish passage and fish screening projects in Oregon and Washington, worked on habitat restoration; they also lead an intensive monitoring program. The WWBWC has cooperated with the CTUIR on many of these projects as well as initiated their own monitoring and outreach (WWBWC document 1).

Verde River Watershed

Verde River Watershed Overview

Headwater tributaries of the Verde River drain from the Coconino Plateau and Mogollon Rim to the Northeast and the Santa Maria and Juniper Mountains to the west. The mainstem Verde begins at Sullivan Lake near Paulden, Arizona with perennial flow beginning just south at Del Rio Springs. The river continues flowing southeast for approximately 150 miles through the Verde Valley and the towns of Perkinsville, Clarkdale, Cottonwood, and Camp Verde. Prior to the construction of Horseshoe dam in 1945 by Phelps-Dodge Corporation and Bartlett Dam in 1939, the Verde emptied into the Salt River; today it flows into Horseshoe Reservoir (Whittlesey et. al. 1997), below which it becomes an intermittent trickle. The reservoir is an essential component of the

Salt River Water Utility for the city of Phoenix. Upstream of Horseshoe Reservoir, 40.5 miles of the mainstem Verde is designated as Wild and Scenic River. Land ownership throughout the watershed is primarily national forest, with some tribal, and private (Reike and Kenney 1997). Descending 3,000 feet to its mouth, the Verde River Watershed supports a diversity of habitat types ranging from forested uplands to dry desert valleys. "The River Valley itself is typical Sonoran Desert with its characteristically hot and dry climate, unpredictable rainy seasons, and damaging thunderstorms, hailstorms and periodic floods" (Whittlesey et. al. 1997). Land uses include forestry, grazing, irrigated agriculture, and rural residential. However, land conversion is increasing and in 1999 Yavapai County was the fastest-growing rural county in the United States (Woods 1999). Altered hydrology, overgrazing, and floodplain development have all significantly changed the Verde and its tributaries (the Nature Conservancy, 2004).

Yavapai-Apache People

Though they are two distinct tribes, the Yavapai and Apache people share a similar origin story. The ancestors of the Yavapai and Apache first emerged from Ahagaskiaywa, a "limestone sink formed long ago by the collapse of an immense underground cavern" (NPS Website) in the Verde Valley, also known as Montezuma's Well (Ruland-Thorne 1993). Both groups of people lived in the Verde Valley for thousands of years, relying on agricultural activity and seasonal gathering for subsistence (Ruland-Thorne, 1993; Whittlesey et. al. 1997). "In general, spring and summer months were spent at lower elevations to gather desert crops such as saguaro and mesquite, and higher elevation areas were occupied during fall and winter to gather acorns, juniper berries, pinon nuts, and mescal and to hunt" (Whittlesey et. al. 1997 p. 147).

Archeological evidence indicates that groups of Yavapai relied more heavily on gathering for food while Apache people may have been more persistent about farming, particularly irrigated agriculture (Whittlesey et. al. 1997). The Upper Verde Valley was home to the Yavapai; their language is derived from the Yuman family (Randall 2000). In addition to frequent contact with the Apache people, the Yavapai ranged to the north, south, and west where they interacted with the Hualapai and other Colorado River tribes. The Apache speak a language belonging to the Athabaskan family, which is closely related to Navajo; their range was generally south of the Yavapai but they also ventured to the east and south of the Verde Valley.

There are 1,550 enrolled Yavapai and Apache with an estimated 743 living on the Rio Verde reservation. Over the last few decades the Nation has actively sought out new economic enterprises and now operates a convenience market, service station, recreational vehicle park, and a casino (Yavapai-Apache Nation Website).

Arrival of Outsiders

From 1583-1604, four gold-chasing Spanish expedition teams arrived in the Verde from Mexico. Two centuries later beaver trappers arrived in the Verde Valley in 1828. By 1864 the United States Army had begun constructing forts throughout Yavapai and Apache lands with the goal to exterminate the Indians of the area. In addition to the deliberate shooting of hundreds of Yavapai and Apache on multiple occasions, the U.S military spread disease and purposefully served poisoned food to the people (Ruland-Thorne, 1993). Following several years of fighting, the Apache, and later some Yavapai, were confined to the 800 square mile Rio Verde Reservation along the upper Verde River. However, in 1875 approximately 1500 Yavapai and Apache were forcibly

marched southeast to the San Carlos reservation where they were held in a "concentration camp" (Coder et. al. 2004). Twenty-four years later many of the Yavapai and Apache left the San Carlos reservation and returned to the Verde Valley.

Current Scope of Watershed Management & Accomplishments in the Verde Watershed

Burgeoning population growth in the Verde Valley and in the southern Phoenix metropolis has increased pressure on Verde groundwater and even escalated to the point of water wars in Yavapai County. In 1998 the controversy peaked between the greater Prescott community and the communities of the Verde Valley on the east side of Yavapai County. The primary source of tension stemmed from current and proposed increases in groundwater pumping from the Big Chino aquifer, which has the potential to severely diminish surface flows of the Verde River. After a year of bullying and accusations, the City of Prescott agreed to some limitations on groundwater pumping and in January of 1999 the County Board of Supervisors established the Yavapai County Water Advisory Committee, a collaborative group with a mission to resolve water conflicts in the county.

In addition to the county-sponsored Yavapai County Water Advisory Group, there are several other citizen-initiated efforts with varying objectives including the Verde Watershed Alliance, the Open Space Alliance of Central Yavapai County, Keep Sedona Beautiful, Citizens Water Advocacy Group, Verde River Citizens Alliance, the Upper Agua Fria Watershed Partnership, and the Central Arizona Land Trust**.** Participants include, federal, state and local agencies, universities, private landowners, city governments, non-government organizations and individuals. However, there is a noticeable lack of participation in these groups from the Yavapai-Apache Nation.

Concluding Thoughts

This review of the literature related to Native American tribes and watershed collaboration elucidates the presence of a critical gap in the research. Several leading scholars in these fields have remarked on the importance of addressing tribal involvement in collaborative watershed management. Daniel Kemmis author of *Community and the Politics of Place* and *This Sovereign Land A New Vision For Governing the West* remarked that, "tribes tend to be major players with regard to water and it is important too know their relationship to water collaboratives" (Daniel Kemmis personal communication: Feb. 4, 2004). Furthermore, Kemmis emphasized studying cases with and without tribal participation. Philip Brick Ph.D, co-editor of *Across the Great Divide: Explorations in Collaborative Conservation and the American West* added, "Study failures too. We don't hear enough about these, and there is much to be learned from them!" (Philip Brick Personal Communication: Jan. 27, 2004). Steven Yaffee Ph.D, co-author of *Making Collaboration Work,* also echoes the call for more attention to the role of tribes and collaboration (Steven Yaffee Ph.D email communication: July 15, 2004).

At the ground level, some practitioners have expressed frustration in forming effective partnerships with tribes (John Cardwell Idaho Department of Environmental Quality personal communication: Feb. 23, 2004). Cardwell adds, "academic papers don't usually get to the crux of the problem, the level of detail is not generally applicable to managers at the ground level." In addition, the scoping phase of this research garnered letters of support from the three collaborative entities of this study: the Dungeness River Management Team, The Yavapai County Board of Supervisors, and the Walla Walla Basin Watershed Council. The chair of the Yavapai County Board of Supervisors, Chip Davis wrote in a letter of support, "we realize the importance of including these key

stakeholders (tribes) in the planning process and want to do what we can to include them. Any research you can provide to explain this lack of involvement will certainly help us draw increased participation from the Native American population and will receive my support" (Chip Davis personal communication: April 8, 2004).

There is a commanding appeal for more research on tribes and watershed collaboration and for analyses that compare successful and less successful cases. More significantly, this research also works toward the development of useful and feasible recommendations for working together.

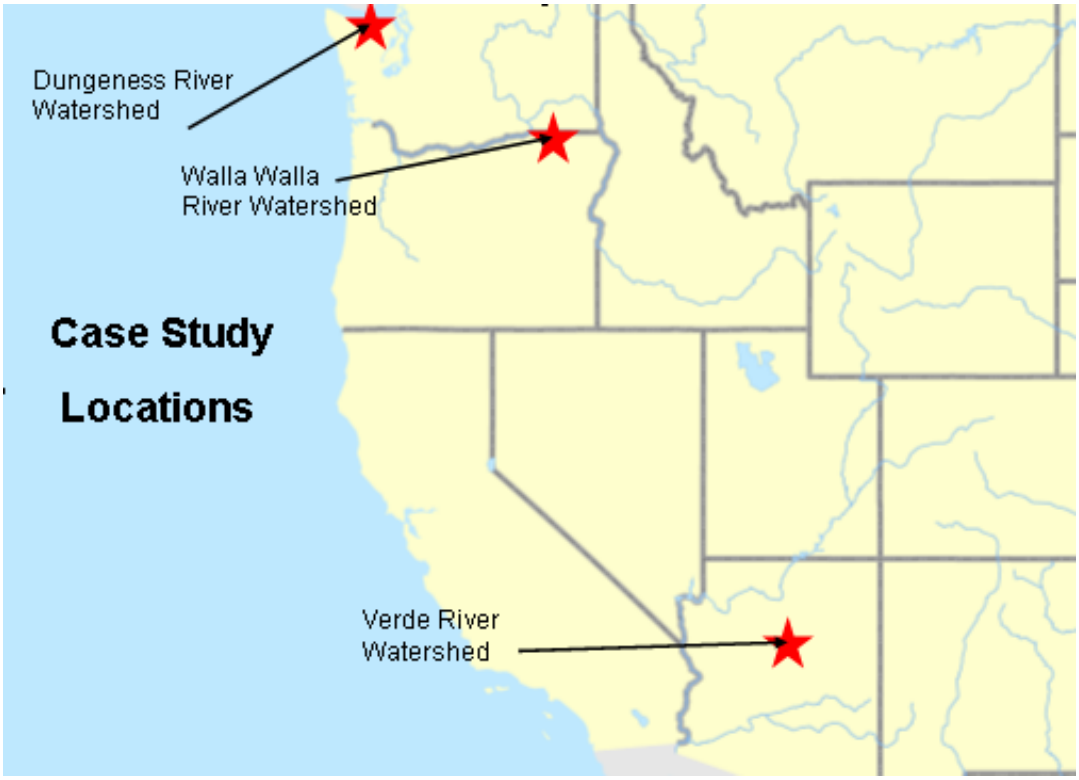

Figure 1 Regional Case Study Map

Figure 2 Dungeness River Watershed Map

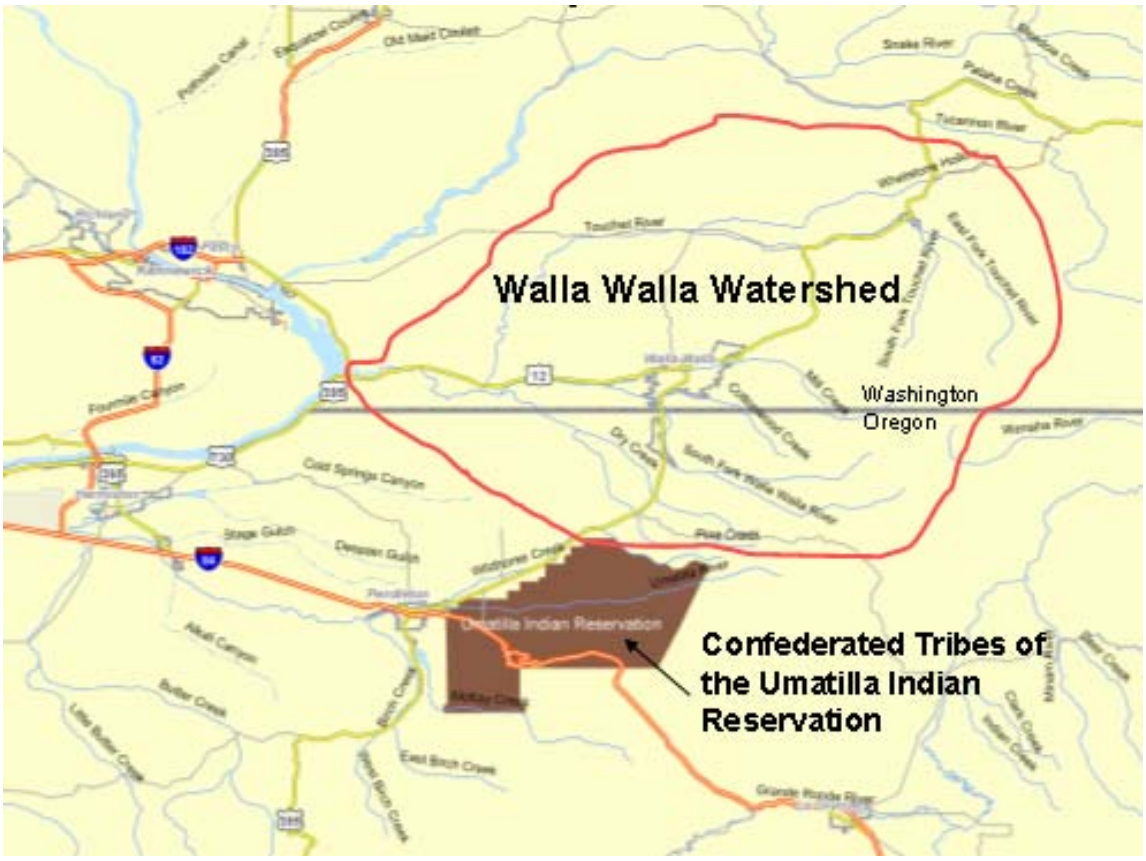

Figure 3 Walla Walla River Watershed Map

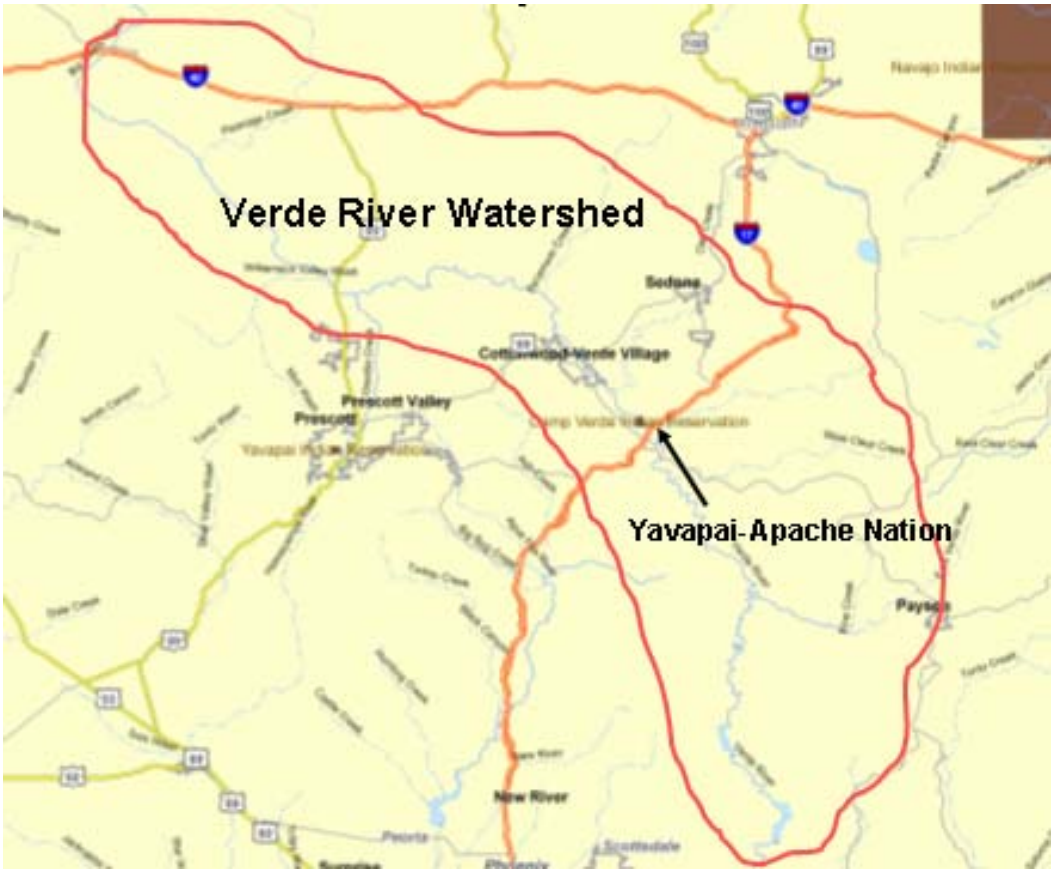

Figure 4 Verde River Watershed Map

CHAPTER III. TRIBAL WATERSHED MANAGEMENT: CULTURE, SCIENCE, CAPACITY AND COLLABORATION

Manuscript Submitted and Accepted by American Indian Quarterly

Introduction

During the colonization of North America and the subsequent expansion of the United States, indigenous peoples were dispossessed of the resources that formed the core of their economic and spiritual sustenance. Today in the United States there is a tremendous diversity of indigenous resource and land management. Some tribes are well on their way to regaining power over the resources that define their culture and economies, most notably with the adoption of tribal-state comanagement. Effective exercise of reserved rights, as established in the treaties of the 1850s, has contributed to goals of regaining sovereignty for tribes in the Pacific Northwest and Great Lakes region.[2] At the same time, many tribes have yet to recover even a sliver of jurisdiction over their traditional lands and resources. We believe there are a host of factors that contribute to the relative success of some tribes in the field of natural resource management including but not limited to: the existence of reserved treaty rights, past and historic relationships with the non-Indian community, current economic status of the tribe, and cultural dependence on specific resources.

This research focuses on two elements of contemporary American Indian natural resource management. First, we explore the capacity of tribes to manage natural resources including the merging of traditional ecological knowledge with Western

[2] Winona LaDuke, All Our Relations. In Debating the Earth: The Environmental Reader, ed. John S. Dryzek and David Schlosberg. (Oxford: Oxford University Press, 2005). 495.

science. Second, we analyze tribal management in the context of local and regional collaborative watershed groups. Collaborative watershed management groups are defined as the voluntary association of stakeholders, which may include local community leaders; state and federal agency employees; elected officials; tribal environmental, and industry representatives; and community members. Stakeholders are unified geographically by a watershed or political boundary and work together to solve natural resource management issues within their watershed.

Of particular interest to this discussion is the variation in the capacity of individual tribes to actively participate in resource management. We compare three cases, two cases from the Pacific Northwest and one case from the Southwest, to explore the challenges tribes face to regain partial or complete control of traditional lands and resources. We find broad differences in tribal capacities and conclude that developing tribal resources for management is a prerequisite for successful collaborative watershed management. However, there has been little attempt to examine the role of tribes in collaborative watershed groups.

Research Design

We draw on field research and case study analysis to examine contemporary tribal environmental management in a real life context.[3] Three cases are compared: the Jamestown S'Klallam Tribe in the Dungeness Watershed in Washington State, the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) in eastern Washington and Oregon, and the Yavapai-Apache Nation in Central Arizona. While we recognize the

[3] Robert K. Yin, Case Study Research: Design and Methods. (Thousand Oaks, CA: Sage Publications, 2003). 1-160.

differences in political and environmental conditions between the Pacific Northwest and the Southwest, the cases were selected based on a public concern or controversy over water quantity and quality, and the existence of at least one collaborative watershed organization. The collaborative watershed groups in all three geographic areas tackle common issues such as endangered species, rural and suburban growth, floodplain development, irrigated agriculture, grazing, and forestry. Water quantity, the primary issue in the Southwest, is also a vital part of discussion in both Northwest examples. This case study draws on a variety of information sources including direct observation, historical and contemporary documents and open-ended, structured interviews. Research was conducted between March 2004 and March 2005. The emergent and place-based nature of watershed collaboratives makes them well suited to the case study research model.

Tribal Resource Management

Although their land base is currently a fraction of historic territories, tribes are major stakeholders in many watersheds throughout the country, managing approximately 95 million acres of land.[4] While each tribe is distinct, one commonality is a historical and intrinsic connection to land that permeates their modern way of life.[5] One reflection of that connection is traditional ecological knowledge (TEK), which describes "a collective storehouse of knowledge about the natural world, acquired over hundreds of years

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[4] Sarah Boyle, "Native Partnerships Protect Land. National Wildlife" Journal of the National Wildlife Federation,(40)5 2002:69.

[5] Anne Ross and Kathleen Pickering,"The politics of reintegrating Australian Aboriginal and American Indian indigenous knowledge into resource management: the dynamics of resource appropriation and cultural revival," Human Ecology, (3)2(2002):187-215.

through direct experience and contact with the environment".[6] TEK is slowly gaining Western recognition as a valid and integral component of ecosystem management.[7] Even as some writers caution against direct applicability of management based on TEK,[8] Dennis Martinez of the National Park Service views integration of TEK as vital to a global reconciliation with indigenous peoples. He writes, "All this is occurring at the very time when the earth and its inhabitants are most in need of healing. Native cultures, although badly fragmented by the impacts of industrial societies, still hold onto significant ecological wisdom based on long ecological experience in particular places. To ignore that millennia-long local experience and knowledge is to risk doing poor science".[9]

While TEK is an important component to tribal natural resource management, tribes across the United States often depend heavily on Western science. In Idaho, the Nez Perce Tribe has worked directly with the U.S. Fish and Wildlife Service to

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[6] M. Kat Anderson, Tending the Wild: Native American Knowledge and the Management of California's Natural Resources. (Berkeley, CA: University of California Press, 2005). 6.

[7] Winona LaDuke, "Traditional Ecological Knowledge and Environmental Futures,"Colorado Journal of International Environmental Law and Policy 5(1(1994):147.and Lawrence M. Lesko and Renee G.Thaklai, "Traditional knowledge and tribal partnership on the Kaibab National Forest with an emphasis on the Hopi Interagency Mangement" in Trusteeship in Change: Toward tribal autonomy in resource management. Ed by. Richmond L. Clow and Imre Sutton. (Boulder, Co: University of Colorado Press, 2001.

[8] David M. Graber, "Facing a New Ecosystem Management Paradigm For National Parks." Ecological Restoration, 21(4)(2003):266.

[9] Dennis Martinez, "Protected areas, indigenous peoples, and the Western idea of nature," Ecological Restoration, 21(4)(2003):250

reintroduce wolves into their traditional homeland.[10] The reintroduction occurred in the face of opposition from the Idaho Fish and Game Department who feared predation on livestock. The Nez Perce Tribe has also initiated numerous salmon recovery projects in the Clearwater Basin. Their efforts include obliteration of 60 miles of abandoned logging roads, riparian restoration and construction of a state of the art fish hatchery to assist with restoration of chinook, steelhead and bull trout.[11] In the Southwest, the White Mountain Apache Tribe successfully manages wildlife and recreational resources for the sustainability of the Apache people and their environment.[12]

Fisheries Management in the Pacific Northwest

Often held up as models of how to regain the right to manage natural resources, the tribes of the Pacific Northwest demonstrate comanagement of a shared resource with the state, as well as the development of individual tribal management expertise. During the 1850s, many of the tribes in this region signed treaties with the United States. Each treaty is unique, but the common outcome was tribal relinquishment of ancestral lands and cessation of hostile actions by both parties.[13] A frequent misconception about treaties is the nature of rights sustained by the tribes. The United States government did not grant rights to the tribes; the tribes explicitly reserved their rights when they signed the treaties.

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[10] Ross and Pickering, The politics of reintegrating.

[11] Columbia River Intertribal Fish Commission Website: www.critfc.org Accessed on: November 28, 2004.

[12] Terry L. Anderson, and Donald L. Leal, 2001. PERC Reports: Enviro-Capitalists Today: Trophy Elk, Tribal Gain. From: www.perc.org Accessed on November 17, 2004.

[13] Mary Christina Woods, "Indian Land and the Promise of Native Sovereignty: The Trust Doctrine Revisited", Utah Law Review (1994). 1471,1497.

In particular, tribes that signed treaties with the federal government were careful to reserve rights to harvest specific natural resources such as fish, wildlife and plant resources.

Although treaties are legally binding, specific tenets of many treaties were routinely broken following signature. A tumultuous period in the Northwest during the 1950s-1970s, known as the fish wars, resulted in two landmark court cases.[14] In 1969, United States vs. the state of Oregon addressed tribal treaty rights and mandated the state of Oregon to adopt practices that do not impinge on tribal fishing rights. A stronger legal pronouncement for the tribes of Washington was the 1974 case, United States vs. the state of Washington, commonly referred to as the Boldt Decision. The Boldt Decision articulated the treaty rights of American Indian tribes who were party to the Stevens Treaties of the 1850s and mandated a co-management relationship between the tribes and the state of Washington to manage salmon and steelhead. Specifically, reserved rights under the Boldt decision were interpreted to mean that the tribes are entitled to half of the treaty area salmon and steelhead annual harvest. The Boldt Decision and U.S. vs Oregon have had a multitude of positive effects over the last thirty years. The most important is the increase in American Indian active management of ancestral lands and waters.

The Boldt decision served to articulate Washington's relationship with the treaty tribes, but it also spurred substantial public backlash against the tribes.[15] Although the Boldt decision has remained contentious, there has been a gradual shift of the public to

[14] Charles F. Wilkinson, Messages From Frank's Landing; A story of Salmon, Treaties, and the Indian way. (Seattle: University of Washington Press, 2000).

[15] Bruce G. Miller,"The Press, the Boldt Decision, and Indian-White relations," American Indian Culture and Research Journal (1993)(17)2:77.

recognize that treaty tribes should control their resources both on tribal land and within watersheds that cross jurisdictional boundaries. The successes in the Pacific Northwest region have been attributed to the tribes' ability to demonstrate competence in managing the resource, drawing upon traditional ecological knowledge and Western science in cooperation with local and regional partners[16], as well as their strong ties to a salmon culture. Furthermore, given that natural resources rarely follow political boundaries, collaboration with multiple landowners and management jurisdictions is necessary for achieving management objectives. Both the Pacific Northwest tribes in this study are actively involved in many facets of managing the northwest salmon crisis.

Jamestown S'Kallam Tribe Watershed Management

Compared to other regions of North America, native peoples of Washington State's Olympic Peninsula subsisted on a relative bounty of marine, riverine and upland resources,[17] most notable, four species of salmon runs: Chinook, Chum, Coho and Pink. The traditional homeland of the Jamestown S'Klallam is centered around the Dungeness River on the North end of the Peninsula. Nisqually elder Willy Frank spoke for all the Pacific Northwest Coastal tribes when he declared that, "when the tide goes out our table is set."[18]

The ancestors of the Jamestown S'Klallam were among the tribes that signed the first of the Olympic Peninsula treaties, the Point-No-Point Treaty on January 26, 1855.

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[16] Ross and Pickering, The politics of reintegrating.

[17] Joseph H. Strauss, The Jamestown S'Kallam Story: Rebuilding A Northwest Coast Indian Tribe. (Sequim, WA: Jamestown S'Klallam Tribe publishing, 2002)xxix.

[18] Wilkinson, Messages From Frank's Landing,22.

Despite attempts to relocate the Jamestown S'Klallam to a reservation nearly 200 miles away from their home, the people stayed put and relied on marine resources for their livelihood.[19] It is fitting that, one hundred and fifty years later the Jamestown S'Klallam people, the "people of the river", have made a commitment to restoring threatened and endangered salmon runs.[20]

For a tribe of five hundred and twenty six members, the Jamestown S'Kallam have a remarkably powerful natural resources department.[21] The nineteen member department includes fisheries, shellfish, forest and habitat biologists and has grown considerably over the last fifteen years due in large part to the Tribe's financial situation. The Tribe owns and operates a fireworks stand, a human resources firm, a casino, a commercial shellfish business, an art gallery and an excavation business.[22]

The goals of the natural resource department are twofold: 1) to secure harvest primarily through the negotiation of fish quotas; and 2) habitat protection and restoration. Given the wide geographic range of salmon and the wide variety of threats to the populations, the Jamestown S'Klallam Tribe must work toward goals through multiple local, regional and international partnerships. Today, management of the Dungeness River is centered around a collaborative entity, the Dungeness River Management Team (DRMT), though the current effort is a product of nearly two decades of collaborative

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[19] Stauss, The Jamestown S'Kallam Story, 16.

[20] Jamestown S'Klallam Tribe Restoring the Dungeness 2003,iv.

[21] Jamestown S'Klallam Tribe (JKT) website: www.jamestowntribe.org. Accessed on November 26, 2004.

[22] Ann Seiter personal communication: July 13, 2004

labor including a dozen cooperative management or planning groups. Collaboratively and individually, the tribe has contributed to the completion of the following since 1989:[23]

- 13 Major Planning Documents for the Dungeness River
- 7 Habitat Assessments
- 9 Stock Analysis/Rebuilding or Recovery Documents
- 13 Instream Flow, Water Conservation or Water Quality Studies
- 11 Restoration Projects and Programs
- 14 Public Education Projects

In addition to mandating cooperative management between the Washington State treaty tribes and the state of Washington, the Boldt decision paved the way for intertribal management. The Point-No-Point Council was established in 1974 between the four Point-No-Point treaty tribes. Currently only the Jamestown S'Klallam and Port Gamble S'Klallam are active participants. The treaty council consists of a board of directors from each of the tribes and a staff of a dozen biologists and fisheries managers who work jointly with tribes to achieve goals for habitat and harvest and the fulfillment of treaty rights.[24]

Cooperative planning for the Dungeness commenced in November of 1990 with the endorsement of Washington State legislators in the signing of the Chelan agreement. The Chelan Agreement was the product of a series of negotiations at Lake Chelan in eastern Washington and signaled the adoption of localized alternative dispute resolution

[23] Jamestown S'Klallam Tribe Restoring the Dungeness.

[24] Point-no-Point Treaty Council website: www.pnptc.org
Accessed on September 15, 2004.

for water management policy in Washington State.[25] The Chelan Agreement designated the Dungeness as one of two watersheds in Washington for demonstration projects in collaborative water resource planning[26]. The Jamestown S'Klallam Tribe was the administrative lead in this effort and Tribal staff prepared the plan in cooperation with others. The demand prompted the Tribe to hire more experts in resource management, and produced the Dungeness-Quilcene Watershed Management Plan.

Among the most significant milestones was the signature of a formal Memorandum of Understanding (MOU) in 1998 between the Dungeness Irrigators Association and the Washington State Department of Ecology. The agreement between the State and the irrigators effectively guaranteed the instream retention of at least fifty percent of the river at any time despite existing legal water rights that allocated more water for the irrigators. As a result of the agreement, the Dungeness River was effectively rewatered, allowing salmon to return, settling tribal instream water claims and granting assistance to farmers for irrigation efficiency upgrades.[27] The Jamestown S'Klallam Tribe was essential in negotiating this agreement. Nearly all of the interviewees in this case gave credit to the high caliber of staff employed by the Jamestown S'Klallam Tribe. Ann Seiter, a nontribal member and former director for the Natural Resources Department, stands out as instrumental to the cooperative negotiation.

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[25] Cynthia G Nelson, Elusive Solutions to Water Issues in Washington State. (Evergreen State College Master's Thesis, 1994) 107.

[26] Nelson Elusive Solutions 70

[27] S.M Born and D.G Kenneth, "The Watershed Approach: An Empirical Assessment of Innovation In Environmental Management"(Washington D.C Prepared for National Academy of Public Administration, 2000)18.

One respondent said, “Ann Seiter has a real genius for vision and considering the long-term.” Seiter in turn credited her staff with the success of returning salmon to the Dungeness.

The Boldt decision signaled a new era of enhanced legal standing for the treaty tribes and increased resources for conservation, which the Jamestown S’Klallam have garnered for watershed improvement. Working with partners of the Dungeness River Management Team the Jamestown S’Klallam has initiated intensive research and monitoring and on the ground restoration. Collaborating with the Audubon Society, the Tribe has worked to establish a River Center located on the banks of the Dungeness River that serves as a clearinghouse for river education.

An elaborate stream and estuary restoration project on Jimmy-Come-Lately Creek within the larger Dungeness Basin has received considerable attention. Using state of the art science, restoration of Jimmy-Come-Lately Creek involves removing dikes, returning the creek to one of its original channels, constructing of wetlands, removing of a log dump, installing of large woody debris, replacing a downstream bridge and estuary restoration. While the Tribe took the lead in this cutting-edge restoration project, they credit its success to the cooperation of many partners including private landowners, Clallam County, the county conservation district, Washington State departments of Ecology and Natural Resources, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency and local non-profit organizations.

Clallam County works frequently with the Tribe on a myriad of natural resource issues. Clallam County Commissioner Steve Tharinger echoes the feelings of many of Jamestown S’Klallam’s partners who value the technical and scientific capacity of the

Tribal staff, and who have also been profoundly influenced by Tribal culture. He observes that while Jamestown S'Klallam staff lead technical discussions on water quality and riparian health, Tribal culture and the ceremony of restoring a river also guide decision-making.[28] While specific discussion of culture is rare, there appears to be an underlying understanding between the Tribe, its natural resource staff, and cooperating partners that Tribal actions are implicitly tied to culture and traditional knowledge.

Over the last decade, Jamestown S'Klallam Tribal scientists have conducted numerous studies on water quality and instream flows in the Dungeness River, its tributaries and estuary. Dr. Virginia Clark, a retired biostatistics professor and DRMT member noted that a good example of tribal scientific leadership was Tribal Natural Resource Planner Lyn Muench's participation in the Clean Water workgroup. Pollution levels where the Dungeness River enters the estuary have forced closure of some Tribal oyster beds as well as a community beach. Clark observes that Muench has initiated studies in the Bay for a better understanding of the circulation in the Bay and why pollution levels are high. Muench summarized her reaction when the pollution levels began to rise, she said "we're not going to sit here and wait for you to close this bay, we can see that its coming, we'll do a clean-up prevention plan".[29] Muench's work in Dungenss Bay illustrates the proactive approach of the Jamestown S'Klallam Tribe.

The Jamestown S'Klallam Tribe's success in fisheries management is related to a number of factors. One is their ability to develop a highly competent natural resources staff. Like many tribes, Jamestown S'Klallam relies heavily on Western trained non-

[28] Steve Tharinger Personal Communication July 6, 2004.

[29] Lyn Muench Personal communication July 14, 2004.

tribal members to staff its natural resource department. Also important is that although Tribal staff depend heavily on Western science, they are building respect for the cultural dimension of their work. Byron Rot, habitat program manager says,

> "I am increasingly more aware of cultural issues, and I am much more sensitive to these issues than the average person. In the JCL, we hired archeologists to determine whether our restoration site was within a cultural site. For revegetation, I consulted with the Tribe's Cultural Technician to get suggestions for culturally important trees and shrubs. Because of these experiences, for my next estuary restoration project, I'll make sure that cultural sites are assessed by an archeologist early on in the planning process. I do not want to do restoration work in an old village or burial site."[30]

The use of cultural experts and archeologists is becoming widespread in part due to federal archeological requirements. In particular, this consultation on a watershed restoration project represents a best-case scenario in which the Tribe is directing the archeologists and TEK is guiding the revegetation design. The combination of western science and TEK as illustrated by the Jimmy-Come-Lately Creek project is another key part of the Tribe's success.

Former Director Seiter, respecting the desires of Tribal members, noted that specific issues of cultural use of the resource as well as sacred sites were not something Tribal members cared to make public. Despite the lack of formal mechanisms for integrating indigenous and Western knowledge, the Jamestown S'Klallam Natural Resources Department is clearly directed by a cultural mandate. The mission of the Natural

[30] Byron Rot Personal Communication: February 14, 2005.

Resources Department directs staff to protect the treaty rights to natural resources for the sustenance and livelihoods of present and future generations of tribal members.[31] Ensuring the opportunity for harvest is vital to maintaining Tribal tradition and culture.

While the staff may be non-Indian, they repeatedly cited direction from the Tribal chairman and elders as integral to their work. Considering the unprecedented declines of fish populations, neither indigenous nor Western science has developed established protocols for restoration of threatened resources. The Jamestown S'Klallam members, council and chairman are clearly directing staff to use the best available techniques to restore salmon to their river. In doing so, the innovations that have occurred may emerge as a composite of western and indigenous science. We now turn to our second example, another northwest tribe with a substantial natural resources department that melds traditional and western science and uses collaboration to achieve their goals.

Confederated Tribes of the Umatilla Indian Reservation Watershed Management

> For Umatilla, Walla Walla and Cayuse people in the beginning of time;
>
> " 'water was created first, life and land were created next, land promised to take care of all life, all life promised to take care of the land'. A long time ago the Indian people also promised to protect the land and have the responsibility to care for her. Water represents an integral link in a world view where water is sacred and extremely important in preserving precious balance. Water is the origin of and essential for the survival of all life".[32]

[31] Jamestown S'Klallam Website 2004.

[32] Confederated Tribes of the Umatilla Website: www.umatilla.nsn.us Accessed on: August 13, 2004 and November 28, 2004.

Since time immemorial the Umatilla, Walla Walla and Cayuse have inhabited the southeastern portion of Washington State and the northeastern corner of Oregon. With close attention to the seasons, the three groups of people relied on salmon from the rivers of the region including the Grande Rhonde, Umatilla, Walla Walla and mainstem Columbia. [33] The significance of water to these three groups cannot be overstated. The rivers were used for transportation and food. Water holds a special significance in the religious and ceremonial practices of each group. Prior to the arrival of the Lewis and Clark expedition of 1804, there were an estimated 8000 Umatilla, Cayuse and Walla Wallas living in their ancestral homeland.

On June 9th 1855, the Umatilla, Walla Walla and Cayuse, although previously unaffiliated, reluctantly signed a treaty with the United States under the observation of Governor Isaac Stevens.[34] The treaty reduced tribal sovereignty from 6.4 million acres to a 500,000 acre reservation. Their land base was further reduced in the late 1800s so that today's CTUIR land consists of 172,000 acres. Within the treaty was the provision to harvest fish on tribal land and at usual and accustomed places off reservation grounds.[35] Like the Jamestown S'Klallam, the CTUIR are still involved in efforts to realize their original treaty rights.

Over the last thirty years, the CTUIR have worked hard to reestablish a sustainable economy. Revenues from the Tribal casino and resort, cultural institute, truck stop, grocery store and Tribally managed recreation areas partially support the CTUIR

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[33] Tamástslikts Cultural Center Tour July 20, 2004. Pendleton, Oregon.

[34] Confederated Tribes of the Umatilla Website.

[35] Treaty with the Umatilla, Cayuse and Walla Walla 1855

Natural Resources Department.[36] The Tribe currently employs 1,100 employees, 86 of whom are in the Natural Resources Department.[37] The fisheries program alone has 50 people and is supported by a $50 million annual budget.[38] The growth of the Natural Resource Department over the past fifteen years is a result of several factors including increased political clout following U.S vs Oregon.

External support for salmon recovery and habitat improvement has also increased over the last decade.[39] The Bonneville Power Administration is the federal operator of the lower Columbia River dams and a substantial source of funding for the CTUIR and other tribes in the Columbia Basin. While the CTUIR's ancestral territory stretches across three large basins, this research focuses on their work in the Walla Walla Basin.[40] Like the Jamestown S'Klallam Tribe, the CTUIR have recognized that restoration of their fishery is dependent on the formation of strong local, regional and national partnerships.

The Walla Walla Basin Watershed Council (WWBWC) is the primary forum for collaboration between stakeholders in the Basin. The mission of the Council is to protect and enhance biological and cultural resources of the watershed.[41] The Watershed Council

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[36] Kat Brigham personal communication: September 7, 2004.

[37] Confederated Tribes of the Umatilla Website.

[38] Gary James personal communication: July 21, 2004.

[39] Jed Volkman personal communication: August 30, 2004.

[40] The historic range of the Umatilla Cayuse and Walla Walla peoples covered the Umatilla, the Grand Rhode and Walla Walla Basin and to a lesser extent the Tucannon and John Day Basins

[41] Walla Walla Basin Watershed Council Website: www.wwbwc.org. Accessed on July 3, 2004

is directed by a thirteen person Board of Directors representing: the CTUIR, wildlife, range, dryland agriculture, up-river, up-river range, irrigated agriculture, industry, fisheries, ecology, city, and a member at large and the council chair. Implementation for fish recovery in the basin has been closely tied to cooperative efforts. The WWBWC has cooperated with the CTUIR on many projects as well as initiated their own monitoring and outreach.[42]

CTUIR initiatives in the Walla Walla Basin have included habitat improvement and removing barriers to fish passage. Their fish passage efforts included small dam removal, diversion improvements, screens for diversion ditches, and a fish ladder. The CTUIR place a huge emphasis on monitoring including presence/absence surveys, spawning surveys, bull trout and steelhead, telemetry and electro-fishing.[43]

At the regional level, the CTUIR are one of four tribes with reserved rights to Columbia River salmon harvest. To protect these rights, the four tribes work together through the Columbia Basin Intertribal Fish Commission (CRITFC). In 1995, CRITFC released its Spirit of the Salmon Plan, perhaps the most comprehensive and realistic "gravel to gravel" (addressing a salmon's lifecycle from birth to spawning) plan for restoring fish populations ever written. Using an adaptive management framework with close attention to the lifecycle of a salmon, the plan calls for habitat restoration, ocean harvest limitations, dam breaching and drawdowns, operational changes, hatchery

[42] Walla Walla Basin Watershed Council Document (WWBWC): Examples of WWBWC-CTUIR Cooperation for Fisheries Restoration.

[43] Confederated Tribes of the Umatilla Document, 2004: Examples of WWBWC (Walla Walla Basin Watershed Council)- CTUIR Cooperation for Fisheries restoration.

supplementation and reintroductions basin wide.[44] Gary James, CTUIR Fisheries Program Manager notes, "there is one thing very unique in that plan that you won't find in any other federal or state plan, and that is a cultural context and that really embeds the importance of the salmon resource to the Indian people. The writers of this plan had more than the usual planning mandate. The Tribes were driven by a grassroots vested interest in the fisheries resource as it relates to their very existence".[45]

The cultural context that James refers to is captured in an entire section of the Spirit of the Salmon Plan. The section clearly articulates the importance of salmon to the spiritual and cultural identity of the four tribes. The plan reads, "Over a dozen longhouses and churches on the reservations and in ceded areas rely on salmon for their religious services" and "The annual return of the salmon allows the transfer of traditional values from generation to generation".[46] The plan also describes the centuries of sustainable salmon harvest developed by the four tribes of the Columbia River Basin. Salmon fishing continues to be the preferred livelihood of many tribal members and traditional methods continue to play an important role in fisheries management. These centuries old methods include the designation of management areas, law enforcement for fishing quotas, research and analysis.[47]

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[44] Melissa Powers,"The Spirit of the Salmon," Environmental Law, 20(4)(2000)867.

[45] Gary James Personal Communication: July 21, 2004

[46] Columbia Intertribal Fish Commission (CRITFC), 1995. Spirit of the Salmon Plan. Accessed at: www.critfc.org July 18, 2005.

[47] CRITFC,1995.

The CTUIR are perhaps most well-known for their massive restoration project of Umatilla River salmon runs. The Umatilla Basin project was initiated in the late 1980s to restore a spring Chinook run to a river that had been devoid of salmon for nearly seventy years. The salmon had been extirpated due to irrigation withdrawals and migration barriers. Working cooperatively with the Bureau of Reclamation, Bonneville Power Administration, Oregon Water Resources Department and Oregon Department of Fish and Wildlife, the CTUIR and the irrigators were able to devise a solution to support both irrigated agriculture and salmon runs.[48] Through the use of an innovative hatchery reintroduction program and a multi-million dollar Columbia River water pumping program that supplies the irrigators, the fishery in the Umatilla has now grown to a size capable of annual harvest by Indian and non-Indians.

Based on the CTUIR's tremendous achievements in the Umatilla, Walla Walla and Grande Rhonde Basins, they have become known as "leaders in fisheries restoration" notes Fisheries Manager Gary James.[49] A shared sentiment amongst many interviewees was that the CTUIR Natural Resource staff are considered a knowledgeable and competent source of expertise in fisheries management. Tim Bailey of the Oregon Department of Fish and Wildlife noted, "Because they have a large staff they are able to do a lot of things, fill in a lot of gaps that the state of Oregon hasn't been able to do"[50]. The director of the Walla Walla Basin Watershed Council even suggested that the tribes have reached the capacity to locally rival the state of Oregon for fisheries resources,

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[48] Confederated Tribes of the Umatilla Website 2004.

[49] Gary James personal communication: July 21, 2004.

[50] Tim Bailey personal communication: August 12, 2004.

"When we think about who can get this done, who has the resources, we know Oregon Department of Fish and Wildlife continues to lose staff as a result of more and more budget hits, so we often look to the Tribes to fill that gap...".[51]

These voices indicate the amount of recognition that the CTUIR have achieved at the basin and statewide level. However, CTUIR implementation at the ground level depends on positive relationships with local jurisdictions and private landowners. There is some evidence that at the local level there are still pockets of residual distrust of the tribes, even feelings of racism. When respondents were asked to compare public perceptions in the Umatilla Basin with the Walla Walla Basin, several respondents felt that tensions had eased significantly in the Umatilla based on the success of the Umatilla Basin project. Others felt that the CTUIR's increased presence in the Walla Walla and outreach efforts were slowly working to address past misunderstandings and tensions in that Basin. In addition to the technical expertise of the CTUIR, their success can be attributed to a consistent expression of the decline of salmon as a direct threat to culture.

Gary James, a nontribal member, explained, "we try to explain to the ag [agricultural] community that a big part of the Tribe's economy, culture and religion, is fish derived. A lot of the health of the environment and cultural health of the Tribes has to do with healthy streams with abundant fish populations".[52] As in the case of the Jamestown S'Klallam, the CTUIR Natural Resources Department depends primarily on Western trained scientists to manage the resource, while at the same time there is a clear cultural imperative that drives their work. Deliberate sharing of cultural values rather

[51] Brian Wolcott personal communication: July 22, 2004.

[52] Gary James personal communication: July 21, 2004.

than the exclusive prescription of scientific assessments was responsible for success in the Umatilla and Walla Walla basins. In particular, the Tribes and the irrigators were able to find common ground in their reliance on water for their respective cultures. Kevin Scribner, a long time environmental activist in the Walla Walla Basin, said of the CTUIR,

> "They are extremely comfortable with the following statement, and will say it at every opportunity; we are about our culture and our culture is about our foods...We all have culture but how much aware are we of it? But the farmers, as their evidence of being most like the tribes, they'll say, I'm a 5th generation farmer...Tribal members will say I'm a 7th generation fisherman".[53]

While on the ground efforts have benefited from an infusion of cultural dialogue, some nontribal interviewees expressed a desire for more discussion of cultural issues. While the CTUIR has tactfully drawn on the most promising scientific solutions to restore salmon, their success is also inextricably tied to their willingness and consistency in articulating their culture. The science that the CTUIR draws upon does not differ significantly from the science of any other management entity. Rather the distinction falls in the interpretation of the data and corresponding management recommendations generated by the CTUIR. The following section discusses a Southwestern tribe who has yet to build the management capacity to address natural resource management thus impacting their ability to join western and indigenous science and be active participants in regional collaborative initiatives.

[53] Scribner personal communication: July 22, 2004.

Yavapai-Apache Nation Land and Water Management

Though they are two distinct tribes, the Yavapai and Apache people share a similar origin story. The ancestors of the Yavapai and Apache first emerged from Ahagaskiaywa, a "limestone sink formed long ago by the collapse of an immense underground cavern"[54] in Central Arizona's Verde Valley, also known as Montezuma's Well.[55] Both groups of people lived in the Verde Valley for thousands of years, relying agricultural activity and seasonal gathering for subsistence.[56] Their combined ancestral homeland is estimated at 1.1 million acres.[57]

By 1864, the United States Army was constructing forts throughout Yavapai and Apache lands with the goal to exterminate the Indians of the area. In addition to several massacres, the U.S military spread disease and purposefully served poisoned food to the people.[58] Following several years of fighting, the Apache and later some Yavapai were confined to the 800 square mile Rio Verde Reservation along the upper Verde River. However, in 1875, approximately 1500 Yavapai and Apache were forcibly marched

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[54] National Park Service Website: www.nps.gov/moca/well.htm Accessed on August 19, 2004.

[55] K. Ruland-Thorne, *The Yavapai: the people of the red rocks, the people of the sun*. (Sedona, AZ: Thorne Enterprises Publications, Inc., 1993)

[56] Ruland-Thorne, *The Yavapai* and S.M. Whittlesey, R. Ciolek-Torrello, J. H. Altschul, Vanishing river: landscapes and lives of the Lower Verde Valley. (Tucson, AZ: Salt River Project Press, 1997).

[57] Yavapai-Apache Nation Economic development, 2004.Yavapai-Apache Nation Trust land Application.

[58] Ruland-Thorne, *The Yavapai.*

southeast to the San Carlos reservation where they were held in a "concentration camp".[59] An executive order eradicated the Rio Verde reservation the same year. Twenty-four years later, many of the Yavapai and Apache left the San Carlos reservation and returned to the Verde Valley where they discovered white settlers living in their home along the Verde River.[60] Completely dispossessed of their homeland, the returning families were forced to live in scattered pockets near the communities of Clarkdale, Jerome, Cottonwood and Camp Verde. In 1909, 55 acres of land were granted trust status to the Yavapai-Apache under another executive order.[61]

There are currently 1,171 enrolled Yavapai and Apache with an estimated 743 living on the Middle Verde reservation. Population growth and the enrollment of Tribal members has risen rapidly over the last decade.[62] Over the last few decades, the Nation actively sought out new economic enterprises and now operates a convenience market, service station, recreational vehicle park, and a casino.[63]

Burgeoning population growth in the Verde Valley and Phoenix has increased pressure on Verde groundwater. In 1998, the controversy peaked between the greater Prescott community and the communities of the Verde Valley on the east side of Yavapai

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[59] Chris Coder, Vincent Randall, E. Smith-Rocha, R. Hines, 2004. Chi Ch' Il (Acorns): Dissolution of traditional Dilzhe'e gathering practices due to federal control of landscape. Yavapai-Apache Nation.

[60] Yavapai-Apache Nation Economic development, 2004. Yavapai-Apache Nation trust land Application.

[61] Whittlesey et. al., Vanishing river.

[62] Verde Valley Forum 2004

[63] Yavapai-Apache Nation Website: www.yavapai-apache-nation.com
Accessed on: August 18, 2004

County. The primary source of tension stemmed from current and proposed increases in groundwater pumping from the Big Chino aquifer. The pumping has the potential to severely diminish surface flows of the Verde River. After a year of disagreement across Yavapai County, the City of Prescott agreed to some limitations on groundwater pumping and in January of 1999 the County Board of Supervisors established the Yavapai County Water Advisory Committee, a collaborative group with a mission to resolve water conflicts in the county.

In addition to the Yavapai County Water Advisory Committee, there are several other citizen-initiated efforts to address land and natural resource uses collaboratively. The groups include the Verde Watershed Alliance, the Open Space Alliance of Central Yavapai County, Keep Sedona Beautiful, Citizens Water Advocacy Group, Verde River Citizens Alliance, the Upper Agua Fria Watershed Partnership, and the Central Arizona Land Trust. Participants include federal, state and local agencies, universities, private landowners, city governments, non-government organizations and unaffiliated individuals. However, there has been a noticeable lack of participation from the Yavapai-Apache Tribe or, for that matter any other tribe in the watershed.[64]

A tremendous limitation for the Yavapai-Apache is personnel. In stark contrast to the Jamestown S'Klallam and the CTUIR, who have 21 and 86 natural resource employees respectively, the Yavapai-Apache have four staff members in their Land and Water Department. When the need arises for an environmental planning or assessment the Yavapai-Apache generally hire a nontribal consultant. While the contractor may

[64]Though we did not interview them, other 'non-participating' tribes in the watershed include the Yavapai Prescott and the Ft. McDowell Yavapai. Results from this research will be shared with all stakeholders in the watershed including these tribes.

work closely with the Nation, there are fundamental differences between in-house environmental planning and contracting outside help. Furthermore, sending a staff person to monthly meetings may slip even further down the priority list than an environmental assessment if the meetings consume time and monetary resources or are perceived to lack any immediate rewards.

Internal tribal expertise in water and land use management is a prerequisite for active and effective participation in the collaborative forum. Kat Brigham, CTUIR board of trustees (the equivalent to the tribal council), has been active on fish issues for the tribes for twenty-eight years. She stresses the significance of legal standing from cases like *U.S vs Oregon* combined with the will of key legislatures and the financial capacity of the tribes to support a natural resource staff as integral to their current status as equal and respected co-managers of the resource. Brigham says, "Before we had our current staff we had to depend on the federal government...to help us on a number of issues and they were very limited...they did the best they could...they just didn't have people on board to help us. It wasn't until we got our own staff that we were able to start making some progress".[65]

The workload on the small staff of Yavapai-Apache Environmental Protection office, rather than a lack of cultural connection to water, has contributed to their sporadic involvement in collaborative efforts at the regional level. Both Yavapai and Apache traditions revere and consider water a sacred element of life. Yavapai-Apache tribal members pointed out that inflicting western notions of water ownership onto their people resulted in significant cultural diminishment of water resources. The Yavapai-Apache

[65] Kat Brigham personal communication: September 7, 2004

belief is that water cannot be individually owned. Confining water use to a system of rights is utterly foreign to the Indigenous way of thinking. Imposition of the western concept of ownership coupled with the paucity of water in the desert has created an incredibly polarized climate for water discussion in Central Arizona. The current situation does not promote collaboration. Furthermore, while the Tribe and Anglo communities acknowledge an interest in addressing issues other than water distribution, priorities remain with the settlement of water rights.

Nonetheless, stakeholders throughout the watershed seem eager to work together and address water resource issues beyond the courtroom. Speaking from the tribal perspective, Cultural historian Vincent Randall observes that there are the beginnings to unite or collaborate on watershed issues.[66] Representing the perspective of many nontribal community leaders, City Councilwoman Diane Joens noted that, "I think the only way we are going to get through all this pain, is to sit down and talk about it and communicate..."[67] The stage is set for collaboration in the Verde. And the Northwest cases demonstrate that a combination of collaboration and capacity-building of tribal natural resource expertise can lead to solutions that integrate cultural and ecological issues.

Conclusion

These three cases illustrate that there is not a clear divide between the use of indigenous knowledge and western science in tribal resource management. All three tribes in this case study rely heavily upon western trained managers and scientists while

[66] Vincent Randall personal communication: November 10, 2005.

[67] Diane Joens personal communication: October 28, 2004.

at the same time tribal values frame how the western science is interpreted and implemented. To understand the interplay between traditional ecological knowledge and western approaches to management, it is important to understand that TEK is not a static set of principles.[68] Rather TEK is a dynamic system of knowledge for working with an evolving environment. While tribes renew and incorporate cultural values into resource management they must also communicate with the entities who share those resources, in our case a watershed. Applying and communicating information in western terms is a function of how well the tribes have been able to build the capacity to gather that information.

Combining TEK and Western science provides a powerful mechanism for resource management in the 21st century. The management currently employed by the Northwest tribes undoubtedly contains strong elements of TEK. According to Muench at the Jamestown S'Klallam Tribe, "Certainly cultural considerations are taken into account in making management decisions. Ecological knowledge, for example, tribal elder recollections, may lead us to scientific inquiry". In a time of unparalleled crisis over salmon populations there is no established mechanism for restoring fish, so the tribes are wise to draw on the best ideas from multiple management regimes and devise new approaches.

Furthermore the Northwest cases both illustrate how social and political factors support the development of tribal natural resource expertise. Political clout, legal decisions, cultural connection with natural resources, and financial backing have all contributed to the development of technical expertise and environmental management

[68] Ross and Pickering, The politics of reintegrating.

capacity of the Northwest tribes. These factors facilitate and motivate the Northwest tribes to manage collaboratively. The Northwest cases are works in progress and time will tell if the tribes are able to achieve their goals of a healthy salmon economy and culture throughout the region. Nonetheless, there are lessons to be learned from the progress of many of the Northwest's tribes.

In contrast, the Yavapai-Apache support a small natural resource staff and operate in a different political and cultural climate from the Northwest tribes. The Yavapai-Apache case reveals that as a tribe works to rebuild its culture and economy, competing priorities limit available resources for a natural resources program. The Yavapai-Apache lack the fundamental capacity to effectively and equitably participate in any collaborative effort. As CTUIR board of trustees member Kat Brigham pointed out, the tribal voice on these issues can not be heard until a tribe has its own staff and resources to bring to the table. While garnering the resources to support tribal resource management is crucial for establishing a tribal voice, Byron Rot, Jamestown S'Klallam Habitat Biologist acknowledges the difficulty of balancing tribal priorities. Rot observes, "As a tribal habitat biologist I am charged with protecting and restoring treaty resources. On the other hand, I work for a Tribe interested in economic development and opportunities for Tribal members. Sometimes these paths are at odds with each other."[69] In the Northwest, development of natural resource programs was tied to political clout, community support, and a willingness to work collaboratively, all of these factors are currently limiting for the Yavapai-Apache.

[69] Byron Rot personal Communication: February 14, 2005.

Politically, nontribal members in the Verde River Watershed misunderstand the trust responsibilities of the federal government and the meaning of sovereignty. Some view the Tribe as enjoying a special level of federal protectionism. One person explained the sentiment, "No matter what happens with the Water Advisory Committee or local issues, it's like they've (the Yavapai-Apache) got the big stick. They realize it, so if things begin not to go their way, I think they can lean on the big stick and get what they want in the world". While the Yavapai-Apache do hold a potential legal hammer in their federally reserved water rights, this was seen by a tribal member as a limited and sole form of influence, when ideally the tribe would prefer more of a voice in issues beyond water rights.

Given the desert climate and current raging battles over water rights, it is difficult for many in the Verde Valley to consider natural resource issues beyond water quantity. At the community level the Nation and the surrounding communities could certainly gain from engaging in broader discussions. To do that the tribal and nontribal community will need to overcome residual feelings of distrust and misunderstanding as in the Pacific Northwest. In the future, the Yavapai-Apache may find that participation and 'collaboration not litigation', is the most lasting and productive path towards fulfilling their goals.

Antone Minthorn, former Chairman of the CTUIR Board of Trustees describes the success of the Confederated Tribes.[70]

"Our tribal philosophy has been to negotiate rather than litigate. If we have to, we will litigate to protect our treaty-reserved rights, but, we have seen that we can

[70] Confederated Tribes of the Umatilla Website: www.umatilla.nsn.us Accessed on August 13, 2004 and November 28, 2004.

> create solutions which meet everyone's needs by sitting down with our neighbors, listening to each other, and developing our own solutions. We want to apply what we've learned locally to help revive threatened salmon populations in the region. We believe the cooperative process between neighbors can be used as a model for success in the region and beyond."

This analysis suggests some important conclusions for the role of tribes in natural resource management and the connections to tribal sovereignty. Clearly, access to and management authority of the resources that sustained traditional economies is critical. Developing management strategies based on an integration of western scientific and Indigenous tradition is also imperative for regaining tribal sovereignty. Building the capacity to participate on equal footing and integrate tribal values fosters collaboration between tribes and other land managers. The outcome is necessarily more robust and, if not immediately successful, creates an environment that promotes discussion and solutions rather than litigation.

Tribal natural resource management promises to contribute to the broader social goals of conservation and restoration. Don Sampson, Executive Director of the CTUIR, said, "In my mind it will be the tribes who come up with a solution to save the salmon. We have lived side by side for thousands of generations." Likewise maintaining springs and water flow for a multitude of purposes in the Verde River may benefit from a Yavapai-Apache perspective that sees water in different terms than the dominant social paradigm of 'ownership and rights'. The promise of building capacity and working collaboratively is increased trust and respect as much as it is putting water in a streambed and preserving the natural resources upon which all cultures depend.

CHAPTER IV. DEMOCRACY, PARTICIPATION, AND NATIVE AMERICAN TRIBES IN COLLABORATIVE WATERSHED MANAGEMENT *Manuscript Submitted to Society and Natural Resources*

Abstract

The collaborative conservation model has emerged as an alternative to deadlocked negotiations and protracted court battles over natural resource management. The management of watersheds is a frequent focus for collaborative groups. Membership in these groups usually represents a variety of interests. The involvement of Native American tribes however, is infrequent. This comparative case study of two tribes in the Northwest and one tribe in the desert Southwest reveals six broad factors that influence tribal participation in collaborative watershed management. Factors include tribal cultural connection to aquatic resources, the political clout and legal standing of tribes, relationships between tribal and nontribal communities and relevant agencies, recognition of the benefits of collaboration, consistency and vision of tribal leadership, and the availability of resources to tribes. By understanding factors that shape the development of tribal-nontribal partnerships, stakeholders can direct financial and human resources to better manage watersheds for a full range of values.

Introduction

Over the past three decades, there has been a significant change in the way natural resource management decisions are made in the United States. Rather than top-down, agency oriented planning, the trend is for communities, nongovernmental organizations, land management agencies, and landowners to turn to collaborative decision-making (Snow 2001). Relatively common collaborations in the United States include small watershed planning and management initiatives, each group specific to place and unique

in approach. Collaborative groups by nature are comprised of a diverse range of interests. Although the goal of most collaboration is to include all relevant stakeholders, all too frequently some stakeholders are absent from the process (Foster 2002).

Another significant trend since the 1970s is an increase in the self-determination of Native American tribes (Alfred 1999). The nexus of these two trends is manifest in the emerging role that tribes play in managing watersheds and water resources. This dynamic of natural resource management is relatively unexplored and is the focus of this research. Much has been written about the origins, functions, processes, and outcomes of collaborative watershed groups. However, fewer attempts have been made to examine the stakeholders, actual or potential (Kenney et. al. 2000; Moote, et.al 2000; Sommarstrom 2000). The success of collaborative management groups relies on representative stakeholder participation (Wondolleck and Yaffee 2000; Born and Genskow 2000). Leaving stakeholders out of the process necessarily limits accomplishments, particularly when major watershed landowners such as Native Americans do not partake (Foster 2002). Our comparative analysis investigates varying levels of tribal participation in collaborative watershed management.

The main question became: What factors encourage or discourage tribal involvement in collaborative watershed management? Our inquiry utilizes three cases in the United States including two watershed groups in the Northwest that have benefited from tribal participation; the Dungeness River Watershed and the Walla Walla River Watershed. The third case is the Verde River Watershed in Central Arizona which has had minimal or no tribal participation in collaborative watershed management.

Methodology

The emergent and place-based nature of watershed collaboratives makes them well suited to the case study research model as developed by GAO (1990) Johnson and Joslyn (1995) and Yin (2003). This case study draws on a variety of information sources including direct observation, interviews, artifacts, and documents. The three cases for this research were carefully chosen based on several criteria.

- There is one or more established collaborative group in each watershed.
- All three watersheds include tribal land ownership.
- Issues of water quality and water quantity exist and are topics of discussion in all cases.
- Stakeholder participation has also not been the subject of any major academic research in any of the watersheds.

Thirty-one interviews were conducted from Spring 2004 through Spring 2005 at a variety of locations and consisted of structured, open-ended questions. Participants were selected as elite informants and cross-checked with each other. The length of the interviews varied from 35 to 90 minutes and in several cases the authors re-contacted interviewees by email or phone to clarify points or gather more information. In some instances, field visits accompanied the interviews which provide additional informal dialogue. Prior to interviews, participants were informed that their responses would remain confidential unless they provided express permission to be quoted. Audio taping devices were used when the participant agreed in advance and appeared comfortable with the procedure during the interview. Observation of planning group meetings was conducted when logistically feasible. Results were analyzed using pattern matching and tabulating the frequency of similar responses to compile a list of factors that address the initial research question (Babbie 2004).

Collaborative Watershed Management Groups

In the American West, the collaborative conservation movement consists of many types of partnerships with various monikers. They include community-based conservation (Meffe et. al. 2002), public-private partnerships (Wondolleck and Yaffee 2000), collaborative conservation (Cestero 1999), watershed initiatives (Kenney et. al. 2000), and grass-roots ecosystem management (Weber 2003). These resource management strategies may have political boundaries or may be limited to specific watersheds or river basins. A common thread between all collaborative initiatives is a focus on diverse participation and foregoing past models of land management in favor of new approaches. All rely on local input to reach to solutions for land management. However, each group varies in breadth of participation, funding, goals and objectives. Furthermore, watershed groups are inherently dynamic. Changes in leadership, participation, direction and organization are not uncommon in collaborative watershed efforts (Born and Genskow 2000).

This study concentrates on collaborative watershed management groups. For the purposes of this research, **collaborative watershed management groups** are defined as the voluntary association of stakeholders which may include community members, state and federal agencies, elected officials, tribal, environmental, and industry representatives. Participants are unified geographically by a watershed or political boundary and work together to solve natural resource management issues. They may be a direct result of community interest, i.e. “grassroots” initiatives, or they may be a result of an agency’s effort to involve local stakeholders or more likely a combination of both. Funding comes from a variety of sources including; local, state and federal agencies, private foundations

and tribes. Policies that emerge from collaborative watershed groups are highly variable in their degree of implementation. Agency support, legal bonds, sufficient funding, and landowner compliance all increase the likelihood of full-scale implementation for the work of collaborative watershed groups.

Why Collaboration?

Collaboration grew out of an era in which bureaucratic, regulatory approaches to environmental problem-solving were the norm. During the 1980's environmental issues escalated to the point of aggressive polarization among environmentalists, farmers, timber workers, ranchers and agencies (Brick and Cawley 1996). Many hard fought battles culminated in expensive court cases and opponents shared the sentiment that "no one is winning" and that agendas were not moving forward (Snow 2001, 4). Critiques of environmental management in the traditional framework of liberal pluralism emphasize the lack of democratic deliberation and public participation (Foster 2002). Planning was an imperfect pluralist process dominated by national environmental groups and exclusive of the grassroots. Avenues to power were through economic means, political standing, and access to technical expertise, all of which potentially discriminate against minority groups (Schlosberg 1999; Weber 1998).

Since the late 1980's the western United States has experienced a simultaneous coevolution of cooperation among natural resource stakeholders in lieu of litigation (Snow 2001; Weber 2003). Hundreds of decentralized, participative groups involving diverse stakeholders have sprung up with goal of reaching shared solutions on tough issues. Collaboration has the potential to improve on environmental management paradigms of the past. In particular, "the new style of management helps to build a sense

of shared ownership and responsibility for natural resources by moderating a top-down style of government agencies that has tended to disempower landowners and local interest groups" (Wondolleck and Yaffee 2000, 5). This shared ownership mentality has led to better cooperation and improved understanding between the public and managers of public lands. "There are literally hundreds of success stories" of independent collaborative watershed efforts (Wondolleck and Yaffee 2000, 4). These successes stem from solutions that could not otherwise be reached and the results are often more long-lasting and rewarding (Kemmis 2001; Kenny 1999). Although the criteria for success are subjective and of considerable debate, clear advantages to collaboration include that it is organized at the grassroots level, fosters innovative solutions and promotes participatory democracy.

Critics of collaboration point out that experts in the field are 'replaced' by local citizens and that the federal agencies are marginalized in the process (Coggins 1999). The outcome is that the federal government becomes just another stakeholder rather than the representative of the American people (McCloskey 2000). Groups must recognize that the resources are usually national resources. A positive aspect of federal agency participation is that they can not agree to a plan that violates Congressional intent (e.g the Endangered Species Act). Therefore collaboration may offer a solution to decades of bureaucratically driven and polarizing land management.

Tribes as an essential component to successful collaborative processes

There are myriad reasons for tribes to be involved in collaborative watershed management. First and foremost is that federally recognized Indian tribes exist as sovereign nations within the United States. The federal government has two primary

responsibilities to Indian tribes that include promoting and supporting self-determination and the economic and social health of all tribes. The federal government is also the fiduciary agent throughout much of Indian country. This obligates the federal government to manage these lands in the best interest of each tribe (Pevar 2002). Thus tribes are essential participants in watershed management that influences their resources or those resources on neighboring federal lands. With ninety five million acres scattered throughout the United States (Boyle 2002), the sheer amount of tribally owned land- - establishes a tribal interest in many watersheds throughout the country. Beyond the essential goals of inclusiveness and promoting democracy, tribes provide a unique perspective to the discussion of watershed planning.

Although tribal cultures are distinct, an emphasis on unity and connection with the land is integral to their traditional and modern way of life. The cultural practices associated with centuries of subsistence living by Native Americans are recognized as traditional ecological knowledge (TEK). Recently some writers and managers have begun to view TEK as an integral component of natural resource management (LaDuke 1994; Anderson 2005) and to reconciliation with indigenous peoples (Martinez 2003).

The extent to which tribes choose to rely on TEK in their management decisions varies considerably between tribes, nonetheless tribal ties to the land predate memory and extend indefinitely into the future. This perspective can yield a greater commitment and provide continuity to what often may be a decade-long watershed management process. Furthermore, tribes may be instrumental in restoration actions that address water quality and quantity. But the bottom line is that full representation of stakeholders is good for collaborative watershed management and ultimately good for local participatory

democracy. “Solving shared problems together on behalf of a shared place is the essence of democracy” (Kemmis 2001, 153).

Jamestown S'Klallam Tribe (JSKT)

Distinct indigenous groups have inhabited Washington’s Olympic Peninsula for at least 12,000 years (JSKT 2003). Compared to other regions of North America, they subsisted on a bounty of marine, riverine and upland resources. Of particular importance were four species of salmon (Strauss 2002). White settlers severely interrupted Indigenous culture in the early 1800s (Wray 2002). The first of the Olympic Peninsula treaties was the Point-No-Point, signed on January 26, 1855 between the tribes of the Juan de Fuca and Hood Canal areas and the United States. Included in the treaty was the provision to harvest fish at usual and accustomed sites. In the years following the Point-No-Point Treaty, the Jamestown S’Klallam continued living in the Dungeness watershed and relied on marine resources for their livelihood (Strauss 2002). One hundred and fifty years later, it is fitting that the Jamestown S’Klallam Tribe, who call themselves “the strong people” have given salmon restoration high priority (JSKT website 2005).

The 526 members of the JSKT are represented by a relatively large natural resources staff. The nineteen-member department includes fisheries, shellfish, habitat and forest biologists and has grown considerably over the last fifteen years due in large part to the Tribe’s financial situation. Today, management of the Dungeness River is centered around a collaborative entity, the Dungeness River Management Team; however, the current effort is a product of nearly two decades of cooperative labor including a dozen cooperative management or planning groups. Collaboratively and individually the Tribe has contributed to the completion of over forty watershed planning documents, studies

and recovery plans since 1989 (JSKT 2003). The JSKT has initiated nearly a dozen habitat improvement projects in the lower Dungeness watershed and estuary. These include streambank stabilization, floodplain restoration on the mainstem and its tributaries, intensive monitoring and research efforts, and an extensive public education and outreach campaign that facilitated the construction of a River Center and several educational publications on the watershed (Born and Genskow 2000).

Confederated Tribes of the Umatilla Indian Reservation (CTUIR)

Since time immemorial the Umatilla, Cayuse, and Walla Walla have lived in the southeastern portion of Washington State and the northeastern corner of Oregon. There were an estimated 8000 Umatilla, Cayuse and Walla Wallas living in their ancestral homeland just prior to the arrival of the Lewis and Clark expedition of 1805. In June of 1855, the three tribes reluctantly signed a treaty with the United States under the observation of Governor Isaac Stevens (CTUIR 2004). The treaty reduced tribal sovereignty from 6.4 million acres to a 500,000 acre reservation later diminished to 172,000 acres. In signing the treaty, the tribes were careful to articulate their right to harvest fish on and off reservation grounds. The Confederated Tribes of the Umatilla (CTUIR) are still involved in efforts to realize their original treaty rights.

A major part of rebuilding threatened cultural and natural resources has been reestablishing a sustainable economy for the three tribes. Presently the CTUIR employs approximately 1,100 employees, 86 of whom are in the Natural Resources Department (CTUIR 2004). While the CTUIR's ancestral territory stretches across three large basins this research focuses on the Walla Walla Basin. Like the JSKT, the CTUIR have

recognized that restoration of their fishery is dependent on the formation of strong local, regional and national partnerships.

The Walla Walla Basin Watershed Council (WWBWC) was initiated by the Oregon Watershed Enhancement Board is a primary forum for collaboration between stakeholders in the basin. Directed by a diverse thirteen person Board of Directors, the mission of the Council is to protect and enhance biological and cultural resources of the watershed (WWBWC 2004). Implementation for fish recovery in the basin has been closely tied to cooperative efforts. The WWBWC has cooperated with the CTUIR on many of these projects as well as initiated their own monitoring and outreach (WWBWC Document). In the Walla Walla Basin the CTUIR has taken the lead in improving aquatic habitat and removing barriers to fish passage. Their fish passage efforts included small dam removal, diversion improvements, diversion ditch screens, and a fish ladder.

Yavapai-Apache Nation (YAN)

Both the Yavapai and the Apache have lived in Central Arizona's Verde Valley for thousands of years, relying on agricultural activity and seasonal gathering for subsistence (Whittlesey 1997). Their combined ancestral homeland is estimated at 1.1 million acres (YAN Economic Development 2004). In the 1860s the United States Army had begun building forts throughout Yavapai and Apache lands with the goal to exterminate the Indians of the area. After several years of conflict, the Apache and later some Yavapai were confined to the 800 square mile Rio Verde Reservation along the upper Verde River. In 1875 approximately 1500 Yavapai and Apache were forcibly marched southeast to the San Carlos reservation where they exist in a “concentration camp” (Coder et. al. 2004). In the same year, an executive order eradicated their last

vestige of homeland, the Rio Verde reservation. Twenty-four years later, many Yavapai and Apache returned to the Verde Valley only to discover hostile white settlers occupying their homeland along the Verde River (YAN 2004). Completely dispossessed of their native land, the returning families lived on small parcels throughout the Verde Valley. Fifty five acres of land were granted trust status to the Yavapai-Apache under an executive order in 1909 (Whittlesey 1997).

There are currently 1,171 enrolled Yavapai and Apache with approximately 743 living on the Middle Verde reservation. In recent years, the YAN has worked hard to develop and attract new economic enterprises. These include a convenience market, service station, recreational vehicle park, and a casino (YAN Website 2004). The YAN's Land and Water Department, with four employees, addresses a broad array of issues such as wastewater treatment, land use and air quality as well as water quantity and quality.

There are both water quality and quantity concerns throughout the Verde Watershed, however action is centered around quantity issues. The political climate is dominated by urban use of Verde River surface water outside the basin and groundwater withdrawal in the basin.

Rapidly increasing population growth in the Verde Valley and Phoenix has increased pressure on Verde groundwater. Phoenix, through the Salt River Project (SRP), has prior appropriation rights to most of the surface water. Another source of tension is between the greater Prescott community and the communities of the Verde Valley on the east side of Yavapai County. After years of disagreement, the county established the Yavapai County Water Advisory Committee (WAC) a collaborative group with a mission to resolve water conflicts in the county. In addition to the WAC, there are several other

citizen-initiated collaborative efforts to address natural resource use. Despite holding an official seat on the Water Advisory Committee the Yavapai-Apache Nation has participated minimally or not at all.

Factors Influencing Tribal Participation in Collaborative Watershed Management

There are six important factors that influence a tribe's involvement in collaborative watershed management. While the presence or absence of any factor may not determine tribal participation, we have found the factors to be powerful indicators for participation. These factors include a cultural connection to aquatic resources, political clout and legal standing of tribes, relationships between nontribal and tribal communities and relevant agencies, recognition of the benefits of collaboration, consistency and vision of tribal leadership, and the availability of resources. Levels of influence over each of the factors are enormously variable. If a tribe, nontribal community or agency seeks to increase the level of tribal participation it may choose to act or influence one factor or another by dedicating financial or human resources. However, some factors such as expression of culture are not easily influenced at the tribal, community or agency level. Despite the challenges, an awareness of the dynamics that shape tribal participation can lead to more positive relationships between tribal and nontribal entities.

Tribal cultural connection to aquatic resources

In the Northwest, salmon are the center of indigenous cultures, economies and spiritualities. A frequent sentiment among many of the interviewees in both Northwest basins was that tribal involvement was inextricably tied to tribal culture. Tribal staff in both cases frequently cited the importance of water resources, especially salmon, in directing tribal natural resource policy choices. At the same time, nontribal affiliated

interviewees from county commissioners to farmers to community members also referenced the importance of salmon culture in driving collaborative management. Kevin Scribner, a long time environmental activist, said of the CTUIR, “Food is a big part of their culture; they’re very interested in seeing that their natural and accustomed fishing locations along the Walla Walla River will again have fish.”

There is not a corresponding culturally significant megafauna like salmon in Central Arizona. At the same time, water is extremely sacred to the Yavapai and Apache and is an integral part of their cultures. Chris Coder, YAN Archeologist stressed that, “in an area where water is so scarce, water was revered.” This reverence is indicated in the medicine bags that contained drinking straws and were worn by tribal members. Coder further observed that imposition of the western system of water ownership tarnished the traditional understanding of water. Another influence is a traumatic history of land loss. Ancient ties to the land were severed when hundreds of people were forcefully removed from their home. The JKST and the CTUIR endured similar losses although a core population managed to remain living on traditional lands.

A key difference in the dialogue of water and culture between the Northwest and the Southwest cases is the use of past and present tense for describing cultural connection to water. Interviewees in the Northwest spoke of the current strength of tribal connection to salmon and water. “The CTUIR has a good sense of themselves, they act from strength. They have a good spiritual base. They are comfortable with acknowledging …that furthering their culture is what they are about.” There was significantly less discussion of culture with regard to the YAN and water management. Most often interviewees referred to the cultural staff of the YAN to address questions of culture. In

light of the land dispossession 130 years ago it is possible that the YAN have a stronger aversion to discussing culture with an outsider or non-Indian. However, it is clear that an ongoing articulation of culture in the Northwest has had a positive influence on all parties in collaborative management regimes. Nontribal entities who are trying to improve collaboration can communicate a sincere respect and recognition of tribal cultures

Political clout and legal standing of tribes

The tribes and state agencies of Washington and Oregon provide an example of comanagement and the development of individual tribal management expertise. Much of these gains can be attributed to the political and legal standing of the Northwest tribes. During the 1850s, many of the tribes in this region signed treaties with the United States which guaranteed the tribes the right to harvest fish on and off reservation grounds in perpetuity. Although treaties are legally binding, the tribal right to harvest fish has been consistently unmet by the federal government. The riotous fish wars in the Northwest in the 1950s-1970s, culminated in two landmark court cases, *U.S vs. Oregon* 1969, *and U.S vs. Washington* 1974 (i.e. the Boldt Decision). Both cases mandated a co-management relationship of salmon and steelhead between the tribes and the state of Washington and Oregon. Under the Boldt decision reserved rights were interpreted to mean that the tribes are entitled to half of the treaty area salmon and steelhead annual harvest. The impact of these two cases have been far-reaching and most notable is the substantial increase in active management by Northwest tribes.

Both Northwest cases repeatedly cited political clout as integral to success. The political clout emerged with the affirmation of treaty rights in *U.S vs. Oregon* and the Boldt Decision as well as subsequent watershed planning acts like the Washington State

Watershed Management Act (1998) which requires tribal involvement. One interviewee, a non-Indian tribal employee said, "I think the biggest driver on whether or not tribes participate is whether or not they have legal standing…the Umatilla Tribe has an enormous amount of political clout." A state agency employee observed, "if the states don't work with the tribes, [the states] pretty much lose." In the Dungeness, Ann Sieter, the former director of the JSKT Natural Resources Department, felt similarly, "I don't think Clallam County would even think about doing any kind of watershed planning in the Dungeness without consulting the Tribe." Legal decisions have developing into a relationship where states, counties and tribes regularly consult one another.

In Central Arizona, interviewees often pointed out the constraints that unsettled water rights and state water legislation had on the Yavapai-Apache Nation's position with regard to cooperative water planning efforts. The Central Arizona Project (CAP) is a state-wide water distribution project to pump water from the Colorado River to the metropolitan areas of Arizona. Despite settlements with other tribes in Arizona, the YAN have yet to receive their entitled 1300 acre feet of unadjudicated water rights (Central Arizona Project 2005). Unresolved rights have created a political tangle for the YAN, particularly in their goal to expand reservation land and designate more land to federal trust status. Many in the watershed see the YAN entitlement as a looming threat and are apprehensive about the YAN's future development plans, especially with regard to increasing the amount of tribally irrigated agriculture.

The desert environment and raging water wars in the Verde have resulted in a highly politicized and often antagonistic climate between tribes and other entities. Arizona water rights disputes have traditionally been settled in courtrooms although the

recent 2004 Arizona Water Settlement Act with the Gila Tribe is a negotiated water settlement (P.L. 108-451). The connection of treaty rights to current state watershed and fisheries management is unique to the Northwest and there is not an equivalent political relationship for the Yavapai-Apache that yields similar political clout. Equity in fulfilling treaty rights can be supported by tribal and nontribal entities and may be crucial in shaping successful collaboratives.

Relationships between tribal and nontribal communities

Though difficult to generalize, the antagonism that has plagued water disputes in the Verde is indicative of the broader relationships between the YAN and the local communities. Nonetheless there are some positive examples in which the YAN and local communities have partnered to address such as utility development in Camp Verde. However, the general sentiment among interviewees in the Verde is that the YAN and the non-Indian community maintain a fragile and variable relationship. Several interviewees even pointed to persistent feelings of racism and misunderstanding of Native Americans. For instance, "The reasons I think they aren't involved are…old feelings, wrongs, things that have happened a hundred years ago. The fact that we ripped their kids out of their arms and took them off to school, that's disgusting. We need to heal those old wrongs somehow."

Trust and respect are prerequisites to the success of any initiative. In the Northwest there are still lingering feelings of suspicion and misunderstandings over tribal rights since the fish wars of the 1960s and 1970s. However a gradual understanding and healing of the relationship between tribes and the non-Indian community has led to successes. Both Northwest tribes in this study were noted for the positive relationships

with the surrounding community. The JSKT maintains an incredibly productive and cordial relationship with the cities and counties in part because they were not recognized by the federal government until 1981. Jamestown S'Kallam Chairman, W. Ron Allen, observed, "I think that the Jamestown Tribe has a very unique relationship with our local community. . . . We didn't have a lot of negative baggage that we had to carry forward causing any difficulties between us and other interest groups." In the Walla Walla Watershed, one CTUIR employee said, "People have come to realize that the Indians aren't just users and abusers; they are out there to protect and manage." Kat Brigham, a member of the CTUIR Board of Trustees, speaks from nearly thirty years of fisheries management and observes that the current positive relationship is a product of many years of working towards tribal recognition. Brigham says;

> I think in the beginning there was some concern, but in the end people began to trust and work with us a lot more. In some instances we've been asked to take the lead….I think we've got a little bit more trust than we have in a long time; a number of people didn't want us involved initially but we are now there because people want us to be involved.

Building trust is a challenge of any collaborative relationship. Despite years of hostility between many tribal and nontribal communities, improving relations is well within the influence of all potential partners in watershed collaboratives.

Recognition of the benefits of collaboration

In order for multi-party stakeholders to participate in collaborative management they must perceive their involvement in the group as contributing to fair and effective management solutions. Given past reliance on lawsuits and antagonistic forms of dispute resolution, collaborative management may or may not be an attractive tool. The participants in the Northwest concurred that success was dependent upon recognition of

the benefits of collaboration. Clallam County Commissioner, Steve Tharinger said of the JSKT, "I guess you could say they get it. They get that there is a real advantage to participate and collaborate with the Anglo government. Part of it is funding. A lot of grant sources realize and are willing to award groups who collaborate." Indeed many external funding sources for restoration and conservation in the Dungeness have been based on partnerships between the Tribe and other members of the Dungeness River Management Team. The benefits of collaboration extend beyond attracting funding and include resolutions that would not have been possible in the courtroom. Carl Scheeler, Wildlife Director for the CTUIR remarked, "From my perspective the solutions are very complex; they are not the type of thing you want to leave up to an attorney or a judge to make. They yield the type of solutions that take participation and willingness of the involved communities because they are big changes."

From a tribal perspective, collaboration may be the most effective way to work towards the non-linear and complex goal of preserving culture. But it is not just the Northwest tribes who have come to understand "collaboration not litigation" as the road to success. Gary James, CTUIR Fisheries Department Manager, articulates the shared values of irrigators and the Tribes in the Walla Walla and Umatilla Basins:

> I think the irrigators have really seen a win-win partnership when they collaborate with the tribes because we've found when the [irrigators] are happy…we're happy…. You can bring up treaty rights for some leverage but…the deepest rooted interests are the Native American tribes, and the agricultural community, who have been here several generations making a living on the land. The closest to the land are the tribes and farmers. We acknowledged that neither one is going away. We don't want to divide up the pie differently, we want to make it bigger and that takes money. And when you bring in more money you have to have support from both sides.

In the Dungeness watershed the irrigators association and the JSKT have come to similar conclusions on the value of partnering. Mike Jeldness, Chairman of the Sequim-Dungeness Valley Agricultural Water Users Association, noted that recognition of declining instream flows and endangered salmon runs was simultaneous with recognition of the need to work together rather than fight out water rights to the Dungeness.

> We didn't want to raise red flags to everybody and say those of you aren't using it better use it or your going to lose it. And we didn't want to lose our water rights by spending millions of dollars for pipeline ditches for conservation... So that was our incentive. …. Farmers fish and tribal members farm, so maybe there's another kind of binding incentive there…We did the state's first trust water right agreement.

The trust water right in the Dungeness was an innovative solution to a common western problem of over allocated instream water rights, and it owes its success to the collaborative effort among the JSKT, the Irrigators Association, the State Department of Ecology and other partners. In many ways, the water scarcity situation in the Dungeness that led to compromise and a win-win solution is similar to current water disputes over water in the Verde watershed. However, current and historical relationships between Indians and non-Indians in Central Arizona have resulted in a situation where the Yavapai-Apache Nation doesn't perceive an incentive to participate in watershed collaboratives. One nontribal interviewee said, "I just don't think they (YAN) think they will be able to get anything out of it. They have their own agenda that they want to move forward and I just don't think they feel there is any value in the WAC".

Recognition of the virtues of collaboration may be increased by exposure to positive examples. Exposure to successful collaborative groups could be achieved via tribal watershed management newsletters, list serves, conferences or workshops in

particular to those with a nationwide focus. The most effective means of communication however is personal meetings and listening to success stories.

Consistency and vision of tribal leadership

The Northwest tribes' propensity towards collaboration is also closely tied to tribal leadership. W. Ron Allen has been the Chairman of the JSKT for 25 years and his staff repeatedly cited his leadership as key to their success. When asked why a small tribe of 500 members with a tiny land base has taken the lead in fisheries restoration, Chairman Allen said the JSKT, "have always had a strong chief who cares about the environment and understands the values and conflicts over water resources. We knew that water resources were over-allocated and made a concerted effort to move that agenda forward." Chairman Allen said the JSKT deliberately choose to steer clear of the courtroom to settle claims, "regardless of what the court does or says you end up having to come to the table to work out your differences." CTUIR board of trustee Kat Brigham stressed the importance of consistency and follow-through in moving the tribal agenda forward and building successful management partnerships. Watershed management plans often take years to write and even longer to implement and monitor; this requires persistent commitment from all involved parties, as demonstrated by the CTUIR.

The YAN also has a strong chairman who is repeatedly complimented inside and outside the Tribe for his visionary leadership. Chairman Jamie Fullmer is challenged with the task of rebuilding the YAN's economy and culture. In Central Arizona the economy must often be balanced with environmental concerns. One Yavapai-Apache leader identified the two main priorities as moving tribal land into federal trust status and securing housing for tribal members. A focus on development should not be interpreted

as a lack of commitment to environmental issues; rather, it illustrates the difficult choices that tribes are forced to make in working towards regaining sovereignty. Tribal leadership stressed the YAN's commitment to issues such as air and water quality, yet the reality is that with only 635 acres the YAN possesses limited means to address natural resource and land management. As tribes continue to make progress in addressing pressing social and economic concerns it is likely that tribal leadership will have more resources to devote to natural resources and water management.

The availability of resources to tribes

Financial resources, technical expertise, staff, and time also emerged as essential factors for authentic participation in watershed management (Cronin and Ostergren 2006). Tribal economic enterprise of both the CTUIR and the JSKT increased through gaming revenues and a diversity of other financial sources. The new revenues support a sizable natural resource staff. Several interviewees in the Walla Walla Watershed commented that the large staff of the CTUIR enabled the CTUIR to fill gaps in implementation, monitoring, and research left unfilled by the financially limited State of Oregon.

Compared to the JSKT and the CTUIR, who have 21 and 86 natural resource employees respectively, the Yavapai-Apache have four staff members in their Land and Water Department. The YAN generally use an external bid process to contract environmental planning and assessment. Kat Brigham of the CTUIR made the point that the development of internal expertise was integral to her Tribe gaining an equal and respected voice in natural resource management. An outside contractor may work

closely with tribes; however, this research revealed the importance of internal expertise for genuine tribal empowerment.

Availability of resources is perhaps the most easily influenced factor. A gesture as seemingly insignificant as funding travel may allow tribal personnel to attend collaborative meetings. On the other hand, tribal capacity building for natural resource management is a long-term goal that requires vision, relationship building and financial opportunity. While all three tribes of this study have strong leaders, leadership alone is insufficient to fuel tribal participation in collaborative watershed management as demonstrated by the YAN.

Conclusions and Recommendations

Interviewees in all three cases offered insightful and often times strikingly similar recommendations for improving collaborative watershed management. Cultural ties, political clout, professional relationships, faith in the effectiveness of collaborative decision-making, tribal leadership, and access to financial or personnel resources are the primary factors shaping tribal involvement among these three tribes in collaborative watershed management. Clearly, these six factors are not independent and tribal participation can be explained only by considering the full context of the intertribal and tribal/nontribal dynamic. The following recommendations recognize that all tribes are unique and that none of these cases are indicative of all southwestern or northwestern tribes. Nonetheless, the six factors provide a solid starting point to involve tribes in collaborative watershed management.

Both the CTUIR and the JSKT have reached a point where political clout, cultural understanding and mutual respect contribute to authentic communication with

collaborative management groups. Respondents spoke to the importance of truly listening to one another as a mechanism for establishing shared goals and values. As Kat Brigham states; “Why do I go if they are not going to listen?... It has to be meaningful participation… You have to be able to make a statement, ask what the concerns or the issues are and then look at the alternatives, before the decision is made. If it’s just going there to speak and not be heard then we are wasting everybody’s time.” Tribes must have confidence that their voice is a valuable and necessary part of the collaborative discussion with nontribal entities and vice versa.

Recognition and respect are prerequisites for participation (Schlosberg 2003). Scheeler offered, "Make sure you respect the participation of tribes not as a special interest group. That is always a problem, people look at tribes as any other special interest group. They are sovereign governments." The issue of how to communicate and partner with a sovereign nation has impeded efforts in the Verde. Several interviewees rightly or wrongly perceive "separate nation status" and “protectionism under the federal government” as insurmountable barriers between cities, county and the YAN.

Recognizing that the entire watershed community depends on shared resources may also prove to be an important part of a relationship. Kevin Scribner, nontribal member and an environmentalist in the Walla Walla observed;

> When you engage with the tribes, the more you understand them. That old cliché, walk a mile in my shoes, walk a mile in my moccasins, is so helpful…. The farmers, they’ll say, I’m a fifth generation farmer… Then, [a tribal member] will say I am 7th generation fisherman…. They both say I have a history here and I want to have a legacy here. Invite people to say what they want their future to be. . . . If you say yes I want to be able use this land and water for my kids, then you have a beginning to start a conversation.

Acknowledging the shared futures of tribal members and irrigators in the Walla Walla watershed provided common ground and has been integral to success.

Given the polarized climate in many watersheds throughout the country, the first step towards a productive partnership may be the most difficult. Ann Sieter, a nontribal member, was the first Natural Resource Department Director for the JSKT. She notes:

> A lot of people have asked me, how do you get the tribes to partner with you? . . . There were efforts by the county to reach out to the Tribe early on, at the elected level, which helped set up the framework for the staff to start to cooperate and build that relationship. Getting started is really hard. Sometimes counties feel like they have extended a hand and been rebuffed. I think, try again, try later, or offer information. . . . If you only wait until you want something from the Tribe, then it is going to be difficult.

Starting the conversation is a clear stumbling block in the Verde. Some nontribal interviewees in the Verde watershed expressed concern over YAN environmental practices that are viewed as irresponsible. At the same time, the white governments hesitate to engage in negotiations about environmental issues with the YAN. Stemming from concerns over water quantity, some nontribal interviewees in the Verde expressed strong opinions on what the YAN should and should not do for future development. In spite of many obstacles, the overwhelming feeling in the Verde was that the stage is set for productive collaboration on watershed issues.

At the Verde Valley Forum in 2004, Chairman Fuller outlined his top five values for the Yavapai-Apache Nation as air, water, management of waste, economic development and education. Diane Joens, a City of Cottonwood council member, responded,

> I was so touched by his speech that day…His Nation is one of the important members of the Verde Valley community. He encouraged everyone to seek a common vision for the area which will support our economy. And he defined his big five values and they're basically the same values that other Verde Valley

> governments think of as priorities, too. His talk made me realize just how much we all have in common.

Many other nontribal and tribal Verde Valley interviewees expressed similar concerns and the need to work together. From the YAN one person noted, "we are seeing the beginnings of efforts, trying to unite on watershed issues." Speaking emphatically on the importance of working together councilwoman Joens said, "This is a big concern of mine…They are our partners and we can't do it with out them and they probably can't do it without us. But mostly we can't do it without them." Both Joens and the Yavapai-Apache tribal member recognize the potential of collaboration.

Despite the barriers that have prevented effective collaborations in the Verde, there are a number of indications that the table is set for a new relationship. After years of hard feelings this relationship could be repaired through respect, understanding and authentic participation. For instance, one unintended outcome from our research has been that the YAN has made a concerted effort to attend WAC meetings. In addition, a representative from the Water Advisory Committee made a presentation to the YAN. While negative baggage between tribes and nontribal communities is a concern, working through past injustices can contribute to goals of healthy watersheds and tribal sovereignty. Building meaningful relationships is a necessary step to future success.

In the Dungeness and Walla Walla watersheds collaborative management has resulted in tangible improvements in water quality, quantity and fish populations. In the Dungeness the trust water right agreement reached between the irrigators and the tribes has drastically improved irrigation efficiency to leave more water in the river for fish (Seiter, Newberry, and Edens 2000). Recognizing the tremendous achievement of this collaborative partnership, Washington State awarded the JSKT and the Dungeness Water

Users Association the Governor's Environmental Excellence Award in 1999. In the Walla Walla, cooperative relationships between the CTUIR, farmers and agencies are also working to leave more water in the river and restore habitat.

While the goals of these collaborative watershed management groups may be directly tied to resolving environmental conflict, there are a host of indirect effects. Tribal empowerment as a consequence of effective collaborations contributes to enhanced social justice and tribal sovereignty. Collaborative watershed management and the very fact that communities are working together increases justice, improves interpersonal relations, and fulfills the basic goals of participatory democracy at the regional level. By carefully assessing the factors that shape tribal participation in collaborative watershed management, we can address broader goals of participatory democracy and tribal sovereignty.

CHAPTER V. CONCLUSIONS AND RECOMMENDATIONS

Accomplishment of research objectives

This research was successful in identifying the factors that encourage or discourage tribal participation in collaborative watershed management. I was also able to shed light on the role of science, both western and traditional in collaborative watershed management. The secondary questions which were developed to answer the driving research questions provided a useful framework and paved the way for the findings in Chapters III and IV.

However, it is difficult to assess with complete certainty the degree to which the overall objectives of this research have been met. Beyond the research questions, the general objective was to elucidate the dynamics of tribal involvement in collaborative management and to ultimately increase the effectiveness of watershed management. On one hand, these are broad and intangible goals that could require decades for fruition. On the other hand, the conversations that have emerged from this research indicate a high degree of responsiveness in addressing the issues at hand. The interviewees were generally enthusiastic about discussing the questions of this research, and subsequent conversations regarding the topic of tribal participation often emerged. Upon receiving the introductory research letters prior to our interviews, several of the interviewees took it upon themselves to write down their thoughts on the role of tribal participation in collaborative watershed management. In the Verde watershed many interviewees were particularly eager to discuss tribal involvement, because they perceived problems and the solutions were not evident. Following the interviews, many participants came away with new perspectives on the issue of tribal participation. After one interview, one person

began brainstorming how she could personally devote time to improving tribal-nontribal relationships. A presentation I gave to the Verde Watershed Association sparked an hour-long discussion about how to cooperate better with the Yavapai-Apache Nation.

During the course of the research I was also fortunate enough to present my work at the following conferences, the Biennial Watershed Council Conference in Sand Diego, California November 2004, the Western Social Science Conference in Albuquerque New Mexico April 2005, the International Symposium for Society and Resource Management Östersund, Sweden June 2005 and the Community Based Collaboratives Research Consortium Conference in Sedona, Arizona November 2005. In addition, informal presentations of the research were given to the following groups, the Watershed Research and Education Program, the Verde Watershed Association, the Walla Walla Basin Watershed Council, and the Dungeness River Management Team. The results of this thesis are combined into two primary papers (Chapters III and IV) which have been submitted to *Society and Natural Resources* and *American Indian Quarterly*. The timely and unexplored nature of this subject encouraged many people to contact me for further information about the project. Based on the feedback received in interviews, informal and formal presentations I can conclude that this research has at the least initiated conversations about tribes and collaborative watershed management.

Furthermore, the concluding sections of chapters III and IV discuss my observation that the stage is set for collaboration in the Verde. Interviewees were stimulated by my research questions and in some cases began making initial steps toward working together. However, time will tell if the Yavapai-Apache Nation will become a more significant player in collaborative watershed management in the Verde Watershed.

Future research

Given that there are few other studies on Native American participation in collaborative management, further research directions are plentiful. Examining the internal dynamics of collaborative watershed groups and the role of minority groups such as tribes is one angle. This research focused on a comparison between the two regions of the United States. An additional viewpoint would be to compare the role of Native Americans in natural resource collaboration with international indigenous peoples such as the Maori in New Zealand or Aboriginal communities in Australia. While case study methodology proved sufficient for approaching this research, additional insight could be gained by varying the methodology. For instance, New Zealand's Department of Conservation and Ministry for the Environment have initiated collaborative participant directed social research to address the role of Maori in Marine Protected Areas (Wilson 2005). Similar participant lead or quantitative studies could be designed to collect further data on the role of tribes in collaborative watershed management in the United States.

Recommendations

Emerging from this research is a series of recommendations for tribes, local communities, and agencies seeking to work collaboratively. The quotes below illustrate the insights offered by all of the interviewees in explaining the dynamics of tribal participation in collaborative watershed management. Further discussion of these suggestions can be found in Chapters III and IV.

Recommendations for Tribes

Consider the impact of sharing your culture with the nontribal community

Nontribal and tribal interviewees in both the Pacific Northwest cases pointed to the Jamestown S'Klallam and CTUIR's emphasis on tying their cultural survival to ecological and political facets of watershed management. In sum, the message of the Pacific Northwest tribes is that cultural survival depends on survival of the salmon and survival of the salmon depends on survival of the habitat. This is a powerful message and one that nontribal leaders have sought to understand and tribal leaders have sought to disseminate. Nonetheless, more education and understanding of cultural practices is desirable in the Northwest. There is even less cultural exchange in the Verde Watershed between the Yavapai-Apache Nation and surrounding communities. Nontribal interviewees in the Verde Watershed almost universally recognized a need to get to know their local tribes better. However, the responsibility of sharing culture is ultimately tied to the Nation's willingness to reach out. The following quote is indicative of an agency perspective in the Pacific Northwest, which has lead to improved relationships between tribal and nontribal entities.

> *"I wish I had a better opportunity to learn more about the (tribal) culture so that I understand it better in all circumstances. They (tribes) just have a different way of thinking than we do and sometimes when they do things, its just because of that different perspective that misunderstanding arise…The tribes try to inform us informally from time to time on some of their religious beliefs [for example] how fish are important to them and to their way of life. That's something they try to work on so they are helping us to better understand their perspective…A major*

step for any agency that is not working well with a tribe, is to better understand that tribe"

-Tim Bailey, Oregon Department of Fish and Wildlife

Prioritize internal tribal capacity building for natural resource management

One of the most glaring differences between the Pacific Northwest tribes and Southwest tribes in this study was the number of tribal employees within the natural resources fields. Growth of the natural resource departments of both the CTUIR and the Jamestown S'Klallam Tribe is relatively recent, and while it is driven by external factors, much of the impetus to build this capacity comes from within the Tribe. The Chairman of the Jamestown S'Klallam Tribe emphasized the importance of prioritizing Natural Resource Department development in the face of competing tribal priorities. Virginia Clark, a nontribal member calls attention to "genuine interest" of the Jamestown S'Klallam Tribe, which has lead to their inclusion in collaborative management.

"If you want to be respected with respect to your unique standing in America as a sovereign government that co-exists with other jurisdictions…then you have to be involved at one level or another…Some tribes don't have that energy or resources but they want to be involved, you really need to step into those forums and be engaged, be respectful if you expect to be respected…a lot of tribes don't have the right leadership....they may be more interested in economic development, gaming, or health care and don't put a lot of energy into natural resources…."

-W. Ron Allen Chairman, Jamestown S'Klallam Tribe

"In summary, the Tribe has been a major contributor, partially because Washington State recognizes the importance of the coast tribes in watershed

planning. But above and beyond that, the genuine interest of the tribal staff and their level of competence have resulted in their being included in a variety of grants and studies that have been done in this area."

-Virginia Clark Ph.D., Dungeness River Management Team member

Recommendations for Nontribal Communities and Agencies

Seek to recognize and understand federal trust responsibilities and sovereign nation status.

Vast discrepancies were revealed among attitudes and understandings of tribal sovereignty in the Pacific Northwest and the Southwest. Interviewees in the Southwest often misunderstood the implications of federally designated sovereignty and viewed the Yavapai-Apache Nation as enjoying a special kind of federal protectionism. To the contrary, in the Pacific Northwest there was generally a higher level of knowledge about tribal legal standing and tribal rights. The following statement stresses the importance of understanding federal and state relationships with tribes as essential for building positive relationships

"Federal, State or NGOS seeking to work with tribes... need to take the time to understand the tribe's legal standing. Understand if they have a treaty what does it protect, what is the strength of the treaty? If they have a government agreement or executive order agreements what is covered under that, so that they can fully understand what their obligations are."

–Carl Scheeler, Wildlife Program Director CTUIR

Be persistent about seeking tribal input

The first step to building a partnership with a tribe can be the most difficult, interviewees in the Pacific Northwest urge persistence and including tribes as early as possible in the planning process.

"A lot of people have asked me, how do you get the tribes to partner with you? . . There were efforts by the county to reach out to the Tribe early on, at the elected level, which helped set up the framework for the staff to start to cooperate and build that relationship. Getting started is really hard. Sometimes counties feel like they have extended a hand and been rebuffed. I think, try again, try later, or offer information. . . . If you only wait until you want something from the tribe, then it is going to be difficult."

-Ann Sieter, Former Director Natural Resource Department Jamestown S'Klallam Tribe

"Its pretty simple, reach out to them.…the tribes are always just a phone call away. Even if you don't know who to call its no different from if you don't know who to call at any other government or agency. The same is true of tribes."

-W. Ron Allen Jamestown S'Klallam Tribe

Be willing to commit long-term.

Watershed planning is almost always a lengthy process. The following quote from Kat Brigham recommends that anyone seeking productive watershed management partnerships should recognize that long-term commitment to planning and implementation is crucial.

"Be willing to commit. We have also had people come up and say we want to work with you and then they're gone, they don't follow through…If there is an agency who wants to work with a tribe they need to be willing to listen commit and implement."

-Kat Brigham, CTUIR Board of Trustees

Recommendations for All Stakeholders

Invite people to share their stories and find common ground.

Scholars and practitioners of collaboration consistently encourage stakeholders to identify common ground as a basis for their partnership. Kevin Scribner and Brian Wolcott echo this sentiment.

"One night we posed the question; what would happen if the cowboys and Indians got together on this?....Those two cultures realized that they of anybody in the Basin had the most history with the land and the desire to have a legacy into the future with the land and the water….It was almost a tearful recognition…We decided we should work together"

- Kevin Scribner, Environmentalist Walla Walla Watershed

"Find common ground and see what assets you might have that you could bring to the table that would help the tribes meet their goals and hopefully create some type of mutual relationship"

-Brian Wolcott Director Walla Walla Basin Watershed Council

Get to know key tribal, community, and agency leaders.

One of the factors that has contributed to the positive relationship between tribal and nontribal entities in both Pacific Northwest cases is one-on-one relationships. For

example, Oregon Department of Fish and Wildlife and the CTUIR work well together because of the… *"personalities of individual people…Gary James (CTUIR Fisheries Department Director) and I get along very well, on a policy level sometimes we disagree… there has always been a pretty good relationship between myself and the other ODFW staff and the tribal staff for the most part…that is where it all begins."*

-Tim Bailey, Oregon Department of Fish and Wildlife

Seek to influence policy that emphasizes comanagement or cooperative management

The successful comanagement regimes of the Pacific Northwest are relatively recent and closely tied with court cases and legislation that directed comanagement for tribes and states and other local partners. Although Federal trust responsibilities exist nationwide, cases like *United States vs. Washington* and *United States vs. Oregon* helped confirm a mandate for collaboration in the Northwest. In the Southwest, interviewees spoke of possible action by Senator John McCain to work collaboratively on water issues, if this happens tribal involvement will be essential. Below Kat Brigham, nearly thirty-year veteran of Pacific Northwest watershed planning, describes her Tribe's progression to becoming a productive partner and a representative of the Oregon Department of Fish and Wildlife describes how the state views the tribes today.

> *"I can remember a time when the states, the counties and the cities did not listen to us, did not want to work with us. It was only after a person, a key congressional representative said 'work with the tribes' that we began to make progress…. It is when a key person says we need to work with the tribes or legislation is passed that says it's important to work with tribes that tribes have a say."* For example*," the Northwest Power Planning Act says 'including tribes', and there have been*

federal court cases like US. vs. Oregon that say you have to do this to meet tribal trustee responsibilities…."

-Kat Brigham, CTUIR Board of Trustees

"The relationship with comanagement with the tribes is a mandate…and is something my supervisors are very keen on maintaining."

-Tim Bailey, Oregon Department of Fish and Wildlife

Recognize potential implementation and financial benefits of tribal and nontribal entities working together.

Private, federal, and state funders of watershed improvement projects are much more likely to award projects that demonstrate cooperation between multiple stakeholders; interviewees in the Pacific Northwest recognize this and frequently work together. They also acknowledge the benefits of sharing resources (personnel, technical expertise, equipment, etc.) as an advantage of collaboration.

"The only thing I would say is that cooperation and partnerships get the problem solved for a lot less dollars in a lot less time than litigation. Our motto was cooperation not litigation."

-Mike Jeldness, Dungeness Irrigators Association

"I guess you could say they (the Jamestown S'Klallam Tribe) get it. They get that there is a real advantage to participate and collaborate with the Anglo government. Part of it is funding. A lot of grant sources recognize and are willing to award groups who collaborate."

-Steve Tharinger, Clallam County Commissioner

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APPENDIX A. SAMPLE INTERVIEW QUESTIONS

Nontribal Affiliated Interviewee

What is your current position? How long have you been in this role?

What initiated the formation of your watershed group?

What is your understanding of your watershed group's objectives?

Are members required to attend meetings and participate? Is the tribal seat filled?

What is the decision-making authority of the collaborative watershed management group?

What is the nature of your relationship with the tribes in your watershed?

What factors have contributed to the positive working relationship between the Tribe and collaborative watershed group?

In what way do you collaborate with the tribe in your watershed?

Have you encountered discussion of any cultural issues in watershed planning discussions?

How is this tribe different from other tribes you may work with?

What kind of incentives are there for tribal participation?

What role does leadership play in the involvement of the tribe in collaborative efforts?

Is there potential for tribes to leverage additional funding for implementation projects by participating?

How has tribal participation changed over the years?

Are there specific values, beliefs or practices of the CTUIR people that you think have contributed to the successful cooperative watershed efforts?

Has traditional ecological knowledge played a role in the development of watershed plans?

Do adequate resources exist to support the planning and coordination of your watershed group?

Do you have any recommendations for agencies that may be having difficulty working with tribes?

What additional factors do you think contribute to participation by the Tribe in collaborative watershed planning?

Would it be beneficial to have more collaboration with the tribes? What are the limitations to this?

Can you suggest anyone else that I should talk to?

Can I contact you with further questions?

Tribal Affiliated Interviewee

Have you participated (and to what extent have you participated) in the collaborative watershed group in your region?

What is the decision-making authority of the WWBWC?

Has your tribe conducted independent watershed planning processes?

What factors do you think contribute to participation by your tribe in collaborative watershed planning?

Have you encountered discussion of any cultural issues in watershed planning discussions?

Can you describe some cultural or religious connections to water among your tribe?

How is your tribe different from other tribes you may work with?

What kind of incentives are there for tribal participation?

What role does leadership play in the involvement of the tribe in collaborative efforts?

What is the relationship of the tribal council to the natural resources staff?

Is there potential for tribes to leverage additional funding for implementation projects by participating?

How has tribal participation changed over the years?

Are there specific values, beliefs or practices of your tribe that you think have contributed to the successful cooperative watershed efforts?

Has traditional ecological knowledge played a role in the development of watershed plans?

Do adequate resources exist to support the planning and coordination of your watershed group?

Has there been any issues of access to natural resources on public lands by tribal members?

What additional factors do you think contribute to participation by the Tribe in collaborative watershed planning?

Do you have any recommendations for agencies that may be having difficulty working with tribes?

Can you suggest anyone else that I should talk to?

Can I contact you with further questions?