

University of Nevada, Reno

**Stakeholder Participation in Watershed Management Negotiations: A  
Case Study from the Klamath River, Oregon & California**

A thesis submitted in partial fulfillment of the requirements  
for the degree of Master of Science in  
Geography

by

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## ABSTRACT

In water governance, where problems are controversial and value laden, different forms of stakeholder involvement in environmental dispute resolution and collaborative techniques have become more common, and in many circumstances have been required. Stakeholder participation is often recognized as fundamental to the legitimacy and success of negotiated environmental dispute decisions, but the intricacies of what influences stakeholders' participation has received less attention. This thesis examines factors that influenced stakeholder participation in the Klamath Basin Restoration Agreement and Klamath Hydroelectric Settlement Agreement of 2010. The thesis considers water as a part of power relationships of everyday life, which subjects it to social struggles along class, ethnic, and political lines for access and/or control. Also, that the power dynamics within/between stakeholder organizations is complex. The research draws on in-depth, semi-structured interviews of a sample recruited from stakeholder organizations in the Klamath River Basin (an interstate basin). Interviewees consisted of representatives from state and federal agencies, tribes, commercial fishing organizations, irrigation agencies, conservation organizations, and a utility company. Data analysis was completed using a qualitative grounded theory approach and results indicate that stakeholder participation is influenced by stakeholder objectives, past experiences, relationships, the political and geographic context, process legitimacy, the regulatory framework, personal values and identity, process support and progress, and process results. Factors that influenced participation in the Klamath context are consistent with factors influencing participation discussed in the literature but add a more nuanced and

contextualized understanding of the dynamics that influence participation and its implications. This work suggests that the factors that influence participation not only inform whether stakeholders chose to participate (or not), but also informs how they participate in negotiated environmental dispute decisions.

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*Chapter 1***INTRODUCTION****Background**

“Water is not a science issue, it is socio-political. Yes, we all want and need good science, but it is not enough. The challenge is to reconnect people who hold different values and restore civility. To depersonalize our conflicts, to create options for mutual gain, to each be a keeper of the other’s dignity, to have open, conflicting discussions about experiences and values including pride, self-reliance, intergenerational equity, and yes, even fear.... Today, watershed planning may be as much about strengthening local communities and democracy as it is about resource management.”

~ Baril, 1996

The American West is defined not only by its landscape and aridity but also by the networks of dams, canals, and levees that crisscross its topography (Hanak et al., 2011). As populations continue to expand in the West, water use, allocation, and protection will increasingly be an issue of contention in the economic, environmental, and social sectors of society. Governance of water resources raises a host of unique challenges intertwining the physical attributes and resources of the land with the social demands and technological advancements of society, creating a demand for coordinated planning at relevant physical and social scales (Kenney, 1999).

Far from a modern day phenomena, strategies to manage and organize water use, allocation, and runoff have been an integral part of Western United States history. John Wesley Powell, a notable explorer and scientist for the United States Geological Survey (USGS) identified a multitude of water issues concerning the West more than 125 years ago. Powell believed and stated in his report on the arid lands of the West in 1879, “that the West's success, perhaps its survival, would depend on the ability of people to cooperate in the allocation and development of water” (Reid, 1995 p. 1). Certainly a

pioneer of his time, Powell foresaw the extent to which water in the West would become a point of contention, creating a need for people to cooperate and make decisions regarding use and allocation together across social and political boundaries.

Over the past century watershed management has progressed towards a more collaborative/participatory-based system and in water governance, where problems are controversial and value laden, different forms of stakeholder involvement in environmental dispute resolution (EDR) and collaborative techniques have become more common, and in many circumstances have been required (Sabatier et al., 2005). Multi-stakeholder participation has demonstrated value in resolving natural resource conflicts and legitimizing management decisions from the perspective of the stakeholder (Wondolleck & Yaffee, 2000; Brunner et al., 2002; Conley & Moote, 2003; Sabatier et al., 2005). In particular, stakeholder participation has the potential to increase social trust (individual to individual) and official trust (institution or organizational) (Sabatier et al., 2005), increase democratic accountability (Weber, 2003), build institutional capacity (Maggioni et al., 2012), and promote creative decisions that are more representative of stakeholders and their interests (O'Leary & Bingham, 2003; Rudeen et al., 2012).

Increasingly, federal and state agencies are embracing participatory approaches for natural resource decisions (Sabatier et al., 2005; Weber, 2003; Wondolleck & Yaffee, 2000). However, skeptics of the participatory/collaborative model caution that stakeholder engagement can be challenging to maintain due to issues of time and cost (Sabatier et al., 2005), that the public is ill-equipped to deal with the complex nature of analyses that is needed for good environmental decisions (National Research Council, 2008), and that participatory processes seldom achieve equity in process and outcome (Maggioni et al.,

2012). While participatory processes promote stakeholder engagement, these critiques point to the potential shortcomings and complexities associated with the participatory process and the need for a more nuanced understanding of why, how, and when stakeholders participate in these processes (Sabatier et al., 2005).

In the Klamath River Basin, water conflict and resource allocation disputes have plagued the Basin since the development of a federal water project in 1905 (Powers et al., 2005) and more recently have acted as a symbolic rallying cry for people on both extremes of the national debate about environmental protection. Presently both local and national stakeholder groups are seeking to resolve water resource conflicts in the Klamath Basin through a participatory, stakeholder driven process. Within this process two controversial companion agreements were developed in 2010: the Klamath Basin Restoration Agreement (KBRA) and the Klamath Hydroelectric Settlement Agreement (KHSA), which have been posited by some as generating an historic *peace on the river* (Doremus & Tarlock, 2008). However, current implementation issues and vocal opposition towards the agreements has generated questions regarding the agreements and their development process (Doremus & Tarlock, 2008).

Development of the KBRA and KHSA relied on diverse stakeholder participation and engagement, a critical component of collaborative and environmental dispute resolution (EDR) processes. However, an understanding of the motivations and influencers of stakeholder participation in the Klamath Basin agreements remains unclear and speculative.

### **Objectives and Justification for Study**

The Klamath Basin located in northern California and southern Oregon, drains a

vast lightly populated region, traveling 263 miles before emptying into the Pacific Ocean off the northern California coast (Powers et al., 2005). For water management purposes the watershed is divided into Lower and Upper River Basins. Both the Upper and Lower Basins are nearly equal in size, but they are geographically, biologically, and socially distinct. The Upper Basin lies largely in Oregon with a semi-arid climate, while the Lower Basin lies largely in California with a wet and rainy climate.

Conflict in the Klamath Basin is not a new concept and the media has painted natural resource debates in the simplistic fashion of *fish versus farmers* (Doremus & Tarlock, 2008). However, the conflicts in the Basin are much more complex and highlight four fundamental themes common in many natural resource disputes: the historic preservation of resource entitlements granted without recognition of competing interest; the clash of fundamental ideologies closely intertwined with natural resources use; pervasive uncertainty, not just over environmental impacts of resource use but also over the priority to be assigned to competing entitlements; and conflicts extending across political, social, and physical boundaries (Doremus & Tarlock, 2008).

The stakeholders of the Klamath Basin have attempted to negotiate these challenges and uncertainties with diverging strategies: strict application of law; absolute faith in science; infusions of emergency federal money; and stakeholder negotiation. Taken alone, none of those strategies have produced a lasting solution but all have in some way affected and influenced the stakeholder's perceptions of the conflicts in the Basin.

In an attempt to aid in collaborative/EDR management strategies for natural resource conflicts and understand the complexities of stakeholder participation, this study

was developed to investigate: *what influences stakeholder participation in EDR negotiations in water resource management?* More specifically, the study of the KBRA and the KHSA in the Klamath River Basin provide the opportunity to learn from stakeholders who are knowledgeable of complex stakeholder negotiations.

In this study, participation is characterized by the “direct involvement of an array of people in the decision making and implementation of water policy or management,” and at a minimum, “involves individuals and/or collectives having an opportunity to express their voices and articulate their arguments in a public forum” (Berry & Mollard, 2010, p. xx). In this study I focus on stakeholder participation rather than broader public participation, where stakeholders are defined as an “interested and/or affected party” (p. 20) including both governmental and non-governmental stakeholders (Sabatier et al. 2005). I focus on stakeholder participation because for purposes of efficiency, many collaborative/participatory efforts in the Western U.S. focus on engaging those who hold a stake (whether directly or indirectly) in the scope of their initiative, rather than attempting to meaningfully engage with the wider public.

Twenty-two in-depth, semi-structured interviews were used to generate an understanding of what influences participation. Understanding how, why, and when stakeholders participated in the Klamath Basin agreements provides preliminary data for a more nuanced understanding of stakeholder participation. The commitment to collaborative/participatory frameworks for management is clear- even in the face of criticism from skeptics, collaboration is the preferred management regime in a plethora of domains (Kenney, 1999). In considering the prevalence of collaborative/participatory processes, the factors that influence stakeholder participation offer an insight to

understanding the nuances that underlie decisions to participate or not.

The following six chapters relay the development and findings of this study in detail. Chapter two explores the literature focusing on three interconnected dimensions that together provide a background for examining what influences stakeholders to participate (or not) in negotiated watershed management processes: the current paradigm of watershed management (collaborative/participatory) and how conflict and power are an inherent aspect of these processes; the role of EDR in watershed management and its potential influence on the collaborative process; and social and stakeholder participation in watershed management, focusing on factors that either encourage or discourage participation in negotiated environmental processes.

The third chapter introduces the geography of the study site, an overview of the stakeholders, the regulatory frameworks and water rights in the Basin, and the lead up to the KBRA and KHSA. The method choice, implementation, and analysis approach used in this study are defined in the fourth chapter, and results are presented in the fifth. The sixth chapter discusses the findings of this study within the context of the literature addressing not only what influenced whether stakeholders participated but also what influenced how they participated. The last chapter concludes by reviewing this study, its strengths and limitations, and recommends future directions for further study.

## *Chapter 2*

# **LITERATURE REVIEW: COLLABORATIVE MANAGEMENT, EDR, & SOCIAL PARTICIPATION**

### **Introduction**

There has been a great deal of attention and resources dedicated to understanding collaborative or participatory watershed management initiatives by both researchers and government agencies at the local, state, and federal levels (Hinchcliffe & Thompson, 1999; Wondolleck & Yaffee, 2000; Sabatier et al., 2005). However, there has been less research focused on the dynamics of why, how, and when stakeholders participate in these processes (Sabatier et al., 2005). Beyond the physical environmental need to remedy degrading and stressed watershed systems, there is a need for a more in-depth understanding of the personal and external social factors that inform stakeholder decisions to involve themselves in the management process. Stakeholder involvement or non-involvement in collaborative processes has more obvious and well-researched implications on process outcomes (Hinchcliffe & Thompson, 1999; Wondolleck & Yaffee, 2000; Sabatier et al., 2005), but what is far less obvious is **what influences how and why this choice to participate is made.**

This chapter is focused on three interconnected dimensions that together provide a background for examining what influences stakeholders to participate (or not) in negotiated watershed management processes. The first dimension explores the current paradigm of watershed management (collaborative/participatory) and how conflict and

power are an inherent aspect of these processes. The second dimension examines the role of EDR in watershed management and its potential influence on the collaborative process. The third and final dimension explores social and stakeholder participation in watershed management, focusing on factors that either encourage or discourage participation in negotiated environmental processes. These three dimensions generate the contextual lens to study stakeholders' motivations to participate.

### **Watershed Management, Power, and Social Processes**

There has been a fundamental shift from previous eras in the way decisions are made in the United States concerning land and water resources. Coined as *The Watershed Collaborative Era* (Sabatier et. al., 2005), this shift in management style developed in response to three defining frustrations of the previous Environmental Era: the fragmentation of environmental programs and regulations across numerous agencies, deadlocked negotiations and legal proceedings, and the inadequacies of public involvement in decision making processes (Schlager & Blomquist, 2008). Federal agencies such as the Environmental Protection Agency (EPA) state, "all parties with a stake in the specific local situation should participate in the analysis of problems and the creation of solutions" (p. 1) and "the actions undertaken should draw on the full range of methods and tools available, integrating them into a coordinated, multi-organizational attack on the problem" (p. 1) (U.S. EPA, 1991). Along with the federal emphasis on collaboration, environmental organizations such as The Nature Conservancy have made similar statements: "We work with local governments, communities, and partner organizations in sharing our science-based and collaborative methods to ensure each

region's need" (website) (The Nature Conservancy, 2012). Across the Western U.S and the world, communities, nongovernmental organizations, land management agencies, and landowners are turning to collaborative/participatory decision-making strategies, rather than top-down, agency-oriented planning as the preferred strategy in a plethora of management domains (Kenney, 1999).

The collaborative movement consists of many types of partnerships that include various monikers, including: participatory management (Hinchcliffe & Thompson, 1999), watershed partnerships (Leach & Pelkey, 2001), watershed initiatives (Kenney, 1999), community-based conservation (Meffe et al., 2002), and integrative watershed management (Schlager & Blomquist, 2008). These resource management strategies vary by structure, leadership, participation, direction, organization, funding, boundaries, and objectives, but all contain a common thread of diverse stakeholder participation, relying on local input for solutions to natural resource management concerns.

Importantly, it should be understood that all collaborative groups are inherently dynamic and for the purposes of this review a working definition of collaborative watershed management, adapted from Sabatier et. al. (2005) includes the following: voluntary association of multiple and diverse stakeholders; unification geographically by a watershed or political boundary; and goals to reach mutually agreeable solutions. Groups may be a direct result of community interests, the result of an agency's effort to involve local stakeholders, or a complex conglomeration of both, typically involving face-to-face negotiations. Funding for planning and implementation efforts may come from a variety of sources.

Water and watershed management in all its forms have long been the domain of

environmental and social conflicts ranging in scale from neighborhoods to international disputes. Regardless of the current management preference, water is a part of power relationships of everyday life, making it subject to intense social struggle along class, gender, and ethnic lines for access and/or control (Swyngedouw, 2004). Particularly, within the context of collaborative/participatory management strategies where diverse stakeholder representation and participation is fundamental (Sabatier et al., 2005), the social and power dynamics present ultimately influence the direction and evolution of the management process. Swyngedouw (2004) articulates the interconnectedness of both social and physical environments suggesting that environmental conditions (good, bad, or somewhere in-between) are not independent of the historical, social, political, and economic conditions that accompany them. Put more simply, environments are continually being reconstructed by different social actors for different ends (Steinberg & Clark, 1999). The discursive and physical manipulation of the environment may be a means of resistance as well as one of hegemonic power (Steinberg & Clark, 1999), suggesting that resulting watershed management is always a product of social relationships influenced by both the current environmental constraints and relationships of power among users (Swyngedouw, 2004).

In *Justice, Nature, and the Geography of Difference*, David Harvey (1996) expands on this notion, articulating that all environmental discourses are arguments about society and represent a complex array of different struggles occurring within the social process. Harvey argues that each discourse regarding the environment shapes a unique blend of complicity and dissent with respect to existing beliefs, institutions, material practices, social relations, and the dominant system of organizing political-economic

power, revealing much about the pattern of social conflict in all aspects of social actions. He follows this idea by asking the question, “what effects does the privileging of [the current dominant discourse] have on beliefs, the functioning of institutions, social relations, material practices, and the like” (p. 373)? To answer this Harvey (1996) suggests understanding the dominant discourses regarding the environment present in the late twentieth century to gain insight as to why those discourses hold the particular positions they do and how that in turn influences stakeholder participation in environmental management decisions.

The four dominant views of environmental discourse Harvey (1996) articulates include the standard view, ecological modernization, wise use, and environmental justice, which all warrant a discussion and description of their attributes. The standard view of environmental management takes the approach of intervening after environmental issues or events have occurred (Harvey, 1996). This partly stems from the belief that environmental concerns should not stand in the way of progress and any environmental difficulties can be dealt with in large part through remedial sciences. The standard view of environmental management does not challenge basic rights for private property, and profit maximization and concerns for environmental justice are kept strictly subservient to concerns for economic efficiency, continuous growth, and capital accumulation (Harvey, 1996). Harvey (1996) notes that the only general problem admitted under the standard view is market failure, which can be dealt with by the state evolving a regulatory framework or mandating standards that entities must meet with respect to resource management. It must be noted, though, that state intervention is limited under the standard view by two considerations:(1) intervention should only occur when there is

clear evidence of serious damage through market failure and damage can be quantified, and (2) there is a zero-sum tradeoff between economic growth and environmental quality. A multitude of discourses (environmental law, planning, etc.) are embedded within the standard view of environmental management and its associated practices, institutions, beliefs, and powers ascribing those discourses distinctive power, which potentially influences the way in which stakeholders approach participation in environmental management processes.

The environmental discourse of ecological modernization promotes a belief that economic activity systematically produces environmental harm and that society should adopt a proactive stance towards environmental regulation (Harvey, 1996). Ecological modernization promotes a strategy towards *sustainable* economic growth and development to ensure the rights of future generations (Harvey, 1996). Forming out of a dissatisfaction with the standard view, ecological modernism addressed some of the shortcomings of the standard view, including the growing irreversibility of environmental problems, the inter-connectedness of many environmental problems which demands a collective action beyond political borders, and the supposed tradeoff between environmental concerns and economic growth in zero-sum terms (Harvey, 1996). Within the discourse of ecological modernism, environmental equity takes a more prominent role and the finding of solutions to problems is no longer seen as the exclusive province of governments or nation states but includes more local and international players. As a discourse, Harvey (1996) argues that ecological modernization does not challenge the capitalistic economic system head-on, although it does imply strict regulation of private property rights and can curb the possibilities of uncontrolled capital accumulation, which

the standard view could not. Although Harvey (1996) warns that ecological modernization is a "...discourse that can rather too easily be corrupted into yet another discursive representation of dominant forms of economic power (p. 382)" and affects the manner in which watershed management is carried out if institutionalized.

The wise use discourse towards environmental management has roots in classical liberal theories based in part on the inalienable right of individuals to mix their labor with the land in such a way as to make the earth more productive (Harvey, 1996). It is also strongly related to the notion that private property owners will improve rather than diminish the ecological value of their land if left to their own devices to bear the fruits of their labor (Harvey, 1996). The wise use discourse in the Western United States has its roots in the opposition towards the powers of the federal government to regulate private property and argues that a highly decentralized property-owning democracy would serve the environment best (Harvey, 1996).

The environmental justice discourse towards environmental management is the most at odds with the three previous discourses discussed. Harvey (1996) highlights five central features of the environmental justice discourse: (1) inequalities in protection against environmental hazards are abundant in capitalistic societies and prioritizing this at the top of the environmental agenda is central to environmental justice discourse; (2) expert and professional discourses are accepted as valuable but taken with skepticism and not the primary framers of the arguments within the discourse; (3) the survival of people (mainly focused on the poor and marginalized) is the center of the argument; (4) environmental justice discourse encompasses both ecological and social justice goals, allowing for diverging positionalities as to what the mechanism of injustice are (class,

race, etc.); and (5) the emotive nature of social identity connection with environmental degradation promotes an intense discourse reaching well beyond environmental problems of cause-and-effect pollutants to the realms of cultural imperialism. Harvey (1996) also notes that the environmental justice discourse does not monetize environmental justice concerns due to the recognition that money is always a form of social power and an instrument of discipline in social relations.

Recognition of the implications of the dominant environmental discourses is necessary if a just and empowering process of watershed management is to be achieved. The dominant environmental discourses influencing watershed management processes have the potential to greatly skew the power relationships at the negotiating table and ultimately influence participation by stakeholders. As Harvey (1996) explains, “a politics which seeks to eliminate the process which gave rise to a problem looks very different from a politics which merely seeks to give full play to differentiated identities once those have arisen” (p. 363). Collaborative/participatory management emphasizes its ability to curb conflict by facilitating empowerment and acknowledging the needs of the marginalized (Mollard & Berry, 2010), but issues of inequity have the potential to carry over to the efforts of collaborative/participatory approaches and become even more masked by the illusion of representation (Mutz et al., 2002). These relationships of power have the potential to influence stakeholder participation in these processes, which may ultimately ignite, delay, or defeat a collaborative process.

### **Role of Environmental Dispute Resolution in Watershed Management**

Dispute resolution techniques are a common theme in collaborative/participatory approaches to watershed management (Bush & Folger, 1994; D' Estrée & Colby, 2004).

Similar in nature to the ideals of the collaborative/participatory approach, and often a component of that approach, EDR literature has played an important role in developing a framework both stakeholders and practitioners have used to approach negotiated settlements. EDR is a subset of the larger category conflict resolution, which involves issues such as economic development, health, race and ethnicity, and governance, and EDR often includes a combination of these issues (Dukes, 2004). Dukes (2004) presents EDR as an umbrella term encompassing many of the same ideals and terms present in the collaborative/participatory framework, suggesting that collaborative/participatory management regimes are encompassed in EDR frameworks.

For the purpose of this review, EDR refers collectively to a variety of approaches that allow parties or their representatives to meet face-to-face in an effort to reach a mutually acceptable resolution of the issues in an environmental dispute (Bingham, 1986). Deliberation is intended to enhance participants' education and understanding of relevant issues and the process typically includes multiple sectors representing diverse and often conflicting perspectives (Dukes, 2004). EDR may or may not include a third party mediator or facilitator (Dukes, 2004).

In a review of EDR literature, Dukes (2004) discussed a multitude of structural questions pertaining to EDR processes that lend themselves to understanding the effect of EDR within environmental management regimes and its influence on stakeholder participation. Two particularly relevant questions presented in Dukes (2004) include: (1) how does EDR compare to other ways of addressing environmental conflicts; and (2) is there evidence of change in participants relationships and conflict management skills? A discussion of these concepts and their potential influence on stakeholder participation

follows.

### **How EDR Compares to Other Ways of Addressing Environmental Conflicts?**

Distinction between EDR processes and more traditional management procedures such as litigation, administrative decision-making, and adjudication present a challenge when assessing the effect of EDR processes versus more traditional means of management. Many environmental conflicts play themselves out in a number of forums involving a variety of processes (Dukes, 2004). EDR influences, and in turn is influenced by, other processes and the distinction between the processes can be hard to ascertain. Buckle & Thomas-Buckle (1986), describe this interplay: "... for the parties, the relationships among mediation, direct negotiation among themselves, legislative politics, regulatory process, media-based efforts at persuasion, litigation, and many other events influencing the outcome of the conflict are typically complex, constantly variable and mutually interactive..." (p. 64). This statement highlights that EDR processes are less often alternatives and more often one part of a complex conglomeration of processes (Dukes, 2004) which underline the challenges in comparing EDR processes to other ways of addressing environmental conflicts.

O'Leary and Bingham (2003), advocates of EDR methods, suggest that there are several advantages to using EDR strategies during negotiated settlements, including: (1) less risk for the parties, as opposed to winner take all litigation; (2) a reduction in court cost, legal fees, and conflict related expenses; (3) an increase in efficiency of the outcome; and (4) an increased likelihood of achieving a stable agreement. They go on to say that when all parties are at the table, there is a better chance that all the relevant issues will be raised and that the parties will be better situated to make efficient trades and make

decisions that effectively address the substantive nature of the dispute (O'Leary & Bingham, 2003).

Critics of EDR processes challenge the stated advantages, citing the very same potential advantages as drawbacks. Foley (2007) cites the serious challenges associated with measuring the speed and cost of EDR and comparing these measures with other resolution options. Smith (1996) notes the problematic nature of measuring EDR agreement stability based on the untested assumption that the agreement itself is fair for the parties, the community, and the environment. Furthermore, Coglianese (2003) views participant satisfaction as an inadequate way to assess *success* because such a measure excludes the views of the non-participating public at large, who may well not be satisfied with the process, and even if they are, to then equate this assessment to good public policy is at best ill-founded.

Amidst all of the pros and cons of the EDR process and the challenge associated with distinguishing between EDR processes and other forms of management, the question of representation of stakeholders still remains. Missing key parties greatly skews the outcome of any success of the frameworks mentioned (Sabatier et al. 2005). A discussion of why stakeholders choose to participate in these processes needs to be addressed to paint a more complete picture of EDR processes.

**Evidence of Change in Participants Relationships and Conflict Management Skills.** Relationship change between participants as a result of EDR processes is well documented (Talbot, 1983; Susskind & Weinstein, 1980; Dukes, 2004) and very relevant to understanding stakeholder participation in EDR or collaborative processes. D'Estree and Colby (2004) presented five ways of measuring relationship change in EDR which

include: (1) a reduction in conflict and hostility, which uses indicators to gain a sense from actions, rhetoric, or tone of communication that conflict is escalating or de-escalating; (2) an improvement in relations, with the original relationship as a baseline, using indicators, such as discussing the relationship itself, tone of communication, and level of trust, as evidenced by adherence to formalities; (3) a cognitive and affective shift, which involves using indicators such as the way parties refer to one another, how they describe or explain the other parties' behavior, and changes in their narratives to include the other parties; (4) an ability to resolve subsequent disputes, which includes implementing the agreement outcome, using indicators such as constructive problem solving and developing and sustaining an ongoing relationship; and (5) a transformation, which is measured by indicators of empowerment, recognition of others' circumstances, and other major shifts in perception.

In an analysis of methods to measure the success of EDR processes, Foley (2007) noted that EDR processes might *fail* in outcome terms, but responses about participant satisfaction nevertheless assert strong elements of transformative success. Participants speak of gaining a better understanding of the other parties' interests and perspectives and breaking down stereotypes of each other as parties spend time face to face and listening to each other (Buckle & Thomas-Buckle, 1986). The potential for relationship change and possible relationship building even in *failed* EDR processes demonstrates a dynamic among stakeholders that is complex and may lend itself to influencing stakeholder participation.

### **Stakeholder Participation**

The success of EDR and collaborative approaches rely on the inclusive

participation of many involved parties in the decision-making process. As resource planning and management agencies steadily embrace these techniques in watershed governance, the role of stakeholder participation and its implications become even more important in understanding the effectiveness of the collaborative approach. Within the body of research on collaborative watershed decision-making and EDR there are a handful of evaluations of both the public and official stakeholders, and the social dimensions that impact the participatory process (Sabatier et al., 2005; Berry & Mollard, 2010). Although according to Lubell (2004) there is limited information on the range of public participants or *grassroots stakeholders* (people who actually use the resource) to indicate the extent to which participants mirror community diversity and the impact that has on the effectiveness of the process.

For the purposes of this review, participation is characterized by the “direct involvement of an array of people in the decision making and implementation of water policy or management,” and at a minimum, “involves individuals and/or collectives having an opportunity to express their voices and articulate their arguments in a public forum” (Berry & Mollard, 2010, p. xx).

### **Factors Influencing Participation**

Within the body of literature on stakeholder participation, a review found that factors which influence stakeholder participation or non-participation in negotiated watershed agreements are predominantly situated within three broad categories: the character of individuals, the context of the environmental conflict, and the process itself (Tuler, 2002). Within these three categories a multitude of themes affecting stakeholder participation are present and discussed below. They have been organized into themes that

reflect an effort to make sense of the factors that influence participation, but should not be thought of as representing any sort of consensus in the literature or encompassing the entirety of factors that may influence participation.

**Objectives.** Tuler et al. (2002) completed a study that assessed the motivations for participation or non-participation by local government officials in a national estuary program and found that respondents paid a great deal of attention to the objectives of a collaborative/participatory process in two ways. First, people wanted to make sure that the objectives of a process were consistent with their personal or professional agenda. For example, Tuler et al.'s (2002) study showed that respondents who did not see problems with the particular environmental conflict being addressed did not have an interest in participating. One non-participant stated: "No obvious problem [with the estuary]. Why waste my time?" (p. 110). Others discussed whether their participation would make a difference in terms of achieving their objectives. Potential participants wanted to be sure that their efforts were needed and would not be wasted. For example one respondent asked the question before participating in a program: "Do I have the insights and skills that are needed here?" (p. 107).

Second, the clarity of objectives, or the strategy of the process to achieve those objectives, has also been cited as an important factor in influencing participation. Tuler et al.'s (2002) study assessing participation by local government officials demonstrated that some participants were discouraged by a lack of clarity and focus in project meetings. One respondent stated: "I mean at the beginning, people said, what's going on? What are we doing? Why are we doing it? Why are we spending so much time talking? And it just became grueling." (p. 110). Leach & Pelkey (2001) expanded on the influence of the

clarity of process objectives, or the strategy of the process to achieve those objectives, discussing the attributes of various recommendations within the literature concerning decision-making style. They found that recommendations were varying, some suggesting flexibility and informality as an advantage and others citing a need for formal mechanisms for enforcing partnership agreements. The discrepancy in the literature regarding process objectives and procedures in terms of best practices highlights the importance and potential impact of process strategy and objectives on potential participants decision to engage or not in a participatory process.

**Past Experiences.** People's experiences play an important role in influencing their decision to participate. The level of trust for other participants and the reputation or personalities of other stakeholder groups are taken into account by potential participants when deciding whether to participate or not (Sabatier et al., 2005; Tuler et al., 2002). Past experiences of participating in a similar process before, for better or worse may also influence participation (Tuler et al., 2002).

Sabatier et al. (2005) developed a number of strategies that encourage stakeholder participation based on social and official dimensions of trust that stakeholders have prior to engaging in a process. They developed four strategies depending on the combination of trust stakeholders have with each other and with officials. The strategies are recommendations as to how to design a participatory approach that acknowledges the importance of trust levels between stakeholders.

In a study assessing farmers' perceptions of the effectiveness of a local watershed initiative in Florida, Lubell (2004) found that trust in the local government displayed a positive influence on participation. Furthermore, he noted that farmers' relationships with

local government officials are critical based on the local government's role of communicating expectations about political agreements and policy promises to the farming community. Mistrust of local officials has the potential to hinder farmer participation (Lubell, 2004).

In a case study investigating the relationship between collaborative processes and their results, Rudeen et al. (2012) interviewed participants of an inactive collaborative group and analyzed their perceptions of success and the role of consensus in the group's process and outcomes. The results of the study showed that participants perceived many benefits from collaboration, such as improved communication and relationships. However, the group was unable to reach consensus and one-quarter of those interviewed indicated that they were less likely to collaborate in the future due to their experience.

**Relationships.** As discussed in the EDR literature above, relationships in participatory process have mainly been discussed in terms of the ability of participatory processes to transform relationships between conflicting parties (Foley, 2007). D'Estree & Colby (2004)'s discussion of their five ways of measuring relationship change in EDR highlights the emphasis on the transformative nature that EDR and collaborative process can have relationships, ultimately influencing how stakeholders approach subsequent participatory processes. Buckle & Thomas-Buckle (1986) highlight this idea, discussing how participants have spoken of gaining a better understanding of the other parties' interests and perspectives and breaking down stereotypes of each other. This development of relationships also enhances stakeholder's perceptions of process outcomes, even if desired results were not achieved (Foley, 2007; Rudeen et al., 2012).

**Political & Geographic Context.** A variety of factors that influence stakeholder

participation are linked to larger political, economic, and geographic factors. For example, the length of term of elected officials is set by law and is merely a feature of the political landscape in which collaborative processes occur. Tuler et al.'s (2002) study of factors that influence participation of local government officials cites the example that some local officials felt the EPA coerced their communities to participate. One respondent stated, "We had just been served with this consent agreement and at that point we hadn't finished negotiating. Neither city had finished negotiating how we were going to respond to this violation of the Clean Water Act. But everyone is like, what else are they going to do? We'd better go find out. So we went to the table out of self-defense" (p. 113). Tuler et al. (2002) also found that factors related to the support available from public agencies within a town or county played an important role in stakeholder participation.

Swyngedouw (2004) stresses the interconnectedness of both social and physical environments, suggesting that environmental conditions are not independent of the historical, social, political, economic, and geographic conditions that accompany them and that the way stakeholders participate in the accompanying management processes is not independent of these conditions either. Schlager & Blomquist (2008) and others (Paasi, 2009; Zimmerbauer, 2011) focus in on the interconnectedness of both social and physical environments by discussing the implications and development of political, social, and geographical boundaries on environmental and watershed initiatives. Highlighting that the delineation of boundaries at the watershed scale (becoming more common in watershed negotiations) is problematic due to the often manufactured connectedness of watersheds by water transfers and the like. Furthermore, they highlight the challenges with how boundaries are conceptualized by potential participants, suggesting that boundaries can

ascribe more credibility to others and possibly exclude some from participating. This suggests that the increasing complexity of the contexts of boundaries requires that they be considered in relation to such categories as power and social practices (Paasi, 2009), which are inherent in all watershed negotiation processes.

**Process Legitimacy.** Sabatier et al. (2005) highlight the importance of process legitimacy in collaborative/participatory processes, emphasizing three criteria: (1) participants must appropriately represent the full range of stakeholders; (2) participants must fairly consider the concerns of the full range of stakeholders; and (3) participants must genuinely consent to the policy decision. It is argued that if participatory processes are perceived to be transparent and consider conflicting claims and views, the process can empower stakeholders through the co-generation of knowledge with researchers and increases participants' capacity to use this knowledge (Reed, 2008).

In a watershed initiative in Quebec, Canada the provincial government, in response to political pressures, imposed a participatory process. The process was not very engaging and did not result in much of an improvement in the conditions of the watershed (Lepage & Milot, 2010). Top-down implementation of the participatory process counters many of the recommendations for procedural legitimacy and discourages stakeholders' continued participation in the initiative and other initiatives in the future. This negative response to participating when stakeholders do not think process legitimacy has been met was seconded in a study evaluating what worked well and what needs improvement in resource planning initiatives in British Columbia (Halseth & Booth, 2003). Respondents were asked what worked well and were given a choice of various options. Very low scores were given to the category *inclusiveness of process* and many of the respondents

expressed an issue that control had shifted to interest groups rather than the local public, which had tainted the process (Halseth & Booth, 2003), potentially discouraging individuals from participating.

**Personal Values & Identity.** A variety of factors regarding personal values and identity have the potential to influence participation. For example, civic duty, environmental stewardship ethics, and social identity may be confirmed by participation. One respondent in the Tuler et al. (2002) study discussed their civic duty, “I have a long time personal commitment to the environment and love for nature. I have feelings of personal responsibility that makes me participate” (p. 111). Another respondent expressed their environmental ethics, “The other thing which always made sense to me was, you know, we all live on this little mud ball and if the frogs and the bugs begin to die, our turn is somewhere in that train of where we go” (p.111). This was confirmed in another study completed by Sabatier et al. (2005) that asked the fundamental question: why do stakeholders participate? Sabatier et al. (2005) found that people participate in the collaborative process for a multitude of reasons, one of which is that they believe the collaborative process holds value to them because it has the potential to enhance the public good by improving local conditions for the community.

Social identity can also affect participation. For instance stakeholder groups that are characterized by members who value a common identity and feeling of solidarity may be motivated to act by the social identity that group confirms, regardless of whether they expect to have a noticeable impact on the process (Rowley & Moldoveanu, 2003).

**Process Support & Resources.** Concerns associated with process support and resources included the adequacy of staff support and the availability of funds. Many

stakeholders have limited budgets for participation, particularly interests represented by citizen volunteers (Bingham & Bourget, 2011), which may ultimately prevent them from participating. Tuler et al. (2002) also noted that smaller counties might also be affected by limited budgets preventing or diminishing participation in an environmental conflict. However, Dukes (2004) noted that some participants in EDR processes reported that the value and benefit of participation exceeded the cost associated with participating, making it worthwhile.

**Time.** Issues of time influence stakeholders' willingness to engage in collaborative processes in three ways: (1) the availability of stakeholders' personal and professional time (Bingham & Bourget, 2011); (2) factors associated with the timing of meetings and events (Tuler et al., 2002); and (3) the measure of elapsed time from decision making to decision effect (Smutko, 2002).

Bingham & Bourget (2011) argue that stakeholders have limited time for participation, particularly interests represented by citizen volunteers. Worry of the political and administrative elite dominating the participatory process may dissuade some stakeholders from investing front-end time in the process due to sheer lack of time and resources. Factors associated with the timing of meetings and events associated with a collaborative process also influence stakeholders' participation. A respondent in Tuler et al.'s (2002) study of local governmental officials stated, "If the CAC meetings had been in the daytime, it would have helped. It's a little tricky when you have to impose on your friends to stay overnight every month . . . and it didn't help at all when the first coordinator changed the meeting from Wednesday when there was a 10 o'clock boat to Thursday when there's only a 9 o'clock boat. . . . And I screamed about that, but it didn't

do any good” (p. 112).

Smutko et al. (2002) examined seven attributes of issues confronted by stakeholders in a collaborative process and the stakeholders’ willingness to engage in the process. They found that the measure of elapsed time from decision making to decision effect influences stakeholder’s willingness to engage. In some cases, administrative requirements and political dealing can add months or years to the duration of a collaborative process, diminishing a stakeholder’s willingness to participate. Decisions that are seen to have immediate impact versus those that show results later are more conducive to collaborative efforts.

### **Conclusions**

Drawing from several diverse threads of research, I have argued that stakeholder participation has become relevant as a significant component in watershed management and water governance more broadly. Relying on qualities such as process objectives, stakeholders’ past experiences, the political and geographic context, process legitimacy, stakeholders’ personal values and identity, the support and resources for a process, and the availability of both personal and professional time, the implications of stakeholder participation or non-participation are inherent to the legitimacy and democratic ideals that collaborative processes intend to address. Kessler (2004) suggests, “as policy making continues to evolve, it is critical to understand the role of stakeholder involvement and, in particular, how participatory decision-making processes can be improved. This information will inform federal, state, and local agencies that are seeking better ways to fulfill their regulatory mandates while constructively engaging the public in environmental decision making” (p. 2). The commitment to collaborative/participatory

frameworks for management is clear -even in the face of criticism from skeptics; collaboration is the preferred management regime in a plethora of management options (Kenney, 1999). In considering the prevalence of collaborative/participatory processes, the factors that influence stakeholder participation offer insights into understanding the nuances that underlie decisions to participate or not.

Understanding what influences stakeholders to participate in environmental conflict decisions requires going beyond looking at only the obvious reasons to participate (economic and regulatory) and allowing the participant to express the complexity of issues that influence their participation. Moving forward from this body of literature, the goal of my research is to better understand what influences stakeholders, from the grassroots to policy elites, to participate (or not) in watershed management negotiations and in turn how those factors inform participation.

The following chapter presents a detailed look at the research setting and the stakeholder agreements under consideration (the KBRA and KHSAs). Understanding the background of the Klamath Basin physically, socially, and politically generates the contextual lens to understand what informed participation in the Klamath Basin context.

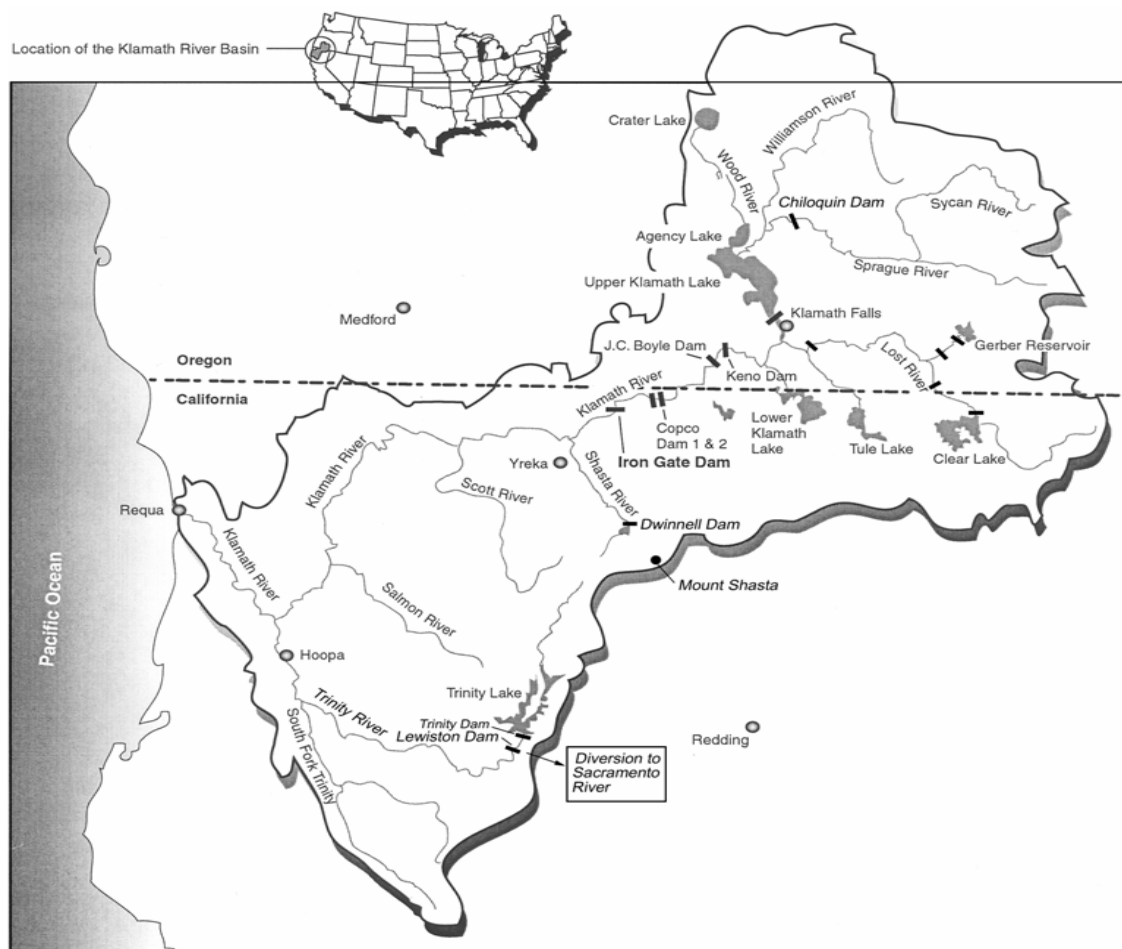
*Chapter 3***THE KLAMATH BASIN****Introduction**

The geographical context of this study situates a knowledge of the personal and external factors that influence stakeholder participation in watershed management processes. To understand these factors it is important to understand the setting in which this process occurred. The study was carried out in the Klamath River Basin, which has become a focal point for local and national discussions on water management and conflict. Draining a vast, lightly populated region of southern Oregon and northern California, the Klamath River travels 263 miles before emptying into the Pacific Ocean off the northern California coast (Powers et al., 2005). The watershed covers approximately 12,100 square miles (Powers et al., 2005), and for water management purposes is divided into Lower and Upper River Basins (Figure 1). Both the Upper and Lower Basins are nearly equal in size but geographically, biologically, and socially distinct. The Upper Basin lies largely above and east of Iron Gate Dam, is primarily in Oregon, and includes four major lakes: Upper Klamath, Lower Klamath, Clear, and Tule (Figure 2). The Lower Basin lies between Iron Gate Dam and the Pacific Ocean and drains four major tributaries: the Trinity, Salmon, Scott, and Shasta Rivers (Figure 3).

Unlike most watersheds, the Klamath watershed is an upside down Basin with its greatest topographic relief in the lower half of the Basin rather than the headwaters (Doremus & Tarlock, 2008). The river originates in the Cascades, flowing through high sagebrush plateaus, and then cuts back through the rugged wetter coastal range. Most

typical watershed systems have substantial water storage capacity in the upper reaches of the watershed above agricultural demands, but in the Klamath Basin most of the runoff occurs in the lower half of the Basin, downstream from the main agricultural demands (Doremus & Tarlock, 2008).

Figure 1 *The Klamath Basin* (U.S. Government Accountability Office, 2005)



Despite their proximity, the Upper and Lower Basins are somewhat isolated from each other. The Upper Basin lies predominantly in Oregon while the Lower Basin is exclusively in California. Roads in the region are few and far between and the economies of the Upper and Lower Basins depend on different engines (Doremus & Tarlock, 2008).

As is true in many regions in the West, the federal government also plays a prominent role in the Klamath Basin's water management. The role stems from three primary activities: (1) the operation and management of the Bureau of Reclamation's (BOR) Klamath Water Project and Central Valley Project (e.g., Trinity River Dams); (2) management of federal lands in the Basin, including the Klamath Basin National Wildlife Refuge Complex, several national forests, and public lands; and (3) implementation of federal laws, such as the Endangered Species Act (ESA), Clean Water Act (CWA), and National Environmental Policy Act (NEPA) (Powers et al., 2005).

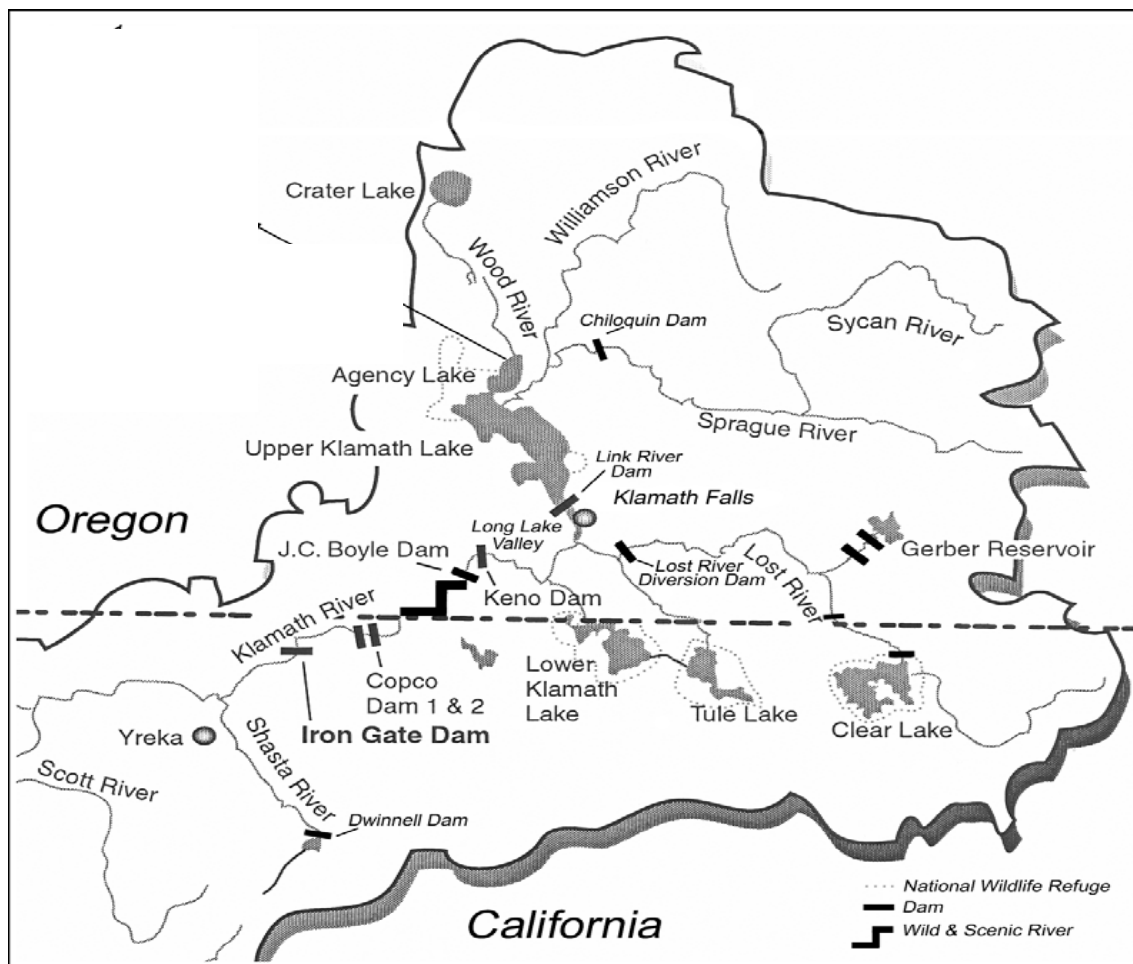
### **The Upper Klamath Basin**

Located in southern Oregon and northern California, the Upper Klamath Basin is an ancient volcanic area that straddles the basin-and-range geological province (Figure 2). Situated on a 4,000 to 6,000 foot high plateau that lies in the rain shadow of the Cascadia margin (Doremus & Tarlock, 2008), the Upper Basin is an area with limited water resources. It represents approximately 38% (4,630 square miles) of the Klamath Basin land area, but accounts for only 12% of its water runoff (Powers et al., 2005).

Once, an enormous volcanic lake occupied much of the Upper Basin, which has subsequently split into marshes and three smaller shallow lakes known as the Upper Klamath, the Lower Klamath, and Tule lakes (Doremus & Tarlock, 2008). The Upper Basin marshes and lakes are a major stopping point for migratory birds on the Pacific Flyway and currently house two National Wildlife Refuges (NWR) that provide habitat for hundreds of species; the Tule Lake NWR and the Lower Klamath National Wildlife Refuge (NWR). The marshlands of the Upper Basin historically supported two large populations of fish called the *qapdo* and the *c'waam* by the Klamath Indians, for whom

they provided a major food source (Doremus & Tarlock, 2008). Today those fish populations, known by many as the Lost River and shortnose suckers, have declined substantially and were listed as endangered under the ESA in 1988 (Powers et al., 2005). Upper Basin tribes and recreational anglers also used to catch salmon. However, Iron Gate Dam, constructed in 1962, blocks salmon passage upstream.

Figure 2 *The Upper Klamath Basin* (U.S. Government Accountability Office, 2005)



The main economic drivers in the Upper Basin include agriculture, forest products, education, and public administration (Doremus & Tarlock, 2008). The Weyerhaeuser sawmill closed its doors in Klamath Falls in the 1990's due to a

diminished supply of old growth ponderosa pines and timber harvesting constraints on federal lands due to the Northwest Forest Plan, developed to protect the northern spotted owl (Doremus & Tarlock, 2008). This boosted agriculture in the area, which has remained an important component of the Upper Basin economically and culturally.

Management of Upper Basin water has largely revolved around BOR's Klamath Project upstream of Keno Dam. Authorized in 1905 and largely completed in 1907, the Project is one of the oldest U.S. reclamation projects (Powers et al., 2005). The unique geography of the Basin makes this Project different from many other Reclamation projects due to the difficulty of finding suitable sites for reservoir storage. Upper Klamath Lake is the primary source for Project water. However, the Lake provides limited storage because it is relatively shallow and has little storage carryover from year to year, and thus is highly dependent on current precipitation and snowmelt for water supply (Doremus & Tarlock, 2008).

BOR's Klamath Project facilities overall provide irrigation water to approximately 1,400 farms covering about 235,000 acres in the Upper Basin (Doremus & Tarlock, 2008). BOR has contracts to deliver water from Upper Klamath Lake to approximately 1,200 of these farms, which grow various crops including wheat, malt barley, potatoes, onions, and alfalfa (Powers et al., 2005). Water is also used on pastures where cattle graze. A portion of the irrigation water is returned to streams or canals for downstream use that includes the refuge areas and fish flows.

Pursuant to a contract with BOR, PacifiCorp, an energy company, operates five hydroelectric dams on the Klamath River: Link River, Keno, J.C. Boyle, Copco 1 & 2, and Iron Gate dams. Link River Dam is owned by the United States, but is operated by

PacifiCorp under a contract with BOR. The remaining dams are owned and operated by PacifiCorp under federal license (Doremus & Tarlock, 2008). As mentioned above, the Klamath Dams prevent fish passage at Iron Gate Dam, blocking some 300 miles of historic fisheries habitat (Most, 2006). Klamath Project irrigators have benefited from a major power subsidy that was reached in 1917 between the BOR and COPCO, the hydropower operator at the time (Doremus & Tarlock, 2008). The agreement called for the utility to furnish power at 0.6 cents per kilowatt-hour to irrigators in exchange for the ability of BOR to regulate the outflow of Upper Klamath Lake and construct Link River Dam (Doremus & Tarlock, 2008). Irrigators had not faced a power rate increase since 1917, setting their power rates well below other Oregon irrigators (Doremus & Tarlock, 2008). In 2004 PacifiCorp, the current owner of the hydro facilities sought to raise irrigators' rates tenfold, and in 2006 Oregon's Public Utility Commission approved the first step of a phased increase to bring Klamath rates to parity with those of other agriculture pumpers (Powers et al., 2005). As with many regulatory changes, this was hotly contested in the Basin, and when PacifiCorp's 50-year operating license for Iron Gate Dam, issued by the Federal Energy Regulatory Commission (FERC), expired in 2006, irrigators tried to convince FERC that the federal license governing PacifiCorp's hydroelectric project forbade any rate increase. FERC rejected the argument (Doremus & Tarlock, 2008). Currently, a new FERC license for the Klamath dams has not been issued, which is discussed in more detail later in the chapter. The dams are subsequently operating on annual licenses (Powers et al., 2005).

### **The Upper Basin People**

Some of the people who first came to the upper reaches of the Klamath Basin

were groups called the *maklaks*, sharing the common language root from the Penutian family (Most, 2006). Known today as the Klamath Tribes (the Klamaths, Modocs, and Yahooskin), their history follows the well-documented manifold of wrongs done to American Indians in the settling of the country. At one time the Upper Basin Tribes occupied and used 23 million acres of land. In 1864 this land was ceded to the federal government and a reservation (2.2 million acres, subsequently reduced to about 1 million acres) was created that paired the Klamath and Modoc Tribes under the Treaty of Council Grove, which settled many Indian land claims (Most, 2006).

The forced pairing of the Klamath and the Modocs caused tension and in 1872, led by Captain Jack, 270 Modocs returned to their historic home. The Modoc War ensued, resulting in the end of 19<sup>th</sup> century Indian resistance in the region. By the 1950's the Klamath tribes had created a sustainable timber and grazing economy on the million-acre reservation (Most, 2006). In 1954 Congress enacted the Klamath Termination Act, with the goal of assimilating Indians into American society, resulting in their ineligibility for federal Indian benefits. This generated severe social and economic repercussions for the Klamath Tribes (Most, 2006). In 1974 the Federal Court ruled that the Klamaths retained their Treaty Rights in light of termination, and in 1986 the Klamaths were successful at regaining federal recognition as a Tribe, although they did not regain their land base (Most, 2006).

The first white settlers to come to the Upper Basin were fur trappers in the 1820's, but permanent white settlement did not begin until 1867 (Most, 2006). These early white settlers were ranchers who began irrigating the land of the Upper Basin to grow hay for their livestock. After the passage of the Reclamation Act of 1902, the Klamath became

the twelfth and the largest project to that point under the Act. It was largely completed by 1907 but was not fully done until the 1960's. Typical of Reclamation projects at that time, this project incorporated existing private irrigation into the project (Doremus & Tarlock, 2008). After World Wars I and II homesteads were awarded to the nation's veterans, and between 1946 and 1948 216 applicants were selected of the 2000 applications to be awarded land for irrigation (Doremus & Tarlock, 2008). Many of the current Upper Basin residents are descendants of these homesteaders and original entrants.

The largest city in the Upper Basin is Klamath Falls, which sits directly below Link River Dam on the Klamath River. With a population of 20,820 (U.S. Census, 2011a), Klamath Falls is a small rural agriculture-based community and has been the staging point for many of the agriculture demonstrations in the Upper Basin.

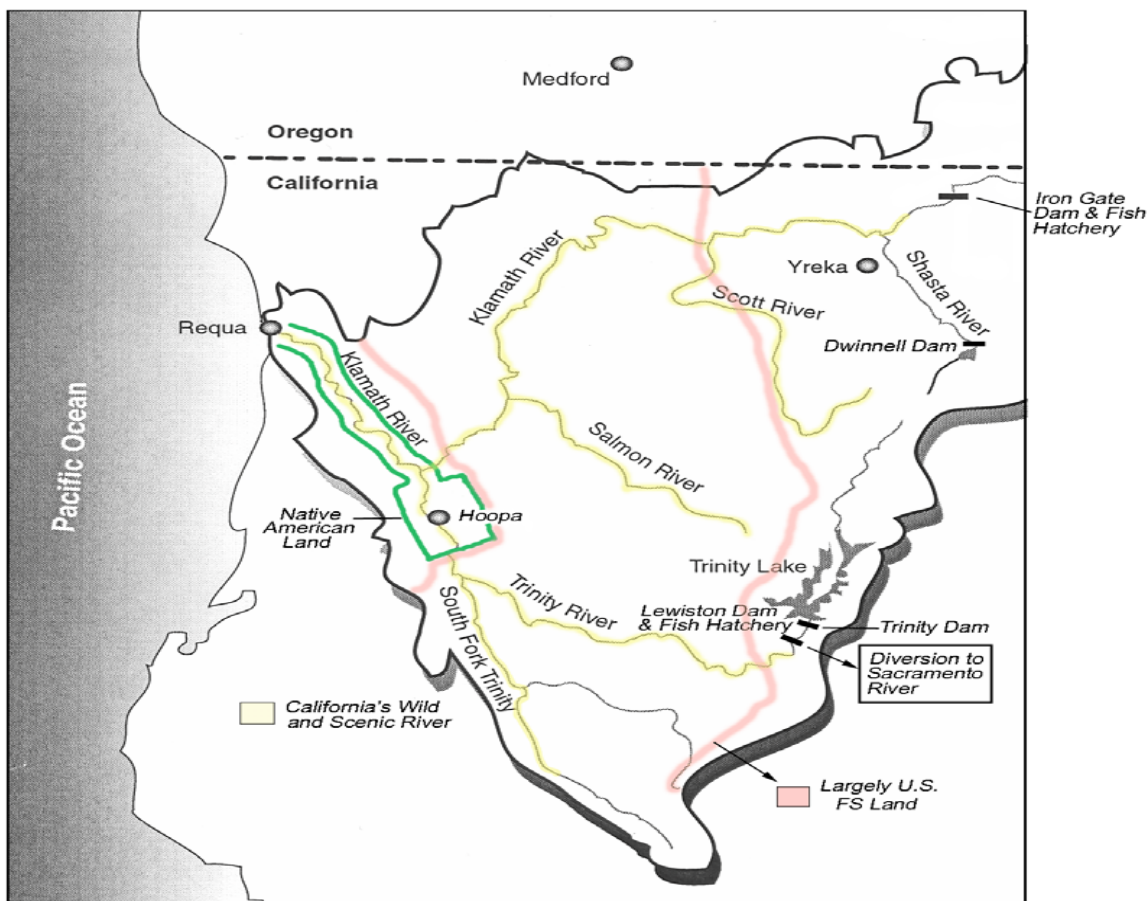
### **The Lower Klamath Basin**

Lying entirely in California, the Lower Klamath River runs unobstructed from Iron Gate Dam to the Pacific Ocean through a sparsely populated and well-watered area (Figure 3). In an area of rapid tectonic uplift and dominated by steep timber-covered slopes and mountainous wilderness areas, the Lower Basin represents approximately 62% (7,470 square miles) of the Klamath Basin's land area; however, it is the origin of 88% of its runoff (Powers et al., 2005). Much of this water flows into the Lower Klamath from four major tributaries: the Shasta, Scott, Salmon, and Trinity Rivers, although much of that water does not make it to the main stem of the Klamath due to water transfers and irrigation diversions within the major tributaries.

Both the land and aquatic environments in the Lower Basin are different from the

Upper Basin, and the colder swift-running aquatic environment in the Lower Basin harbors distinctly different fishes than the Upper Basin. Salmonids species that currently occupy the Lower Basin below Iron Gate Dam (which has no fish passage) include chinook, steelhead, and coho (Powers et al., 2005). Other important anadromous fish include the green sturgeon and the Pacific lamprey (Doremus & Tarlock, 2008). The Lower Basin salmonids support a valuable commercial and recreational fishery, although concerns about species decline are intensifying in the Lower Basin and many of the native fish populations are drastically reduced from their historic runs (Doremus & Tarlock, 2008).

Figure 3 *The Lower Klamath Basin* (U.S. Government Accountability Office, 2005)



Currently, coho salmon are the only salmon species listed as endangered under the ESA, and the Klamath River was designated as critical habitat for this population (Powers et al., 2005). There has been controversy and litigation over this listing because of the relative abundance of hatchery-raised, as compared to native, coho salmon. Salmonids are an important resource for the three major tribes (Yurok, Hoopa Valley, and Karuk) in the Lower Basin. Yurok tribal members, for example, operate both subsistence and commercial gill net fisheries in the Klamath River near its mouth and in the late 1980's, the Yurok's commercial fishery harvest represented a direct value to the tribe of three million dollars (Doremus & Tarlock, 2008).

Salmonids and other anadromous fish from the Klamath River also support commercial and sport fisheries off the northern California and southern Oregon coasts. Beyond the direct revenues of these fish to commercial fishermen of nearly six million dollars annually since 1986 (Powers et al., 2005), commercial fishing also supported various businesses in fishing ports that contribute substantially to local economies, although users of these fish have been harmed by increasingly restrictive fishing regulations and low fish populations during the last decade. Today, even under restrictive fishing regimes, the economic value of the ocean salmon fishery far exceeds the value of agriculture in the Upper Basin (Doremus & Tarlock, 2008).

In addition to commercial fishing, agriculture, logging, and cannabis production are also important to the economies of the Lower Basin. Irrigated agriculture is mostly found on the major tributaries of the Klamath River, but operates at a much smaller scale than agriculture in the Upper Basin (Doremus & Tarlock, 2008). Timber harvests have diminished dramatically in the Lower Basin, with many of the major lumber mills closing

their doors in the 1990's (Doremus & Tarlock, 2008). Recreational activities also occur in the Lower Basin. Whitewater rafting on the main-stem of the Klamath River and its major tributaries is popular and much of the Lower Klamath River and its tributaries are part of California's Wild and Scenic River System (Powers et al., 2005). The largest city in the Lower Basin is Yreka, with a population of 7,764 (U.S. Census, 2011b). Similar to Klamath Falls, Yreka maintains rural community values and in 1941 was designated as the capital of the proposed State of Jefferson, a secession movement along the Oregon and California border that has maintained support to this day (Doremus & Tarlock, 2008).

Management in the Lower Basin partly revolves around BOR's California Central Valley Project (CVP). The project consists of canals and aqueducts that work in conjunction with the California State Water Project (SWP) to supply water to the Central Valley of California and metropolitan areas in the southern region of the state (Powers et al., 2005). The Trinity River is the largest tributary of the Klamath River and enters the Klamath not far from where it meets the Pacific Ocean. The Trinity River Diversion takes water from the Trinity River system and transports it into the Sacramento River (a separate watershed) for use in water-deficient areas to the south (Powers et al., 2005). While not discussed fully in this paper, management of the Trinity River has been a topic of ongoing debate and litigation. In particular, the debate has focused on the quantity of water that should remain in the Trinity River versus the amount exported. This controversy has resulted in litigation (*Westlands Water District v. U.S. Department of the Interior*) and other settlement agreements in which the Hoopa Tribe has held a substantial stake (Powers et al., 2005).

### **The Lower Basin People**

Three major tribes reside in the vicinity of the Klamath River in the Lower Basin and, unlike the Upper Basin Klamath Tribes, they have been more successful at holding onto their land base. The Yurok, whose name means *down the river*, traditionally inhabited and currently have reservation land near the mouth of Klamath River where it meets the Pacific Ocean. The Karuk, whose name means up the river, traditionally inhabited land near the confluence of the Salmon and Klamath Rivers, and they do not have a federal recognized land base. The Hoopa traditionally inhabited and currently have reservation land in Hoopa Valley, which sits on the Trinity River near its confluence with the Klamath River (Most, 2006).

The California gold rush brought an influx of white settlers into the Lower Basin, increasing tension between native populations and white settlers. In an attempt to settle some of these tensions the federal government began negotiating treaties with the Tribes in the region, but did not create reservations lands until 1853 (Most, 2006). Following subsequent laws, confusion in the Basin over reservation boundaries generated tension and conflict between the tribes over revenues from natural resource extraction that persists today (Doremus & Tarlock, 2008).

### **Water Rights in the Klamath Basin**

The allocation of water rights in the Klamath River Basin is a subject of continuing debate. Along with most Western U.S. watersheds, the Klamath River Basin is subject to the prior appropriation water rights doctrine and state created water rights (Doremus & Tarlock, 2008). In the Oregon portion of the Klamath River Basin, the State of Oregon allocates water from the Basin with the exception of federal trust water rights

(i.e., Tribal rights) and federal water rights associated with federal land reservations (i.e., national forests and national wildlife refuges). However, many of the region's water rights have not been quantified due to a general adjudication of Oregon water rights and priorities through the state's statutory adjudication procedure, which began in 1975 and is still underway (Powers et al., 2005). Since 1909, Oregon law has required that all rights to water by prior appropriation be acquired through an application for a permit. The permits (and certificates issued upon proof of beneficial use under the permits) specify all elements of the rights, including priority date, point of diversion, place of use, and other elements (Doremus & Tarlock, 2008). Thus, all post-1909 water rights under state law are determined, but rights initiated pre-1909 appropriation, and federal reserved water rights, are undetermined unless adjudicated through the state's statutory adjudication procedures, which is under way currently (Doremus & Tarlock, 2008).

BOR began acquiring water rights for the Klamath Project in 1905 and filed a formal application with the State of Oregon in 1909 to appropriate water for delivery to landowners within the Project area. In 1957, the bi-state (California and Oregon) Klamath River Compact gave domestic and municipal users and irrigators in the Upper Basin preferential use of unallocated water supplies, essentially keeping all of the water generated in the Upper Basin in the Upper Basin (Powers et al., 2005).

Although the water rights in Oregon have yet to be quantified, the United States Bureau of Indian Affairs filed claims on behalf of the Klamath Tribes for in stream water levels to protect fisheries on the former Klamath Indian reservation (and the Klamath Tribes asserted those same claims). A court has held that the water right claims of the Klamath Tribes have a priority date of *time immemorial* and are not restricted by the date

of the Tribes' 1864 Treaty with the U.S. government (Doremus & Tarlock, 2008). How this holding will affect other Klamath Basin water allocations under the ongoing water rights adjudication is not yet clear, but a preliminary court decision regarding their water rights favors the tribes' senior holding (Doremus & Tarlock, 2008).

Within the Klamath Basin National Wildlife Refuge Complex in the Upper Klamath Basin, two of the refuges (Lower Klamath NWR and Tule Lake NWR) rely on water from the Klamath Project. They have received lower priority for water than irrigators or Tribes, thus they may not receive water in times of shortage and often depend on irrigation return flows. However, the Lower Klamath NWR (est. 1908) may have federal reserved rights for an as-yet undetermined amount of water sufficient to accomplish its purposes (Powers et al., 2005).

### **Endangered Species Act**

The environmental movement of the late 1960's to the mid 1980's brought a host of laws that called for greater attention to the environmental impacts of extractive activities (Sabatier et al., 2005). For example the National Environmental Policy Act (NEPA) brought the consequence of federal environmental activities into the open by requiring the preparation and public disclosure of environmental impact statements (Doremus & Tarlock, 2008); the Clean Water Act (CWA) established national goals for water quality; and the Endangered Species Act (ESA) set minimum conservation thresholds for fish and wildlife and the ecosystems they inhabit (Doremus & Tarlock, 2008).

Passed in 1973, ESA is intended to protect species at risk of extinction. Under the ESA, species of plants and animals may be listed as either endangered or threatened

according to assessments of the risk of their extinction. In furtherance of this goal, federal agencies (such as the BOR) are to consult with either the Fish and Wildlife Service (FWS) (for terrestrial and freshwater species) or the National Marine Fisheries Service (NMFS) (for marine species and anadromous fish) on project operations for a given year that might affect a listed species, or jeopardize its continued existence (Powers et al., 2005). When a federal agency proposes an action, the action is analyzed in a Biological Assessment and the FWS or NMFS issues a Biological Opinion as to whether the proposed agency action is likely to jeopardize a species (Powers et al., 2005).

In the Klamath context, a primary factor driving issues in water management is the interplay between federal project operations and the ESA. The 1988 listing of both the shortnose and Lost River suckers followed by the subsequent listing of the coho salmon in 1997 has played an important impact on water allocation in the Basin and can be cited as a major player in the 2001 water crisis and subsequent 2002 fish kill.

### **Crisis in the Basin**

**The 2001 Water Crisis.** At the Klamath Project, ESA issues have been an integral component of operating decisions. Since the ESA listings, BOR, NMFS, and FWS have issued Biological Assessments and Biological Opinions addressing the Project's effects on the two species of suckers and coho salmon. Controversies have surrounded the Biological Assessment and Opinions since the start, but came to a head in early 2001 (Powers et al., 2005). In 2000 the BOR failed to consult with the FWS and NMFS in a timely manner (the Biological Opinion did not come out until January 2001 after the project operation plan had expired) before implementing their project operation plan for 2000 (Doremus & Tarlock, 2008). Because of this, the Pacific Coast Federation

of Fishermen's Association filed a suit against the BOR that claimed a violation of ESA (Doremus & Tarlock, 2008). Subsequently, a federal district court faulted the BOR for failing to formally consult with NMFS on the effects of irrigation releases on downstream coho salmon under their 2000 operating plan, and enjoined (or prohibited) BOR from making further irrigation releases until they formally consulted with the appropriate agencies on their next (2001) annual plan (Doremus & Tarlock, 2008).

In April 2001, the FWS and NMFS each issued final Biological Opinions concluding that the BOR's proposed operation of the Project for 2001 would jeopardize the continued existence of the two species of suckers and the population of coho salmon. The NMFS's determination on water requirements for coho salmon in the Lower Basin called for increased releases from Upper Klamath Lake, followed by the FWS recommendation that water be held to raise the Upper Klamath Lake level for the suckers (Doremus & Tarlock, 2008). Because of severe drought conditions, there was not enough water to implement both Biological Opinions, let alone provide irrigation water for farmers.

On April 6, 2001, the BOR issued its final 2001 operation plan, implementing the proposed alternatives by the FWS and NMFS, which severely limited the delivery of irrigation water (Doremus & Tarlock, 2008). The 2001 operations plan provided for delivery of the full allotment of irrigation water for some 70,000 acre-feet from Clear Lake and Gerber Reservoirs, but that no water would be available from Upper Klamath Lake for deliveries to irrigators or to the Lower Klamath NWR (Doremus & Tarlock, 2008).

Irrigators immediately took to the courts to block implementation of the plan.

The court concluded that they were unlikely to prevail because they were merely in disagreement with the agencies' scientific conclusions and eventually the court denied the requested injunction and urged parties to solve their disputes regarding water in the Basin outside of the courts (Doremus & Tarlock, 2008). The irrigators' loss of water drew widespread national attention and regional sympathy throughout much of the rural West.

On May 7<sup>th</sup>, 2001, thousands of Upper Basin area residents took to the street in protest of the lost water and formed a bucket brigade to bring water from Upper Klamath Lake to an irrigation canal near the local high school (Doremus & Tarlock, 2008). The protest began peaceful but quickly became volatile as local frustration mounted and anti-federal government activists from across the West poured into Klamath Falls. Sabotage to the head gates of the irrigation project ensued and federal marshals and FBI agents were brought in to defend the head gates (Doremus & Tarlock, 2008).

Subsequently, Secretary of the Interior Gale Norton announced that about 70,000 to 75,000 af would be released from Upper Klamath Lake to assist farmers. This amount of water represented about 15%-20% of the water typically delivered to Project users from the Lake in non-drought years (Doremus & Tarlock, 2008). Because many disagreed over the fundamental guidance contained in the 2001 Biological Opinions, the Secretary of the Interior then sought and secured review of the scientific decisions by the National Research Council, an arm of the National Academy of Sciences. They concluded that there was no substantial scientific basis for changing the operation of the Project to maintain higher water levels in Upper Klamath Lake as proposed in the FWS 2001 Biological Opinion, or for higher minimum flows in Klamath River as stipulated in

the NMFS 2001 Biological Opinion (Powers et al., 2005). Therefore, the National Research Council concluded scientific data were insufficient to support any of the Upper Klamath Lake level management regimes proposed by federal agencies for the 2001-growing season and in the following years the irrigators received water deliveries (Powers et al., 2005).

**The Fish Kill of 2002.** Following the events of 2001 a dramatic event in 2002 renewed water management concerns throughout the Lower and Upper Basins. In September of 2002, at least 34,000 adult salmon died in the lowermost 40 miles of the Klamath River mainstem. While fall-run chinook salmon were the primary species affected, coho salmon, steelhead trout, and other species were also lost (Doremus & Tarlock, 2008). The cause of deaths was due to an epidemic of two common parasitic diseases triggered by crowding of the fish in warm and low waters near the mouth of the Klamath (Powers et al., 2005). This loss prompted renewed focus on Klamath Project operations and many believed that the juxtaposition of the die-off with the implementation of Klamath Project water management plan were responsible for the fish kill.

California's Department of Fish and Game issued a final report on the fish kill in July 2004, concluding that the combination of low September flows, warm water temperatures, an above-average run of chinook, and perhaps restricted fish passage had precipitated the disease outbreak, attributing most of the importance to low flow (Doremus & Tarlock, 2008). Based on this, the Yurok tribe contended that the BOR was responsible for the fish kill and violated its trust responsibilities to the tribe (Doremus & Tarlock, 2008). Because of the 2002 fish kill, the 2006 fish returns (which were born of

the 2002 salmon) were so small that it forced the nearly complete closing of the northern California ocean salmon fishery, resulting in the declaration of an economic disaster by the Department of Commerce (Doremus & Tarlock, 2008). The fallout from the 2001 events followed by the events of 2002 still reverberate to this day in the Basin, and controversy surrounding water allocation and quality have not been put to rest.

### **The FERC Relicensing Process**

PacifiCorp, which was recently acquired by MidAmerican Energy Holding Company, operates the Klamath Hydroelectric Project, beginning with Link River Dam and ending with Iron Gate Dam. Iron Gate Dam, the largest and most significant barrier to salmon species was licensed in 1956 and completed in 1960 (Doremus & Tarlock, 2008). FERC grants 30 to 50-year operating licenses, and since many licenses were granted during the heyday of the 'Big Dam Era' in the 1950s, at least 40% have come up for renewal in recent years (Gosnell & Kelly, 2010). The license for the Klamath Hydroelectric Project expired in March 1, 2006 and the hydro project has been operating under annual licenses pending completion of the relicensing proceedings (Gosnell & Kelly, 2010).

In order to renew a license, dam operators must demonstrate compliance with existing laws such as ESA and the CWA. To comply with modern laws not in place at the time of the original license, PacifiCorp would have to mitigate impacts on listed species, and address concerns such as blocked fish passage, serious alterations in the natural flow regime due to peaking power operations, and water quality impacts (Doremus & Tarlock, 2008). Traditionally, hydropower licensing followed a sequential procedure: the licensee developed its proposal, circulated it to resource agencies for comment, and then filed it

with FERC (Doremus & Tarlock, 2008). The public then had the opportunity to comment and environmental review began. Once the review was complete, FERC would review the application and decide whether to issue a license (Doremus & Tarlock, 2008).

However, beginning in 1997, FERC began to encourage license applicants to use a more collaborative approach that would involve negotiation with stakeholders, aimed at developing an agreement both the stakeholders and applicant are on board with prior to submitting to FERC (Doremus & Tarlock, 2008).

At the beginning of the re-licensing process in 2000, participating stakeholders tried to persuade PacifiCorp to adopt FERC's alternative approach, as opposed to the traditional approach discussed above, and from 2004 to 2006 PacifiCorp convened stakeholders including tribes, environmental groups, irrigators, fishermen, and federal and state agencies from all over the Basin in what they called a hybrid process that would retain the traditional procedure and run it in parallel with an effort to negotiate terms for re-licensing (Gosnell & Kelly, 2010). The result was regular meetings between the most comprehensive set of stakeholders and interests ever regularly convened in the Basin.

In conjunction with the hydropower negotiations, design and scoping of studies regarding environmental review and evaluation of the application by federal agencies and other stakeholders proceeded. In 2006 the FWS and the NMFS jointly developed fish way prescriptions under the Federal Power Act section 18 requiring volitional passage, meaning that fish could pass upstream on their own accord at all dams (Spain, 2007). PacifiCorp objected to these prescriptions, but ultimately lost in front of an administrative law judge, a sound victory for many of the stakeholders participating in the relicensing process, and squarely putting dam removal as a viable option on the table (Spain, 2007).

PacifiCorp continued to favor maintaining the dams, even after a 2007 Environmental Impact Statement estimated mitigation costs at over 300 million dollars. Expensive mitigation measures could be avoided by removing the dams, but uncertainty about liability for impacts associated with removal, costs associated with removal, and the prospect of lost revenue from electricity generation kept PacifiCorp opposed to dam removal (Gosnell & Kelly, 2010).

### **From FERC Relicensing to the KBRA & KHS**

As discussions with PacifiCorp grew more difficult, the FERC meetings began to morph into an extended caucus (without PacifiCorp) that eventually became the Klamath Settlement Group (KSG) (Gosnell & Kelly, 2010). The KSG was endorsed by the Bush Administration and given generous funding and resources to obtain needed facilitation and scientific information to support negotiations (Gosnell & Kelly, 2010). Stakeholders decided that the non-hydropower dam issues were too numerous and too complex to negotiate with the dam issues, and in addition, many members of the extended caucus believed that if they could forge an agreement that dealt comprehensively with most of the driving conflict issues in the Basin, then they could turn back to the dam issues with far greater political capital to pressure a settlement that would include dam removal.

The KBRA negotiation followed a consensual model and produced a settlement framework in 2007 that several participants decided they could not live with (Gosnell & Kelly, 2010). Those participants were asked to leave the negotiations when they reconvened to finalize the framework. This development signified a move from a full consensual approach to one that relied on a coalition that might not represent 100% support, but that would have enough breadth and depth of representation to be able to

move forward politically. The group drafted the KBRA and released it in January 2008.

The KBRA intends to:

... result in effective and durable solutions which will: (1) restore and sustain natural fish production and provide for full participation in ocean and river harvest opportunities of fish species throughout the Klamath Basin; (2) establish reliable water and power supplies which sustain agricultural uses, communities, and National Wildlife Refuges; and (3) contribute to the public welfare and the sustainability of all Klamath Basin communities. (KBRA, 2010)

After the completion of a draft KBRA, the state governments of California and Oregon, the federal government and PacifiCorp negotiated an Agreement in Principle for dam removal with PacifiCorp, which would eventually become the KHSA (Gosnell & Kelly, 2010). Many parties supported the agreement, but the final agreement would have to come out of a process that had all stakeholders at the table. A new forum was convened to sort out the details of the KHSA between November 2008 and the release of the final agreement in September 2009 (Gosnell & Kelly, 2010). When finalized, the KHSA laid out the process for:

...additional studies, environmental review, and a decision by the Secretary of the Interior regarding whether removal of four dams owned by PacifiCorp: (1) will advance restoration of the salmonid fisheries of the Klamath Basin; and (2) is in the public interest, which includes but is not limited to consideration of potential impacts on affected local communities and tribes. The four dams are Iron Gate,

J.C. Boyle, Copco 1& 2 dams on the Klamath River. The Hydroelectric Settlement includes provisions for the interim operation of the dams and the process to transfer, decommission, and remove the dams. (KHSA, 2010)

On January 7<sup>th</sup>, 2010 the final drafts of the KBRA and KHSA were released and on February 18<sup>th</sup>, 2010 the agreements were signed by many of the participating parties but require congressional approval to move forward. The KBRA was signed by 45 organizations representing the affected states, counties, parties related to the Reclamation Project, Upper Klamath irrigators, tribes, and other parties, which consisted of fishing organizations and conservation groups (KBRA, 2010). The non-federal parties that signed the KBRA received separate letters from federal parties expressing their intent to take actions consistent with the agreement upon enactment of authorizing legislation that authorizes and directs federal agencies to become parties to the KBRA, which has yet to occur (KBRA, 2010). The KHSA agreements were signed by all of the same non-federal parties as the KBRA with addition of PacifiCorp (who did not have a stake in the KBRA) and the federal parties not yet authorized to be parties of the KBRA (KHSA, 2010). A list of the KBRA and KHSA signatories is presented in Appendix A at the end of an executive summary of each of the agreements in Appendix A (Summary of the Klamath Basin Agreements, 2010).

Touted as historic by many who participated, media outlets, and politicians (Sheets, 2011) the agreement's failure to receive congressional approval by the March 2012 deadline has left some skeptical of the outlook for the agreements. Currently controversy in the Basin persists and the dams continue to be operated under annual

licenses. The backdrop of the Klamath Agreements has provided a very rich case study to investigate my research question of: *what influences stakeholder participation in EDR negotiations in water resource management?* The following chapter presents a narrative about the methods adopted for this study, which are reflective of the need for a nuanced approach to this research topic.

*Chapter 4***METHODS****Introduction**

Understanding the motivations of a stakeholder is often context specific and a highly nuanced process. Specific events or ideologies may hold varied meanings for different stakeholders, potentially affecting participatory processes in a multitude of ways. In this study, factors influencing participation were expressed by all respondents. However, the meaning and context of what generated those factors varied greatly. A challenge with this type of research question is generating a more in-depth and contextualized level of understanding of what influences stakeholder participation. In the Klamath River Basin, understanding what influences participation may have applications in understanding the challenges associated with negotiated watershed agreement processes. For example, continued conflict within a Basin may motivate or alternatively disenfranchise historically antagonistic stakeholder groups, affecting how and whether they participate in a negotiated watershed process.

In this chapter, I provide a discussion of my methodological choices. This includes a discussion of the qualitative methods I chose to use for this research project, the theoretical lens I approached the study with, the selection process for participants, data collection, and data analysis. At the end of the chapter I discuss some of the methodological issues and choices I faced in designing and conducting the study.

## **Methodological Approach**

Understanding the nuances of what motivates or discourages stakeholders from participating in EDR negotiated watershed agreements suggested a need for a research method that: 1) was reflective of the individualistic expressions of motivation for or against participation; 2) could capture the evolution of these motivations throughout the negotiation process; and 3) provided a level of interaction with the study participants such that issues relevant to participants would be addressed. To meet these requirements I employed the qualitative research methodology of grounded theory, which takes the perspective that reality is negotiated between people, always changing, and constantly evolving (Richards & Morse, 2013).

As conceptualized by Glaser and Strauss (1967), grounded theory is an approach to produce theory from qualitative data gathered through fieldwork with those engaged in the social phenomenon being investigated. Data forms the foundation of the theory and the analysis of the data generates the concepts the researcher constructs (Lichtman, 2012). Theoretical sampling, constant comparison of data, and specific ways of coding data are the foundations of grounded theory (Lichtman, 2012).

Grounded theory has seen considerable debate and reevaluation from its original conception by Glaser and Strauss in 1967 (Richards & Morse, 2013). The various theoretical lenses scholars have applied to grounded theory directly affect the development, procedures, and outcome of a research study. It must be noted that Glaser

and Strauss (1967) in their original program for grounded theory called for a flexible application of the method:

Our principal aim is to stimulate other theorists to codify and publish their own methods for generating theory... . In our own attempt to discuss methods and processes for discovering grounded theory, we shall, for the most part, keep the discussion open minded, to stimulate rather than freeze thinking about the topic. (p. 8-9)

Ultimately even the fathers of grounded theory split on the grounds of theory forcing versus theory emergence (Strauss & Corbin, 1998). For the purposes of this study I ascribe to a constructivist orientation towards data collection and analysis, which will be discussed in subsequent sections.

Given the nature of this research topic, grounded theory permits an understanding of the dynamics of a particular situation, making it a viable methodological choice (Fendt & Sachs, 2008). As Richards & Morse (2013) point out, grounded theory is particularly well suited for studies in which researchers are trying to understand from participants about process or situation, which is the aim of my study. Based upon detailed exploration and re-exploration of data the methodological approach of grounded theory allowed for the development of a localized theory<sup>1</sup> concerning participation in the KHSA and KBRA

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<sup>1</sup> The term theory has seen considerable debate within the literature of grounded theory (Fendt & Sachs, 2008; Thomas & James, 2006). Thomas and James (2006) criticize grounded theory methodology for confusing the vernacular “spark to inspiration,” (p. 7) which involves tacit patterning, interpretation, and inspiration with the “predictive function of theory in the natural sciences and functionalism” (p. 7). For the purposes of this study I agree with their criticism and see theory more as a narrative or understanding and interpretation (Fendt & Sachs 2008).

agreements within the Klamath Basin, which can inform or critique more broad theoretical assumptions surrounding collaborative/participatory management processes.

### **Researcher Theoretical Lens & Background**

My research design for this project leans towards a constructivist orientation (Charmaz, 2006) in approach and ideology. A constructivist approach places priority on the phenomena of the study and sees both data and analysis as created from the shared experiences of the researcher and the participants (Charmaz, 2006). In the data gathering, coding, and analysis phases, I focused on my belief that knowledge, in the context of this study, is at least partially created by the dialogue between the interviewer, the interviewee, and the geographic, economic, cultural, and political preconceptions of both the interviewer and interviewee. This approach allowed me to maintain an inclusive, rather than exclusive viewpoint, allowing for patterns in the data to emerge.

At the same time, I felt that the research subject benefited from being well grounded in the literature, which provided a framework for understanding the data I collected. As a result I conducted a literature review and formulated research questions prior to data collection of the phenomena under investigation.

Within the context of the Klamath Basin my background places me in a unique position of both an insider and outsider. My insider perspective developed from living in Humboldt County during the early 2000s, a point in time when many of the conflicts over water allocation within the Klamath Basin came to a forefront in the local and national community. This allowed me to understand the tremendous emotion surrounding the conflicts from multiple viewpoints, including my own. I was inundated with news media

portraying differing views on how to move forward with the Basin's natural resource problems and had the opportunity to attend meetings associated with the KHSA and KBRA agreements on campus as an undergraduate student. This closeness to the Klamath Basin and its various stakeholders has allowed me to generate a rapport with a number of the interview participants, possibly giving me legitimacy in their eyes.

By not participating in the negotiation process for the KBRA and KHSA I have also maintained the position as an outsider to the process. Remaining outside the negotiation process was critical in gaining the trust of the interview participants. By not sitting at the table I am able to maintain a level of neutrality and a willingness to hear all sides of the story. Walking the fine line between legitimate yet neutral researcher was extremely challenging and developed throughout the process of data collection.

### **Participants**

Participants were comprised of stakeholders that represented the more than forty non-federal and federal parties represented by the KBRA and the KHSA, as well as stakeholders not represented by the KBRA and KHSA due to either a decision not to sign the agreements, or involuntary exclusion from the agreements. Participants selected were either self-identified or were recommended as a representative of a stakeholder organization affected by the KBRA and KHSA. Participants also needed to have participated in the negotiation process in some capacity.

Initial study participants were identified by consulting the signed KBRA and KHSA, which breaks signatories down into eight categories of representation: regulatory agencies of California, regulatory agencies of Oregon, tribes, affected counties, parties

related to the Klamath Reclamation Project, upper Klamath irrigators, other organizations (which are exclusively environmental and fishing organizations), and applicable federal agencies (KBRA, 2010; KHSA, 2010). Each stakeholder organization that falls into one of these eight categories is identified by the organization's name, the signatory's name, and their contact information. I also identified participants by suggestions made through my professional and personal contacts, and I searched media outlets to identify stakeholder groups publicly in opposition of the agreements. From this a list of potential participants was generated.

I contacted each of the potential participants by email and phone and informed them of the nature of the study and inquired about their participation in the KHSA and KBRA negotiation process and their willingness to provide an interview. I also used a snowball sampling technique to identify further participants by asking each participant for recommendations of other individuals they felt fit the inclusion criteria stated above. I repeated the process with each new contact. Once an individual agreed to an interview I provided them with an information sheet (Appendix B) that outlined the purpose of the study and the confidentiality agreement I would provide them based on Institutional Review Board (IRB) protocols and approval (Appendix C). Twenty-two individuals agreed to participate.

When I had approximately 50% of my interviews completed, I assessed where I was missing data in each category of the eight signatory categories and of the stakeholders not represented by the agreements and began to ask study participants for suggestions of people to interview that fit within those categories. In this paper, I have used pseudonyms and changed personal details as necessary to protect the study participants' identities.

## **Data Collection**

The primary source of data is twenty-two semi-structured interviews conducted with various stakeholders that participated in some capacity in the KHSA and KBRA negotiations. The interviews took place between October and December of 2012, nearly two years after the signing of the agreements. Interviews lasted between 50 minutes and 2.5 hours, and were either in person at a location requested by the interviewee or over the phone for the convenience of the interviewee. Nine interviews were completed in person and thirteen were completed over the phone.

I began each interview by reviewing the information sheet (Appendix B) provided to the participant prior to the scheduled interview and followed with a discussion of my objectives for the interview. I identified my desire to understand their perceptions of participation within the negotiation process, specifying my interest in how, why, and when they participated. For most respondents, this provided a natural transition into the interview process.

For all interviews I used an interview guide (Appendix D) with questions directed towards the participant's background, the dynamics of their participation in the negotiation process, and closing questions allowing them to reflect on their participation. Although I attempted to remain within these specified themes for each interview, I remained adaptable to individual modes of communication, understanding, and thoughts. I closed each interview by asking the respondents if I could contact them with any follow up questions and explaining that I would provide them with the main themes identified

throughout their interview for their verification. Interviews were recorded using a digital recorder and transcribed by a professional transcription service.

### **Observations**

Throughout the interview process, I kept a field journal that includes information regarding the interviews that I felt was relevant during and after an interview. I used this journal during the analysis phase of the project as observational data in support of themes I identified. I also attended the California State Water Board meeting and hearing regarding the consideration of a proposed Resolution regarding the Section 401 Water Quality Certification Application for the Klamath Hydroelectric Project, FERC Project No. 2082 on July 17<sup>th</sup>, 2012. This meeting brought many of the representative stakeholders out that are either in favor or against the KHSA and KBRA, allowing for a validation of the themes identified from interview data. Extensive observational field notes were taken throughout the meeting.

### **Data Analysis**

Analysis began after eight of the interviews were completed. I began to develop a basic list of initial codes, or labels, that expanded as the interviews continued. Label construction was inductive and open-minded during the initial phases of analysis (Charmaz, 2006). I conducted this labeling by going through the transcripts line-by-line and assigning a label to passages that contained an idea relevant to my study objective. If that idea came up again later in the transcripts it was then coded again with that same label, subsequently adding to the frequency of that particular code. At the end of the first pass through there existed well over 100 labels. After this initial pass, I began a more

focused coding by grouping and sifting similar labels to synthesize and explain larger segments of data (Charmaz, 2006). I followed focused coding by theoretical coding, which entailed specifying possible relationships between categories I developed in the previous focused coding process (Charmaz, 2006). The theoretical codes were more interactive and helped me conceptualize how my previous labels and categories were related, allowing me to produce a more coherent analytical story grounded in the data. This process resulted in nine categories: objectives; past experiences; relationships; political and geographical context; process legitimacy; regulatory framework; personal values and identity; process support and progress; and results.

During the theoretical coding process I moved between an inductive and deductive approach. This was helpful because it allowed me to begin identifying the primary themes emerging from data that had a base in the theoretical literature surrounding stakeholder participation without sacrificing the initial openness of a qualitative approach. Throughout the labeling and coding process a constant comparative method was employed by comparing data (transcripts) with data across the interviews, labels, and categories (Charmaz, 2006).

### **Methodological Dilemmas and Limitations**

There were a few concerns that arose both before and during the research process that require some explanation and discussion to conclude this chapter. One of the first issues concerned the small sample size of data. Stakeholders that represent various organizations affected by the KHSA and KBRA presented two distinct challenges for this study. Most individuals that were present in the negotiations in some capacity are

extremely busy working professionals and carving 1 to 2 hours out of their schedule proved difficult. The other issue revolved around the precarious position of the KHSA and KBRA agreements currently. Some individuals are currently working hard towards either promotion or dismantling of the agreements while others moved on from this process nearly two years ago. These diverging involvements or lack of involvements in the agreements manifested themselves in varying degrees of motivation to participate.

The second limitation involves the use of phone interviews in conjunction with in-person interviews. There has been limited research conducted on the differences between phone interviews and face-to-face interviews (Shuy, 2003), although many qualitative method guides recommend the use of in-person interviews as opposed to phone interviews (Charmaz, 2003). Shuy (2003) pointed to ten indicators that lent themselves either to phone interviews as being more advantageous or to face-to-face interviews being more advantageous. The indicators are: cost, control quantification of results, completion time, naturalness, response rates, thoughtfulness of response, complexity of issue, marginalized respondents, and sensitive questions. Of the indicators I found most pertinent to my study (thoughtfulness of response, complexity of issue, marginalized respondents, and sensitive questions) all but one (thoughtfulness of response) lent themselves to face-to-face interviews. As mentioned earlier many of the stakeholders contacted for interviews are extremely busy and only had time to participate in phone interviews. I felt their participation outweighed the limitations associated with phone interviews.

## **Conclusions**

Studies such as this project present value because of the social perspective they

can provide by analyzing the patterns of individual perceptions concerning events. Through this type of analysis, this study is able to speak to the theoretical concepts previously outlined, expanding our understanding in these areas of research. The information collected and analyzed in this study provides a level of detail that may be helpful in informing others participating in EDR-negotiated watershed decisions. In the next chapter I present the results of the twenty-two semi-structured in-depth interviews conducted with a representative sample of stakeholders within the Klamath Basin.

## Chapter 5

### RESULTS: FACTORS INFLUENCING PARTICIPATION

#### Introduction

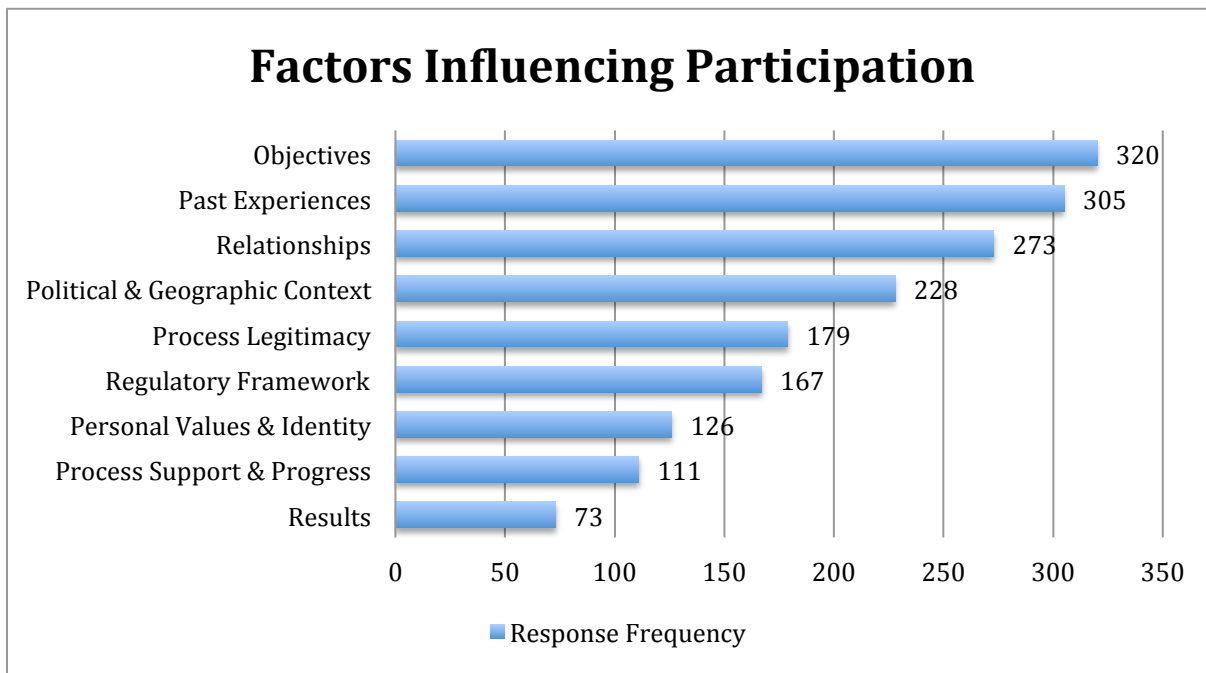
As explained in previous chapters, the analysis of twenty-two interviews conducted with stakeholders in the Klamath Basin relies on the qualitative approach of grounded theory methodology. Study participants (Table 1) consisted of representatives from the four major tribes in the Klamath Basin (Yurok, Karuk, Hoopa, & Klamath), commercial fishing representatives (California based), conservation organization representatives (local & national level), federal agency representatives (Fish & Wildlife Service, National Marine Fisheries Services, & Department of Interior), state agency representatives (California state agencies), and the hydropower owner (PacifiCorp). Interviews conducted were in-depth, semi structured, lasting between 50 minutes and 2.5 hours, and covering a range topics that informed my research question: *what influences stakeholder participation in EDR negotiations in water resource management?*

Table 1 *Interview Pool*

Tribes	4
Irrigators/Farmers	3
Fishing Organizations	2
Conservation Organizations	5
State Agencies	2
Federal Agencies	5
Hydropower Owners	1
<b>Total</b>	<b>22</b>

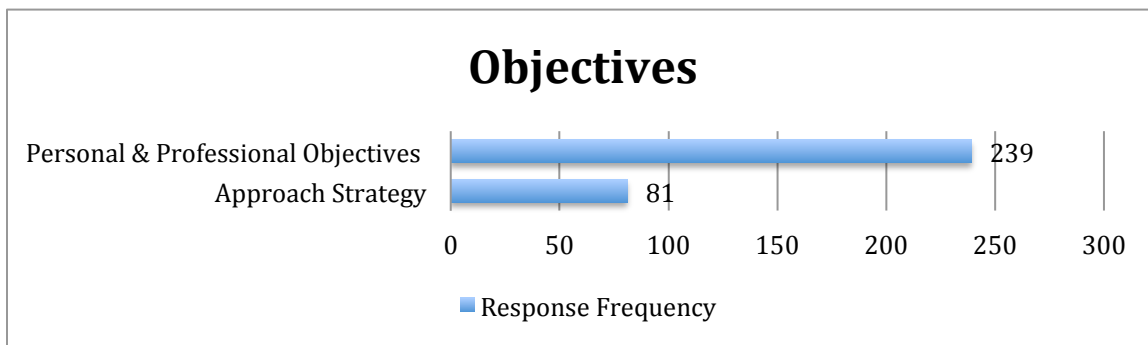
One hundred and six factors emerged from the interview transcripts. The factors

have been grouped into nine descriptive categories that highlight the more salient themes emerging from the interviews, listed in order of response frequency, which was generated by going through the transcripts line-by-line and assigning a label to the entirety of a passage that contained an idea (factor influencing participation). If that idea came up again later in the transcripts it was then coded again with that particular label, subsequently adding to the frequency of that particular code (Figure 4): (1) objectives; (2) past experiences; (3) relationships; (4) political and geographic context; (5) process legitimacy; (6) regulatory framework; (7) personal values and identity; (8) process support and progress; and (9) results. It must be noted that these nine categories are not closed systems (clearly bounded domains or systems) in the processes that encouraged or discouraged stakeholder participation throughout the agreements. The categories should be thought of in a more cyclical fashion, influencing and affecting each other throughout the process. Aspects from each category are inherently present in subsequent categories producing a dialectical relationship between the factors influencing stakeholders to make decisions regarding participation. Some of the more telling passages from the twenty-two interviewees are presented below, bounded within the nine categories that highlight the factors that influenced stakeholder participation. A summary of these categories is provided in Table 2 at the end of the chapter.

Figure 4 *Factors Influencing Stakeholder Participation*

### Objectives

Respondents discussed objectives in two ways: (1) how their personal and professional objectives, as well as the objectives of other stakeholders, influenced their participation; and (2) the ability of the strategy or approach of the process to allow them to achieve their agenda (Figure 5).

Figure 5 *Factors Influencing Participation: Objectives*

Interviewees' discussion of their personal and professional objectives and the perceived objectives of others encompassed a number of ideas. The mission statement of the organization that stakeholders worked for was a prominent reason many were involved in the negotiations, particularly for the conservation groups and the federal and state agencies. A respondent from the environmental community articulated the reason for their organization's interest in the Klamath water resource issues:

We work on basically water quantity issues and one of our main missions is to protect and restore stream flows and keep water in our streams and our marshes and lakes and things like that. So part of our main mission is water related stuff. Dam removal is very important to us.

Another respondent from the federal community expressed how these negotiations were his assignment so he had to be involved, but that he was committed and dedicated to the outcome, a sentiment expressed by all interviewees:

Well, it was my assignment and I was really committed to it.

One respondent from the conservation community indicated that his organization's mission statement had shifted over the years the negotiations occurred and they were no longer focused on the issues that the agreements entailed, which caused him and his organization to discontinue participation in the negotiation process.

Respondents also expressed their personal and professional objectives in terms of financial interests, a need to protect their previous gains, and how the meeting of their objectives (or not) influenced their participation. One respondent from the commercial

fishing community articulated the financial interest they had in the Basin and how that compelled them to participate:

So that means we've got a very important, crucial economic interest in making sure those [fish] runs are in good health.

Another respondent from the environmental community expressed their need to protect gains they had made in other forums:

We were there to inform others about the impacts of the power rate and also work to make sure that this forum didn't undermine progress that we were achieving elsewhere.

All respondents with the exception of the conservation groups, state agencies, and the utility company expressed a need to focus only on their objectives and to not worry about what the other groups were gaining during the negotiations. As long as their objectives were met they could move forward:

Early we kind of established what do we really need? If we put blinders on and say if we don't care what everybody else gets – once you get past worrying about what the other guy gets and you focus on what you get or need, that's a big point, so we kind of set out these things pretty early on.

Respondents also articulated how their objectives either evolved throughout the process or stayed consistent. One respondent discussed how their group always maintained a fundamental truth:

[Our goals] were pretty fixed. The methodology that we used and how we tried to achieve those goals changed in various ways.

The perceived objectives of other stakeholders were also an important influencing factor mentioned by all interviewees with the exception of the utility company. A respondent articulated how other groups in the negotiation only cared about dam removal

and were willing to trade off most anything to make a deal:

For some groups dam removal was the highest priority. So as long as there was a deal for dam removal and there was some cover that the water deal might work for fish and some cover that the refuges were getting something out of the deal, you know they were willing to make those trade-offs.

The process strategy or approach was also indicated as an influencing factor, although not as relevant as stakeholder's objectives. The traditional FERC relicensing process was (in some respondents' views) not capable of delivering the broad restoration hopes that nearly all stakeholder groups desire for the region. For example, one respondent from the environmental constituency expressed a need for a more flexible or holistic approach to achieve the desired results from this process:

I think the simple answer is the [FERC] relicensing process was really unlikely to give us the kind of latitude and flexibility to explore creative solutions to a really complicated problem.

Others felt that they would prefer control of the outcome through negotiated settlement to the uncertain alternative of the FERC process and litigation. A respondent from the tribal constituency articulated this sentiment:

It's a really uncertain way to go [the FERC process]. To me, it seems like the KHSA for whatever perceived shortcomings it has is a much more certain path to actual dam removal, like shovels getting going and the removal actually happening.

Others disagreed with the route of negotiating the KBRA and the KHSA as tandem agreements and thought that they should have been dealt with as issues in separate forums.

I warned the tribes about this and a lot of the stakeholders. I said, "look, let's get the hydro relicensing resolved before you deal with

what's going on in the Upper Basin." The issues, while there are some linkages, hydro and the Upper Basin are separate issues. They really are separate issues and should be dealt with separately.

Lastly, respondents evaluated whether or not this process was worth their time or if they would or could make a difference. A respondent from the federal community discussed how he only participated once he got the thumbs up from others that this might be worth his time:

In fact, you know, I only got involved when I got the thumbs up. He called me up and said okay, it's time. They [the other stakeholders] had been talking for about six months to a year up to that point, and they were you know, still trying to feel their way through things. But when they finally started making some progress he said get down here.

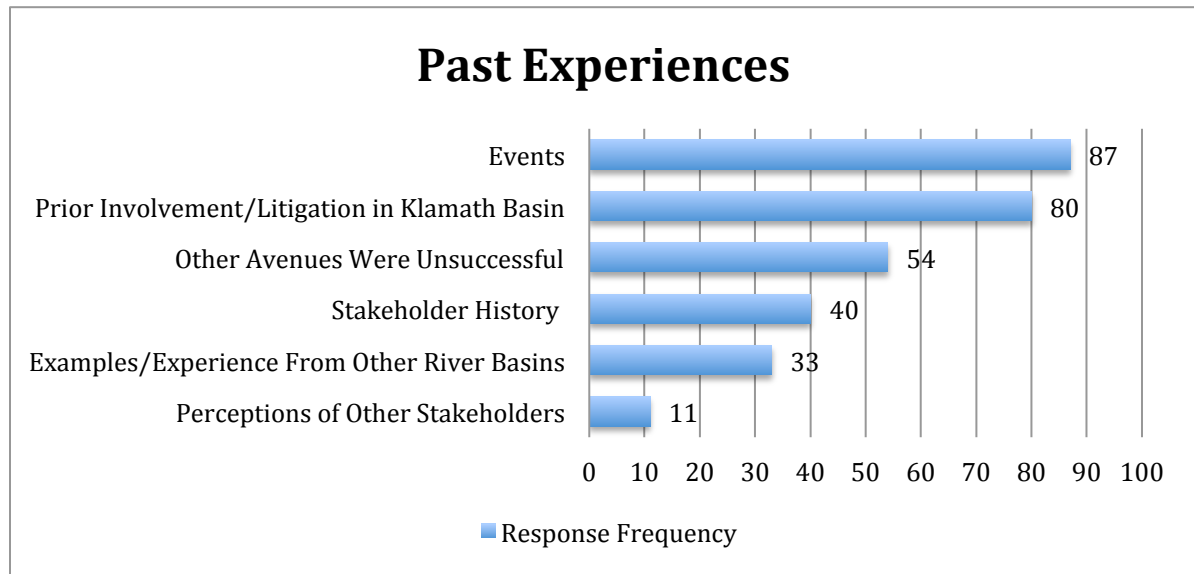
In sum, the objectives of stakeholders and their perceptions of others objectives, as well as their objectives for the strategy of the process engaged some to negotiate due to their organization's mission statement. Others came because they wanted to protect their interest or see if this process could help them achieve their objectives. Others discontinued participation because their organization was no longer focusing on the issues being discussed or changed how they participated due to their perceptions of other stakeholder's objectives.

### **Past Experiences**

Past experiences that stakeholders were a part of or witnessed influenced their participation in a many ways. Respondents discussed past events that had occurred in the Basin, prior processes they had participated in concerning the Klamath Basin, whether their participation in those prior processes was fruitful or meeting their needs, the history

with other stakeholder groups and the perceptions that had formed of others, and lastly their experiences in other river basin or collaborative processes (Figure 6).

Figure 6 *Factors Influencing Participation: Past Experiences*



The 2001 water shutoff and the subsequent 2002 fish kill were the most prevalent events mentioned by the interviewed stakeholders. These events spurred change in the Basin, igniting many historical conflicts between opposing stakeholder groups and changing how stakeholders perceived themselves and others within the Basin, as well as their perspectives of how to deal with the resource distribution issues occurring in the Basin.

For example, one respondent from the irrigation community articulated how the events of 2001 made stakeholders realize that others in the Basin could impact them, and traditionally perceived borders or barriers in the Basin were more porous than they had realized:

I think in the pre-2001 world, the downriver people didn't see anything above the lowest dam on the river and everybody up above was just a

dirty SOB taking all the water. The upriver people felt the same way and didn't think the down river needs could impact them at all.

A respondent from the irrigating community followed this up, indicating that maybe they would have never been a part of (or needed to be a part of) the KBRA and KHSA if the water crisis of 2001 and its implications hadn't occurred.

It's one of the things that I don't like talking about a lot, but it's like if we never had 2001, would we have made this deal?

Another respondent from the conservation community discussed how the specific events of 2001 and 2002 personalized the resource issues for stakeholders in the Basin reviving some of the traditional conflicts between stakeholder groups:

... and then in 2001, 2002 you had just more fuel for the fire, "We're going to take the water away from the farmers and we're going to provide it for the fish." And then the exact same perfect storm shows up the next year. And so again, that just ups the ante on the war of words and made things a whole lot more personal. 2001 and 2002, I think, made things a whole lot more personal.

Lastly, a respondent from the tribal community somewhat countered this point articulating how all the events occurring on the landscape acted as a wake up and a call to action, and possibly as a unifier against a common enemy between traditional advisories in the Basin:

We had the farmers taking a giant hit [2001 water shut off], followed by the Indian tribes and commercial fisherman taking a giant hit [2002 fish kill]. Everything was just kind of swirling around all at the same time. And then after that, the commercial fishery was completely shut down in the ocean due to weak Klamath stock. Everybody was suffering in turn one after the other, except PacifiCorp. They weren't suffering. And people started to realize that.

The influence of prior processes in the Klamath Basin was the second most prevalent code in the study, cited numerous times by all interviewed stakeholders with the exception of the utility company and state agencies. Many other processes had occurred in the Basin regarding resource allocation and restoration (in the form of litigation, coalition, EDR process, etc.), impacting whether and how stakeholders negotiated during the KBRA and the KHSA negotiations. For example a respondent from the tribal community expressed how a prior experience in the Basin began to change relationships that had made the KBRA and KHSA possible.

There were these Chadwick sessions. Bob Chadwick was a retired forest supervisor from Fremont-Winema National Forest. He became a facilitator; I think the Bureau hired him. He went around the Basin and had all of these listening sessions where you get folks from agriculture, tribes, conservation communities, and people who live here and have a lot of hot passion for these issues into these listening sessions and he got people to listen to each other and express themselves. I think in those Chadwick sessions, people started developing some bona fide appreciation for the other guys' perspective and I think people started seeing each other as people.

However, past experiences between stakeholder groups did not always influence the way stakeholder groups perceived each other in positive ways. For example, a respondent from the tribal community recalls past litigation where a conservation group intervened in a tribal court case:

Well, for example, the Klamath Tribe's reservation was terminated and they lost their entire reservation. It became National Forest and then they logged the crap out of it. They introduced federal legislation about 15 years ago to reacquire their reservation and change it from federal to tribal lands. A conservation group opposed that and the legislation died. The Klamath Tribe has never forgot that.

A respondent from the irrigation community aptly summed up the impact of prior process in the Basin:

Our involvement in the KBRA and the companion KHSA, has a lot to do with fifteen years of various settlement processes and experiences that led up to the KBRA and KHSA. There were a lot of first efforts that came years before the KBRA/KHSA table formed, and much of the work that went into the KBRA/KHSA had a lot to do with people learning things maybe ten years beforehand.

The lack of success of prior processes in the Basin was expressed by a number of respondents, particularly the respondents that make a living in the Basin, as a key factor influencing their participation. They cited that they had tried other options (e.g. litigation and relying on regulation) with unreliable success and that at the time of the negotiations they were hurting and needed to find a solution to some of the resource allocation problems:

I'd be lying if I didn't say that we were hurting. That was a factor, the fact that we weren't winning. We had already tried everything else.

Stakeholders also discussed their own and others' history and how for example, the genocidal past between the tribes and irrigators was always somewhat at the table due to knowledge by some of linkages between their ancestors. Experiences in other process also informed how, why, and if they entered negotiations. All stakeholders interviewed discussed positive and negative experiences from other collaborations, or ideas about how to proceed.

Lastly, stakeholders articulated how these past experiences informed their perceptions of other stakeholders greatly influencing their participation. Positive or

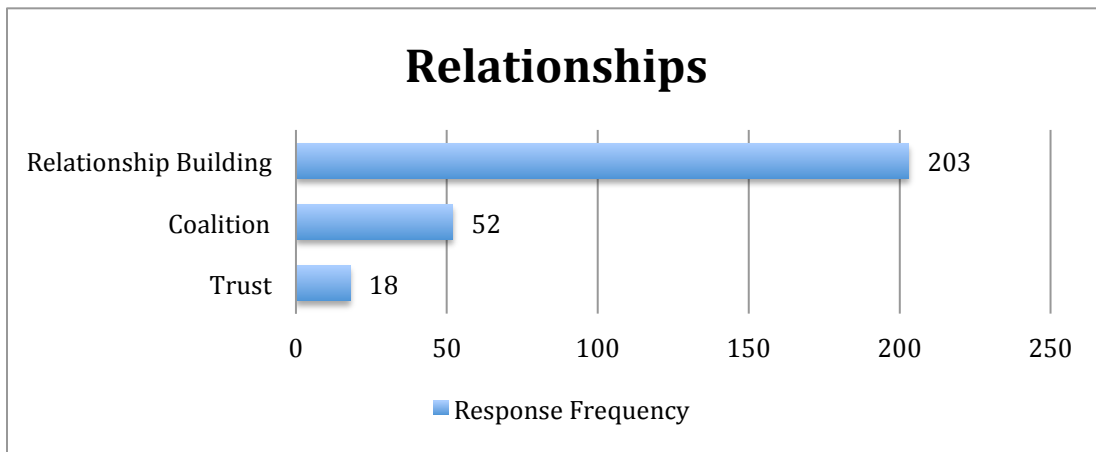
negative views of stakeholders had to be dealt with while negotiating and in some instances negative views of stakeholders exacerbated issues, forcing some out of negotiation process.

In sum, past events and experiences impacted how and why stakeholders entered negotiation. If specific experiences had not taken place, like the realization of the porousness of the divide between the Upper and Lower Basin due to the implications of the 2001 and 2001 water crisis, certain stakeholders would not have felt a need to participate and some would have began negotiations with a different mindset, which would have changed the way they participated.

### **Relationships**

Respondents expressed the importance of relationship building (which encompassed ideas of developing relationships, the lack of relationships, common ground, and personalities), building or redefining coalitions between stakeholder groups, and trust. Relationship building was the fourth most cited individual code in the study, was emphasized by all respondents, and was by far the most prevalent factor within the relationships category (Figure 7).

Figure 7 Factors Influencing Participation: Relationships



Respondents articulated how regardless of the outcome of the process, the development of relationships with other stakeholders in the Basin made it worthwhile. One respondent from the conservation community put it this way:

I think even if just queuing up those relationships is the main thing that comes from it [the negotiation process] it was worth it. All the hair that was lost in the nine years [of negotiations], sitting in really dimly lit rooms in the basement of some federal building in Sacramento or Redding was worth it.

Another respondent articulated that as the FERC process continued on they started to slowly develop personal relationships with other groups attending the FERC process and friendships began to form, allowing them to open up to the KBRA/KHSA negotiations. Others discussed how they made friends in this process, which made them want to see it through and make sure things worked out. A respondent from the conservation community articulated that point:

I made a lot of friends along the way. I still have very close relationships with several different parties from that process. It was like not wanting to let your friends down. Like, "Okay, I'm going to trust you that this is going to work out, and I'm going to hang with you

and hope.”

Traditionally adverse stakeholders were also able to find common ground and come together and negotiate in this forum. One member of the tribal community articulated the importance of the common ground discovered between groups:

I think the thing that the tribes and the farmers realized that they had in common – was this connection to land. They wanted to continue doing what they were doing, but were finding it increasingly difficult to do so. So the goal of the talks became sustaining rural communities. It really became about the people. So I’d say it [the common ground] just formed the very basis upon which the talks came together.

Not all respondents expressed the development of relationships and some noted the lack of relationships between stakeholders as a factor inhibiting some groups’ success in the agreement or in their ability to see the agreement through.

Other respondents discussed how this process developed or diminished coalitions between stakeholder organizations, affecting the organization’s ability to achieve desired goals:

We had a conservation coalition within the negotiations that initially tried to stay together on decisions. Those were totally violated by the major conservation groups that were involved because they were focused on dam removal, not the refuge and water issues. Basically by not following the protocols within the coalition and going out on your own and agreeing to things before you brought everybody along divided the conservation coalition and basically the negotiating power of the conservation community disappeared.

Trust between stakeholder groups was also an important factor influencing how stakeholders would participate. A respondent from the irrigation community discussed how some groups in the room could just never get to a place where the groups believed

what the irrigation community were saying was really needed:

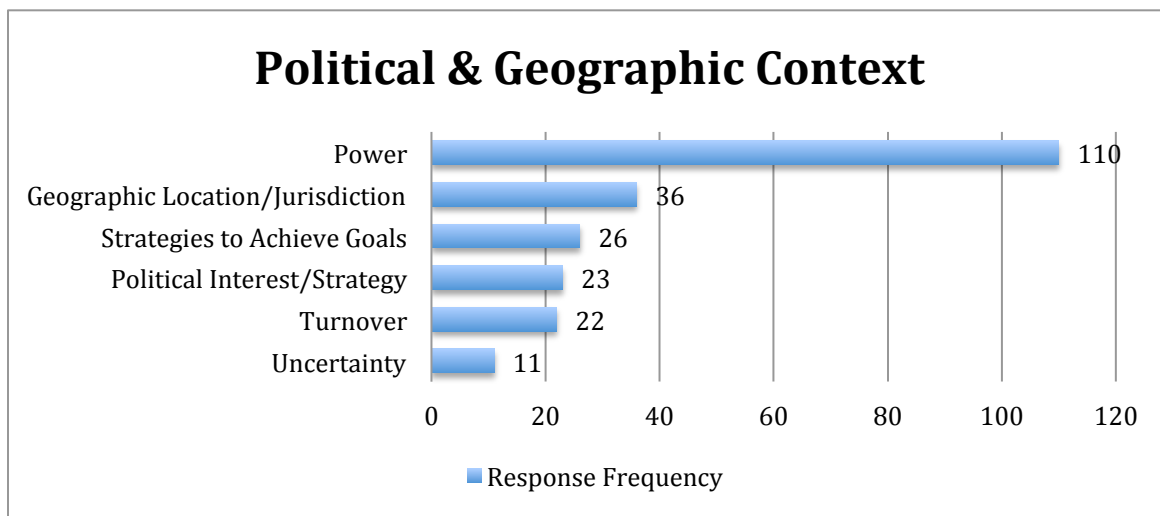
Some folks that were inside the room never could get to place where they had the trust, where when I told them I needed water, they would believe it.

The sentiment of trust issues was only articulated by a few of the respondents, with the majority of the respondents citing relationship building as more prominent in influencing participation. Relationship building allowed stakeholders to work together in new ways, lasting beyond the scope of the agreements.

### **Political and Geographic Context**

Respondents discussed the importance of the current political and geographic climate in terms of power, implications of jurisdictions and geography, political interest in the negotiations, the effect of turnover in political and administrative positions, the strategies stakeholders used to negotiate the current sociopolitical climate, and uncertainty associated with the sociopolitical climate they were dealing with (Figure 8).

Figure 8 *Factors Influencing Participation: Political & Geographic Context*



Power was looked at in two distinct ways: imposed power and perceived power.

Respondents discussed the imposed power of other stakeholder groups in the negotiation and how they were able to manipulate the process to achieve their desired results. One respondent from the conservation community articulated how other groups' political power influenced their ability to participate in the process:

I think it was really not your typical mediation process where you had people with, you know maybe somewhat equal power sitting around the table and trying to resolve issues. I think it was a process that was basically tainted because one group had too much political power within an administration that had a specific agenda, which allowed them to exclude people to achieve their agenda.

Another respondent echoed this sentiment:

So a lot of the stuff that was driving this was the irrigators demanded to have this, this, and this. We expressed the need for other policy options that incorporated something in the public interest, as opposed to just the most powerful interest group coming into the negotiations and saying, "Our party is in the White House, so you guys have to tow the line or you're out."

Other respondents discussed the power of the utility company and how that influenced how Oregon participated in the negotiations:

I mean PacifiCorp to California, as far as an entity, who cares? PacifiCorp has limited power in California 'cause they have such a small community they serve, where in Oregon they obviously have a very large community that they serve and they interact with regulators and the governor's office on a frequent basis. That's not the case in California, so people don't have the same familiarity with them. So on that level it was a different dynamic for Oregon.

Finally, another respondent articulated how they had no power in the negotiation and were being used by nearly all the other groups as leverage to bolster their political

agenda:

So the power was with everybody but the refuge. For example, the irrigators could use the refuge to their advantage. They thought they could use the refuge to say “hey, we’re environmentally conscious. We want to get water to the refuge. So we can look green. We have wildlife on our place.” You know, that kind of thing. But now that the KBRA has died, a lot of those folks have walked away. And when the refuge is dry the environmental groups can score points by saying, “look, see how this project isn’t working. This isn’t right. This refuge shouldn’t be dry.” So, no matter if things are good or bad for the refuge someone is always using us to boost their agenda.

Concerns associated with geographic location and jurisdiction included the jurisdiction of the organizations that stakeholders represented, the physical geography of the Basin and how that coincided with the sociopolitical borders, and how environmental issues influenced the whole Basin, not just the Upper and Lower Basins. The jurisdiction and location of the organizations that the stakeholders were affiliated with influenced the way they perceived their role in the negotiations or how they needed to approach the conflicts. A respondent indicated the divergence between federal agencies’ mission statements due to their location in the Basin and how it was his responsibility to help them see the Basin as one, as opposed to an Upper and Lower Basin:

The perspectives are different even within agencies. Part of my job was to try to get the FWS to see it as one basin because down at our office in Arcata, they were founded to provide technical assistance to the tribes [they do Chinook]. The Yreka office was founded for salmon restoration and then the refuge obviously has a local interest. So there was, and in my opinion, still is, kind of a divide in interests within the FWS from the so-called Upper Basin and Lower Basin and then between the other federal services as well.

Respondents also discussed the issue of political jurisdictions and how they affected what

the stakeholders could bring to the negotiation process. One respondent from the state agencies highlighted the difference between Oregon and California in terms of the resources they could bring to the negotiation and the influence other stakeholders had [such as PacifiCorp] in Oregon versus California, changing how aggressive they could be while negotiating.

I think people also have to recognize that Oregon is a much smaller state, and so when you're dealing with people like myself in Oregon, they're not governor's appointees. They're going to be line people in the departments. So they just can't offer as much as easily. Also, it was definitely a different dynamic with the utility [PacifiCorp] for Oregon than it was for California, both practically and politically.

The physical geography of the Klamath Basin is very unique and in many instances the geography exacerbated the conflicts in the Basin both environmentally and socially.

Many of the sociopolitical borders within the Basin coincided with the physical divides in the Basin, compounding the divides between stakeholders. A respondent from the conservation community articulated this point:

Essentially, the geological split in the basin is around the town of Keno, this is where the rocks and the fish show the break. Upstream of Keno the rocks, snails, and fish are really different from downstream of Keno. Keno's right about the state line, and so you've got the interesting geology, and then you've got the state line. Because they pretty much coincide, it's easy to view the issues in Oregon as different from the issues in California.

Another important factor in terms of power discussed by all respondents with the exception of the utility company, had to do with the perceived legitimacy or power of other groups in the negotiation process. Stakeholders referred to this notion as *skin in the*

*game* and ascribed the concept to many of the stakeholder's that participated. Some respondents diminished other groups' stake in the process due to a multitude of reasons while others reflected that certain stakeholders' *skin in the game* should have been taken more seriously due to the effects it is currently having on the ability to implement the agreements. One respondent articulated this latter notion:

My recommendation is that someone needs to do a really careful, sober assessment of all of the interests and not just what legitimate power they can wield, but even what illegitimate power they can wield. They [the land owners on Copco lake, created by one of the dams slated for removal] don't have any legal authority, they don't have a lot of power in this thing, but through their manipulation of the issue, they struck a chord in their surrounding community. They had power there that was not really acknowledged and it wasn't formal power. But it has made an impact on the process.

Another respondent articulates how some groups did not matter quite as much to the process because their stake and power was not as substantial:

Ultimately, the important groups were willing to sign off on the water flows and that made a huge difference. The fact that one lone small organization up in Oregon with an interest in it that's very small compared to the tribes or the irrigators was not willing to go along with it and was not a barrier to move forward.

Another respondent aptly summed up this sentiment:

All the important stakeholders were sitting around the table.

The legitimacy ascribed to certain stakeholders and the perceived power they could yield in the negotiation process affected the way stakeholders participated with each other and considered each other's interests.

A number of respondents also discussed political interest in the negotiations. All

considered the current political dynamics and how best to negotiate them. Some respondents from the conservation community and one from a state agency expressed concern that the whole negotiation process was hijacked or devised by the administration at the time to deliver benefits to certain stakeholders:

I think what happened is that the Bush Administration realized that they had 26 parties or something like that that wanted to see these dams come out and were very concerned about the operation of the dams. And of course, the feds hold a lot of power in the relicensing process with their filing of dam relicensing conditions. I think the dynamic was that Bush Administration realized that they could have used that power to convene a process and get different parties to the table; that it was an opportunity to basically deliver a number of things to the irrigators that there really was no other way to deliver.

Another respondent from a state agency echoed this sentiment:

Well the feds had a huge problem with the Upper Basin. I mean because of the water shut off and the ESA issues. They had a big problem and they were starting to see that there was sort of some progress being made in the relicensing process. So they sort of hijacked that process, and pulled all the issues they wanted to deal with into the relicensing process.

Others discussed their response to the political and geographic climate in terms of the strategy they used to achieve their goals. One respondent discussed how the strategy they used to approach other stakeholders and create alliances was what allowed for many of the victories that occurred in the negotiations, because they understood that particular stakeholder groups had political sway:

Well, the federal government was getting ready to make these mandatory prescriptions. [The federal government asked] “does anybody have any big objections if we’re going to do this?” The farmers were like, “No, we don’t have any objections.” That was a direct result of us standing down on their [the irrigators] power rate.

We had offered them some things, and we took a lot of criticism for that from the environmental groups. Like we lost friends. So they [the irrigators] stood down on that. I think that gets lost. There are a lot of critics of the KHSA/KBRA right now. They're like, "wow, the fish ladders are mandatory. It's a checkmate on the company." I'm like, those things happened because we were talking with the farmers. I mean I think it gave the Bush administration the political courage to go ahead and prescribe them.

Another respondent from the conservation community commented on how other group's strategies were flawed and did not produce for them in the end:

Some people made the political calculation of, "If we will get the irrigators on board, we'll get the Republicans on board and that will help us get dam removal." But the reality is, they didn't deliver.

Lastly, stakeholders discussed how turnover in terms of their leadership and political or administrative leadership affected their ability to be effective at the table. One respondent from the irrigating community discussed how while negotiating they realized they needed to make *some* progress, otherwise the dynamics would change and that might completely change the negotiation:

We got to the point where we realized we just needed to solve the problem because it's like otherwise we'll be working with a different Congress or a different leadership.

Another stakeholder articulated how their group actually left the negotiations because their chairman did not like a procedural element of the process, and when a new chairman was elected, they decided that they needed to be at the table:

The chairman at the time said, "We already signed one [confidentiality agreement]. We're not budging." He was pretty stubborn I guess is the word, and he said, "No we're not going to do that. We already did it." Everybody said, "Well you're not going to participate then." Then we got a new chairman that said we needed to be at the table.

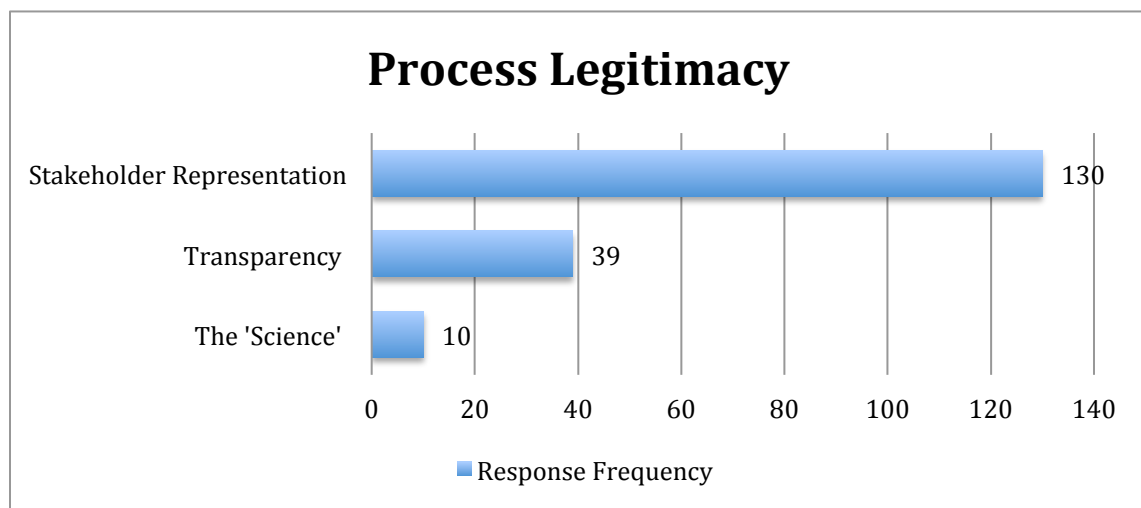
In sum, the political and geographic context impacted how stakeholders entered the negotiation and how they negotiated while in the process.

Implications of power differentials were present throughout the entire process and stakeholders responded to those differentials in a multitude of ways.

### **Process Legitimacy**

As the negotiations progressed, the legitimacy of the process became a very important concern for all of the respondents interviewed. Process legitimacy entailed stakeholder representation, the transparency of the process, and the science that was used to make decisions during the negotiation. Of the concerns associated with process legitimacy, stakeholder representation or non-representation was by far the most cited issue for stakeholders (Figure 9). Some felt that their community was not adequately

Figure 9 *Factors Influencing Participation: Process Legitimacy*



being represented by the organization representing them in the negotiation, which spurred

their involvement in the process. Others, particularly organizations from the conservation community, reported being excluded from the process themselves as well the exclusion of others trying to join the negotiation, which equated to their non-involvement in the process:

Certainly we participated voluntarily but we were excluded involuntarily, so that was the big reason why we weren't involved in the process anymore, was we were not allowed to participate.

This same respondent also discussed the exclusion of other stakeholders who attempted to join the process but were not permitted:

They willfully excluded us and if you just look at what happened in the lead-up, there were a number of organizations that tried to get in like, the smaller less powerful. They were excluded. The outfitters, the guys that make a living off of the dam releases, were excluded – again, it's not like their interests are perfectly aligned with environmentalists.

Adequate stakeholder representation in the negotiation did not only have to do with whether or not a stakeholder group was in the negotiation process, but also whether or not the individuals felt adequately represented by the leaders who were supposed to be representing them. A respondent from the irrigating community expressed their concern with this and how that prompted them to get a seat at the table for themselves:

We were a later joiner of the settlement table, and that was basically because we didn't feel that the other off-project group that was there was serving our interests. I remember a couple of years before the group I now represent got a seat at the table. I went to meetings that were in Redding and they would not allow me to sit in on the meetings. So, I sat in the car for a couple of days. The group that was supposed to be representing our interests would not allow me in the room. We ended up getting a seat at the settlement table because the other parties at the table eventually voted for us to have a seat.

Another stakeholder from the environmental community also noted that the transition from the FERC process to the settlement process facilitated the exclusion of other conservation groups that would have been interested in the KBRA issues. Those groups were unaware of what was being negotiated and were not informed either, weakening the position of some of the interests being negotiated:

This was convened at the end of licensing negotiations, and then it morphed into this let's make a water deal that involves the refuges and do all these other things. There were a number of groups: The Wilderness Society, Defenders of Wildlife, and Audubon groups that are heavily interested and engaged with refuge issues, and none of those groups were invited. The refuge groups weren't in the FERC process. Why would they have been, right? And then all of a sudden it's like hey, we're going to take the group of people that are interested in the dams and turn this into this huge negotiation with irrigators. It wasn't really a properly represented table to be addressing all those other issues.

Exclusion of stakeholders from the agreement process influenced the excluded groups to publicly not support the agreements. Not all respondents echoed the stakeholder representation issues cited by some, noting that they felt the various interests were represented adequately in the negotiation, citing that it is not possible to have every single interest around the negotiation table because it would not be possible to draft a settlement in that situation.

Respondents had diverging views on the transparency of the process and the adequacy of the science brought to the negotiation process. Responses from respondents were split, either indicating they were satisfied with process transparency or they were

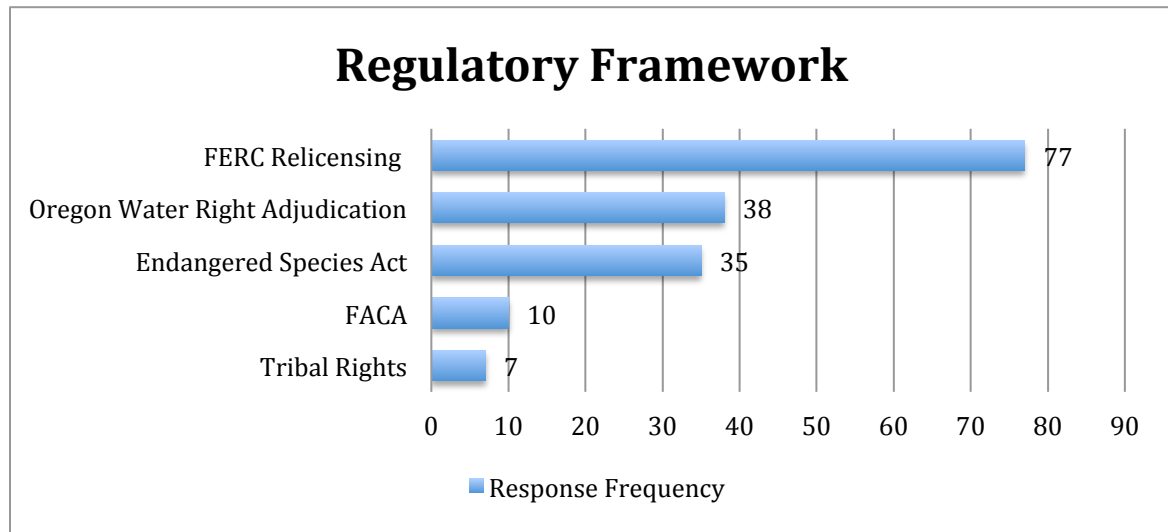
not. Process transparency encompassed concerns about backdoor conversations and secret deals occurring in the periphery of the negotiations. The science used to negotiate was also a concern discussed by many. Most of the science used in the negotiation process was conducted by federal and state agencies, but private entities conducted some studies as well. As with any negotiation, there was give-and-take between whose science was more correct and in the case of the Klamath, a majority of the respondents were satisfied with the outcome of the science adopted, with the exception of a handful of the conservation organizations. Stakeholders that did not see the process as transparent also were less supportive of the science that was accepted in the process, claiming that the more powerful stakeholders were able to push their agenda even though the science did not support it.

### **Regulatory Framework**

Factors associated with the regulatory framework encompassed concerns and implications associated with many of the dominant regulations and policies in the region. The multitude of processes occurring in the Basin as a result of imposed policy and regulation is by no means restricted to the Klamath Basin, but the combination of processes was/is unique, and respondents emphasized the impact of these policies on their participation. Stakeholders discussed the implications of the FERC relicensing process for the hydropower dams on the Klamath River (including the termination of preferential power rates for irrigators in the Upper Basin), the Oregon water rights

adjudication, the ESA, the Federal Advisory Committee Act (FACA), tribal rights, and the divergence from more traditional regulatory processes while negotiating the KBRA (Figure 10).

Figure 10 *Factors Influencing Participation: Regulatory Framework*



The expiration of the hydropower license, the Oregon water right adjudication, and the impacts of the ESA listings were key factors in the development of the KBRA and KHSA negotiations. All respondents concurred on this point emphasizing that the FERC relicensing process initially spurred their involvement in the negotiations. A respondent from the federal community articulated this point:

I think there are three major things that got these negotiations going. I guess continual lawsuits over ESA. The FERC process, which looked like it was going to cost PacifiCorp a ton of money, and the Oregon water rights adjudication, which could create big winners and losers.

Many of these policies and regulations changed the game in terms of who would benefit from a resource allocation and who would not. One respondent from the federal

community articulated this notion in terms of the Oregon water rights adjudication:

The other thing is that the Klamath tribes were seeking to have their, I believe it's 1885 treaty water right adjudicated, so the Oregon portion of the Klamath Basin has not been adjudicated so the water rights hadn't been defined. The Klamath tribes were first in line, first in right and that was pretty scary because if they succeeded, they could have potentially shut down the Klamath Irrigation Project, depending on how much water their right was or how much they claimed. So there were several things swirling on the landscape all at one time that were a major, major potential for causing problems with water and solving water problems.

Another respondent from the commercial fishing community indicated how a ruling against the utility company regarding fish passage during the FERC relicensing process completely altered the way the utility was willing to negotiate and even participate in the development of the KHSA.

Probably the single biggest turning point was 2006 when the relicensing process came to a head over how you do fish passage. So FERC can't say remove the dams, but the federal agencies do have the authority under the Federal Power Act to say this is the type of fish passage we want. PacifiCorp was advocating for trapping the fish below Iron Gate Dam and trucking them into the upper Basin, which we didn't like. We advocated for fish ladders. The federal agencies said that ladders were their mandatory condition on the license and PacifiCorp challenged it. So we went to a court hearing, a federal court hearing, in Sacramento where the tribes and the agencies and the conservation groups pooled their expertise and had a weeklong crazy session before a judge. A lot of information came out of that and at the end of the day it was a pretty sound victory for our side against PacifiCorp on a whole number of issues. That changed the playing field a lot. PacifiCorp is going to have to do ladders. They put ladders down on paper, way too expensive. They've got to look for something else, and again, something else that's in the best interest of their ratepayers and shareholders. So PacifiCorp all of a sudden was, "Okay, let's see what we can do here."

Implications of the ESA were discussed throughout the interviews as well. Many of the events that had occurred in the Basin, such as the 2001 water crisis and 2002 fish crisis, were a direct result of the implications of the ESA. Water allocation is affected by the Biological Opinions of the agencies mandated to monitor endangered species, these Biological Opinions affect water allocation and have a direct result on the livelihoods of irrigators and fishermen alike.

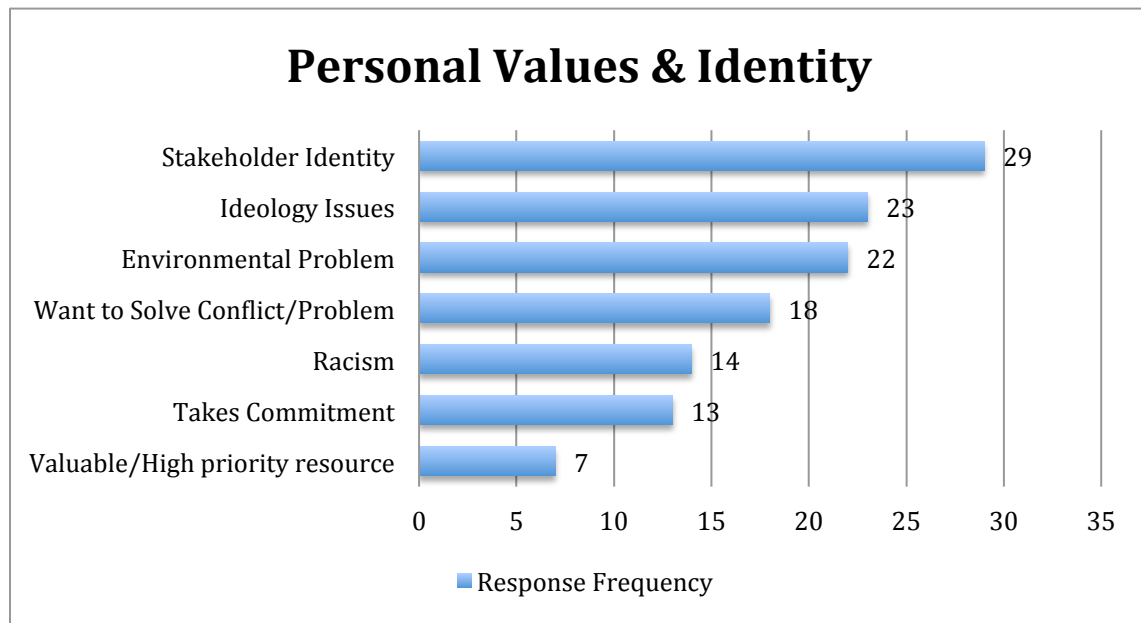
Tribal respondents also expressed a concern that the agreement could influence or alter their rights. One respondent from the tribal community indicated that the agreement potentially could affect their fishing rights and that was enough reason to participate:

The reason we participated is to protect the interest the tribe has in protecting its federally reserved fishing rights. That was the major reason for us participating.

The imposition of these policies and regulations on the land and water fundamentally influenced the playing field for a majority of the respondents, requiring them to react to the regulations being imposed, or deal with the position that they were in, willingly or unwillingly, due to regulatory control.

### **Personal Values & Identity**

A great deal of attention was paid to stakeholders' personal values and beliefs. Respondents discussed how stakeholder identity, ideology, the value of resources in the Klamath Basin, their environmental ethics, and racism present within the Basin influenced their participation (Figure 11).

Figure 11 *Factors Influencing Participation: Personal Values*

A respondent from the federal community discussed the duality of his attachment to the things he loved in nature and communities, and how that motivated him to try and find solutions:

You know, my personal motivation was my uncle had a dairy farm where I spent time and got to enjoy families from that background. So, I was really personally attached to farmers and ranchers but I also loved wildlife, so it was sort of this tearing kind of – for me it was, you use the water for ranches and farms or do you use it for wildlife or do you use it for both? So I was looking to find a solution for both.

Other respondents discussed how stakeholders from one end of the Basin to the other look at the world very differently. The geography of the Basin and the political divide between the two ends of the Basin were cited as contributing factors to the differences in stakeholder identities at the negotiating table. A respondent from the irrigating community articulated this point:

Some different views about just the amount of rain they get there

versus the amount of rain we get here, and we see that even today, even when we're getting along. It's like we want to be way more conservative with stuff up here. We don't know if it's ever going to rain again. That's how we look at things. It may never rain again or snow, so let's be really conservative. There, it's wet. People think about some things differently.

Respondents also discussed how the identity others assign to them or the racism others had for them impacted how they were willing to negotiate with them:

The suckers have been an important sustenance fish for us and they were characterized as barely edible bottom-sucking trash fish. So, because the tribes are concerned about it, you know, we became characterized as being sucker-loving Indians. All this racism, it was below the surface, and I think it is still there, but it surfaced and a lot of division happened.

This was echoed by another respondent but in a different manner:

I think some of the environmentalists are really slow to lose their – we're the powerless little guy fighting against these big forces that are beyond our control, but we're still going to will the sword and fight and fight and fight and fight. It's like the fight's over.

Another respondent articulated how their organization's identity influenced the way they approached the negotiation:

Our boards are all very pragmatic leaders. They're real blue-collar people who make their living fishing.

Stakeholder's ideology was also discussed by respondents, indicating that some groups could never compromise because their ideologies stood in the way and they were able to oppose the solution because they had other options:

They got in a place where they could never get past the ideology. For some of us, we had to change or we were never going to get to a place where we were going to solve problems. But for others I think they just saw it as another venue to express ideology.

Another respondent from the irrigating community added:

There are a lot of people with 20 acres and a couple of horses that work at the hospital. By god, I am irrigator and I oppose this? Yeah, but you're not dead if you don't get water. So that's one point to make. You can be a little more ideological about things if you've got other options.

All respondents echoed the notion that the resources in the Klamath Basin were extremely valuable economically and emotionally and need to be addressed. A respondent from the state agencies expressed the more economical justification for the protection of the resource:

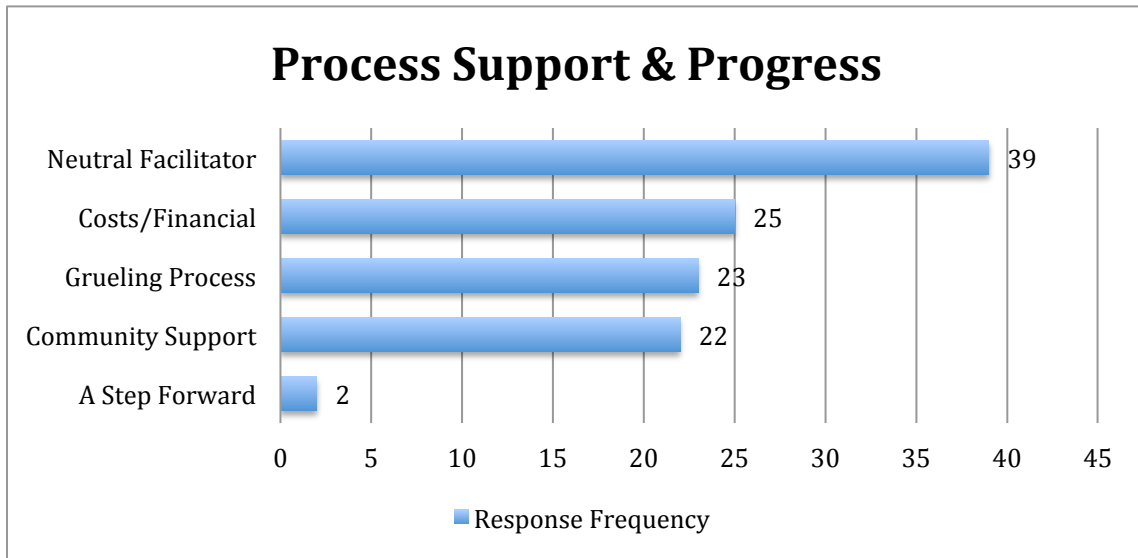
These things are very hard, but I think folks have to decide where they want to put their priorities – and I'm not a biologist – but if the conservation benefits of the Klamath are anything close to what people predict they're going to be from historic runs, then it's just a no-brainer on investing the money to do the project.

In sum, personal values influenced participation at the most fundamental levels. Stakeholders' identities and beliefs entered in to the negotiation process in many different ways, but they were always there and needed to be considered.

### **Process Support & Progress**

Respondents saw process support and progress in three ways: they indicated concerns in terms of the support provided by project staff to facilitate participation (e.g. a neutral facilitator and costs), the support from stakeholders in the surrounding communities, and the need to make progress or achieve milestones throughout the process due to the grueling nature of collaborative negotiations (Figure 12).

Figure 12 *Factors Influencing Participation: Process Support & Progress*



Facilitation throughout the negotiations transitioned from professional facilitators hired by the utility company, to a federal representative stepping in, followed by another professional facilitator hired by the federal government. The conservation community respondents expressed concern with the lack of professional facilitation when the federal representative was leading the process, believing that the process was being manipulated by the federal government:

Well, the Administration was writing it. I mean some high-level federal people were running the process, and that's who was driving the process. Unlike other settlement processes that we've been involved in, there was no sort of neutral facilitator. The neutral facilitator came way at the end, long after we'd been kicked out of the process.

They also discussed a lack of organization in informing groups about meetings and logistical issues:

I think the meetings often weren't scheduled far in advance. So you might find out on Tuesday that there was a meeting in Redding on

Thursday. I think that again goes to the lack of a professional facilitation, where you could send a calendar out in advance and everybody knows kind of where they need to be and when. That would have been helpful.

Not all the respondents concurred with the sentiment of the manipulation of the process by the lack of a neutral facilitator. A representative of a state agency discussed his view of the federal lead and how they helped with that facilitation:

So it was working, that's why we were doing it. It was working. We were moving things forward. We weren't seen as biased. We were having honest dialogues with everybody at the table. We were actually doing a job as a facilitator, even though we had to represent ourselves as a stakeholder, but people could recognize the difference when we had to provide input.

An irrigator concurred with that notion, painting the federal lead in a very different light than some other respondents:

He was kind of the glue at that point. He wasn't really directing traffic or telling people what to talk about, but he created the environment. He said, "We'll find a meeting room since we kicked PacifiCorp out. We'll find a place for you to meet. We'll have a flip chart there or whatever."

Stakeholders also articulated their desire for support from their community. Some indicated that the support from their community was one of the main things that kept them participating in the agreements. A respondent from the irrigation community put it this way:

As much divide or local, political opposition there is, there's a hell of a lot of support too and I live in the heart of the Klamath project. My neighbors are farmers and ranchers. My kids' friends' parents are farmers and ranchers and my friends are farmers and ranchers and they support what we do. That's why I'm still here. That's why I'm still doing it.

Lastly, progress being made throughout the process was also important.

Interviewees said it helped keep them going when the process was intense and grueling:

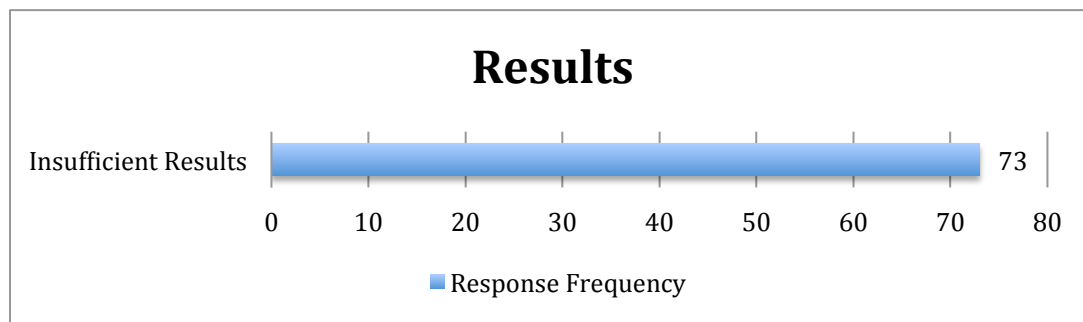
Well, I think we kept making progress and achieving milestones. The day that PacifiCorp came and sat at the table was a big deal. The day that we reached an agreement in principal, big deal. The day that we went into an agreement, big deal. The day it was signed, big deal. The day we introduced legislation, big deal. So it was sort of this constant series of milestones that we achieved.

## Results

Results of the agreements were discussed in some fashion by all interviewees.

Respondents articulated their perceptions of the outcome of the agreements (good, bad, or somewhere in between), which in most cases did not directly influence how they participated in the Klamath agreements, but may have a profound effect on how they approach other agreements in the future (Figure 13).

Figure 13 *Factors Influencing Participation: Results*



One exception to this was articulated by a respondent from the conservation community who articulated that the final results of the agreements were not sufficient enough for them to continue participating:

We were there until the bitter end. I mean there was a first phase, the KBRA, and there was a second phase, the KHSA, and then there was

another one of those watershed moments where you're called to determine whether or not the work product was sufficient. I think our bar for the KBRA was not incredibly high, for us the real prize was the dam removal agreement [KHSA]. I think we were moderately successful in achieving what we needed out of a KBRA. But for us, at the end of the day, the KHSA, it wasn't sufficient and we could not continue to participate.

Ultimately, all the participating stakeholders evaluated the results of the agreements when it came time to put pen to paper, which in one instance resulted in an organization withdrawing their support. How individuals perceived the outcome of the Klamath agreements will undoubtedly influence their approach to other agreements in the future and should be considered.

## **Conclusions**

The purpose of this chapter has been to present the themes that participants mentioned as important to their decision about whether to participate. A summary of the nine categories influencing participation discussed above is presented in Table 2. As mentioned above, the factors that encompass the nine categories have a dialectical relationship. Although the response frequency is much higher for some categories, that should not be taken as discounting the importance of less discussed factors. It is clear from the study that there was not complete agreement about the degree of importance for any particular factor, and the factors most salient for specific individuals differed. There were occasions of outright differences of opinion about the relevance of certain factors. With that said, the factors that were discussed the most frequently were clearly very

important to the participants and need to be considered at the outset of any water management process.

In the next chapter, I focus on developing a discussion that relies on the presented results in conjunction with current literature presented in earlier chapters to explore the nuances that inform stakeholders' participation in watershed management negotiations.

Table 2 *Summary of Categories Influencing Stakeholder Participation*

<b>Objectives</b>	Concerns associated with stakeholder's personal and professional objectives, efficacy, and the ability of the strategy or approach of the process to allow stakeholders to achieve their agenda.
<b>Past Experiences</b>	Implications of prior processes that occurred in the Basin (EDR process, litigation, events, environmental commissions, etc.) that stakeholders participated in. Stakeholders perceived <i>success</i> or outcome of those prior processes and the perceptions of other stakeholders developed from past experiences and events. Stakeholders were also influenced by experiences from other collaborative or water resource processes that had occurred in other river basins.
<b>Relationships</b>	Stakeholders discussed the influence of finding common ground, developing personal and professional relationships with other stakeholders, the impacts of developing and refining stakeholder coalitions, and the impacts of trust gained or lost between stakeholder groups.
<b>Political &amp; Geographic Context</b>	Concerns associated with political influence and interest by the current administration, the political and perceived power of stakeholder groups, jurisdictions of stakeholder organizations and political borders, election terms and turnover, and the implications of surrounding environmental conflicts.
<b>Process Legitimacy</b>	Concerns associated with adequate stakeholder representation, the transparency of the process and procedures, and the adequacy of the science brought to the table by the various stakeholders.
<b>Regulatory Framework</b>	Implications of the regulatory framework in the Klamath Basin. Most noted regulations, policies, and rights discussed included: ESA, the FERC relicensing process, tribal water and fishing rights, and the Oregon water rights adjudication.

<b>Personal Values &amp; Identity</b>	Stakeholder's identity, environmental ethics and stewardship, their ideologies, and desire to resolve conflict with others.
<b>Process Support &amp; Progress</b>	Concerns included the adequacy of process leadership and facilitation and the ability or need to make continual progress throughout the process.
<b>Results</b>	Stakeholder's perception as to whether the results of the agreement were sufficient and met their needs.

## Chapter 6

### DISCUSSION: WHETHER & HOW STAKEHOLDERS PARTICIPATE

#### Introduction

In the introduction, I posed the question: *What influences stakeholder participation in EDR negotiations in water resource management?* Existing theory and empirical work suggest that three broad categories influence stakeholder participation in watershed management: (1) the character of individuals; (2) the context of the environmental conflict; and (3) the process itself (Tuler et al., 2002). However, maintenance of stakeholder participation can be challenging due to issues of time and cost (Sabatier et al., 2005), inequity between stakeholders (Sabatier et al., 2005), and the frequent focus on consensus decisions in these approaches (Coglianese, 1999; Rudeen et al., 2012). My results suggest that *whether* and *how* stakeholders involve themselves (or not) in EDR/collaborative processes is not a static decision, but instead is dynamic, evolving over the life of the conflict and conflict resolution processes.

As explained in previous chapters, the analysis of twenty-two interviews from respondents that were comprised of stakeholders representing the more than forty non-federal and federal parties represented by the KBRA and the KHSa, as well as stakeholders not represented by the KBRA and KHSa due to a decision not to sign the

agreements or involuntary exclusion from the agreements, were analyzed using grounded theory methodology. The nine categories that emerged from the data (objectives, past experiences, relationships, political and geographic context, process legitimacy, regulatory framework, personal values and identity, process support and progress, and results) operate in a dialectical fashion and encompass a complex array of different struggles occurring within the social process.

Following a discussion of the impact of the dominant environmental discourses on all nine emergent categories influencing participation, the remainder of the chapter is divided into three sections. The first section focuses on *whether* these factors influenced stakeholders to participate (or not), followed by the second section, which focuses on *how* these factors influenced participation. The final section concludes the chapter by presenting a comparison of the factors that influence participation presented in the literature review with the influencing factors discovered in this study. In previous chapters I defined participation as the “direct involvement of an array of people in the decision making and implementation of water policy or management,” and at a minimum, “involves individuals and/or collectives having an opportunity to express their voices and articulate their arguments in a public forum” (Berry & Mollard, 2010, p. xx). As seen from the definition, participation not only involves being present during the decision-making and implementation processes, but also involves the ability to play an active role and contribute to the development and implementation of water resource decisions.

Assessing what influenced participants to engage, disengage, or not participate in the first place is the first step to understanding participation, followed by an assessment of what influenced *how* participants navigated the process once they were engaged.

As discussed in previous chapters, Harvey's (1996) discussion of the four dominant discourses regarding the environment play a particularly important and subtle role in whether and how stakeholders participate. Harvey (1996) articulated that all environmental discourses are arguments about society, representing a complex array of different struggles occurring within the social process, suggesting that each discourse regarding the environment shapes a unique blend of complicity and dissent with respect to existing beliefs, institutions, material practices, social relations, and the dominant system of organizing political-economic power. Revealing much about the complexities of social conflict in all aspects of social relations and particularly environmental disputes. Stakeholders' objectives (personal and professional), values and identity, professional affiliation, relationships with each other, their negotiation of the political, geographic, and regulatory climate, and their perspective of what constitutes a legitimate process are all subject to the dominant discourses regarding the environment.

The four dominant views of environmental discourse Harvey (1996) articulated include the standard view, ecological modernization, wise use, and environmental justice. All four are incorporated into individuals' personal understanding and stance towards environmental conflicts, management, and the institutional and regulatory frameworks

that stakeholders are subject to. Each of the stakeholders interviewed in this study began negotiations with some combination of these discourses incorporated into their personal and professional views and their desired outcome of the process. In many instances these views clashed between stakeholder groups, generating conflict that was either overcome or not. Also, the views stakeholders entered into negotiations with were not stationary and their understanding of how to approach an environmental conflict evolved as relationships developed and progress was made. Indicating that EDR/collaborative processes have the potential to shift or solidify a participant's environmental discourse.

### **Factors Influencing *Whether* Stakeholders Participate**

Stakeholders engaged, disengaged, and reengaged at various times throughout the life of the Klamath agreements, suggesting that decisions by stakeholders to participate are a product of social relationships influenced by both the current environmental constraints and relationships of power among users (Swyngedouw, 2004). This dynamic and evolving relationship between both physical and social conditions is something that all stakeholders experience and has the potential to change greatly throughout a management process, as it did over the five plus years the Klamath agreements proceeded. Of the nine categories identified in this research, objectives, past experiences, political and geographic context, process legitimacy, regulatory framework, personal values and identity, and results, most saliently spoke to whether stakeholders engaged, disengaged, or reengaged in the negotiation process.

**Objectives.** Others have characterized the influence of stakeholder objectives on participatory processes as encompassing the concerns of stakeholders regarding the alignment of their personal and professional agendas with the objectives of the process (Leach & Pelkey, 2001; Tuler et al., 2002). My results support the literature, and in addition shed a more nuanced light onto what kinds of objectives influenced whether or not stakeholders participated in the KBRA and KHSAs. Stakeholders' professional objectives played a very dominant role in bring them to the negotiation process. The mission statement of organizations, the desire to promote and defend the economic and cultural needs of an organization's constituency, the desire for some to develop a professional legacy, and the desire for a collaborative/EDR process all influenced whether stakeholders entered negotiations. For example, many of the conservation organizations chose to enter negotiations because the agreements had the potential to further their mission (often in line with ecological modernization discourse as discussed by Harvey (1996)) in a format (collaborative/participatory) that was aligned with their views.

Organizational mission statements, however, did not always promote participation in the Klamath context. One respondent discussed how over the life of the agreements their organization's mission statement had shifted and they could no longer justify participation, resulting in discontinuation of their participation. Stakeholders also felt they needed to protect their personal and professional agendas, recognizing that all their

opponents were at the negotiating table, so they needed to be there to protect their objectives from the opposing interest of other groups and advocate for a different use of the water resources in the Basin.

**Past Experiences.** As discussed by study respondents, past experiences greatly influenced whether stakeholders participated. More specifically, respondents discussed prior involvement in events preceding the Klamath agreements and other management processes such as litigation or collaboration that had occurred in the Basin. The economic and cultural pain compounded by failed mitigation following the 2001 water crisis and the 2002 fish kill had left many stakeholders, particularly the ones who rely on water for irrigation and fishing, in a position where they felt they did not have a better alternative to negotiated settlement (BATNA). As a respondent from the irrigation community articulated, they may not have even participated if the events of 2001 had not occurred.

Prior events and processes in the basin had not only left stakeholders feeling they lacked options; they also had shaped relationships with other stakeholder groups. Others have noted the impact of past relationships with other stakeholder groups as a factor influencing whether stakeholders participate in a collaborative process (Tuler et al., 2002; Lubell, 2004; Sabatier et al., 2005). In the context of the Klamath, some stakeholders had participated in prior EDR processes with the goal of listening to each other's perspectives. As indicated by respondents, these prior EDR processes impacted relationships between groups in positive ways, but did not clear the air between

traditionally conflicting groups and did not generate any significant level of trust prior to the KBRA and KHSA negotiations. In the Klamath Basin, a lack of trust for other stakeholders did not translate into a decision to not participate in the KBRA and KHSA negotiations as others have observed or predicted (Tuler et al., 2002; Lubell, 2004), but it did influence *how* stakeholders participated, which will be discussed further below.

**Political & Geographic Context.** In the context of the Klamath Basin, the political and geographic climate played a direct role in influencing stakeholders to engage or disengage in the KBRA and KHSA negotiations. Much of the writing on collaborative and EDR processes accepts politics as a given, but expresses a weariness with existing political choices and a desire for a different brand of politics which is more reflective, collaborative, and cooperative- a politics that unfolds outside of present government and dominant political institutions (Schlager & Blomquist, 2008). As Gregg (1998) expressed in his discussions of collaborative watershed efforts: “One of the strengths of watershed initiatives is their ability to focus their activities directly at the most pressing natural resource problems of particular watersheds, often operating outside of normal governmental processes and free from the constraints of inflexible mandates or program requirements” (p. 26). Although ideal, my research suggests along with others (Harvey, 1996; Swyngedouw, 2004; Schlager & Blomquist, 2008) that political and geographic conditions are implicit in nearly all the decisions stakeholders make regarding participation, and in many respects are intertwined into the eight other categories of

factors influencing participation.

Political interest in the Klamath Basin following the events of 2001 and 2002 by the administration at the time was discussed by nearly all respondents interviewed and was considered by respondents as the process transitioned from the FERC relicensing to the KBRA negotiations. The strategies stakeholders developed to respond to their interpretation of the political climate resulted in some participants engaging in the negotiations. For example, a stakeholder from the tribal community expressed how they decided to engage in the negotiations due to a political calculation. Stakeholders recognized that the water resource allocation issues in the Klamath Basin extended well beyond questions of science and technology, but were also influenced by the dynamics of social power. Resulting in stakeholders deciding whether or not their participation made strategic sense in the political climate they were faced with.

Stakeholder political power also played a distinct role in whether stakeholders engaged or disengaged in the negotiation process. As discussed above, the decision or strategy to encourage some stakeholders to participate was a direct response to the current political climate. For example, the tribal community encouraged the irrigation community to participate due to a perception that the irrigation community held power within the current administration and, in some respect, reflected the national psyche. The real and perceived power of certain stakeholders also allowed for the exclusion and expulsion of others from the negotiation process. A consensus provision that was put in

place when groups tried to join the process gave other groups already in the process the power to veto their inclusion. As discussed by many respondents, most were not going to disagree with the groups advocating to exclude other stakeholders because they had power at the negotiating table. In turn, this exclusion of certain groups and the expulsion of others actually engaged those groups to actively work against the agreements, a form of participation in its own right.

**Process Legitimacy.** The legitimacy of the process encompassed issues regarding stakeholder representation, the transparency of the process, and the adequacy of the science used. Sabatier et. al (2005) discussed the importance of process legitimacy, particularly that participants must appropriately represent the full range of stakeholders in a resource conflict, potentially generating increased empowerment by all stakeholders and increased consent of process outcome. Within the context of the Klamath, strong divides within what some perceived as single interest groups (such as the tribes, the irrigators, the conservation community, etc.) prompted some to try and engage in the process that were thought to already be represented at the table by other groups.

A respondent from the irrigation community indicated that they did not feel represented by the organization that was supposed to be representing them, so they went to great lengths to form their own organization and acquire a seat at the table. Others trying to join the negotiation later in the process were not permitted to join for a multitude of reasons, but some highlighted how others thought those interests were

already represented in the negotiation when potentially they were not.

**Regulatory Framework.** Although not discussed directly in much of the literature regarding participation and most often tied in to the sociopolitical context (Tuler et al., 2002), the regulatory framework surrounding a water resource conflict is highly influential as to whether stakeholders engage or not. The multitude of uses of the Klamath Basin water are governed by many different and overlapping institutional arrangements, each charged with enforcing divergent policies and regulations. For instance, water allocation and use are governed by each of the states in the Basin (California and Oregon). Although both states use the prior appropriation doctrine to govern use and allocation of water, each state has its own set of administrative rules and regulations. As discussed earlier, Oregon is still in the process of adjudicating their prior appropriation rights, complicating the regulatory framework. Furthermore, in addition to states, federal agencies are notable water allocation actors operating under different mandates and regulation enforcement regimes. Federal water projects consistent with the project in the Klamath Basin are then, in addition to the doctrine of prior appropriation, governed by a series of contracts that a federal agency enters into with users. Similarly, the complexity of the policies and regulations for other natural resources also complicates issues in the Basin. For example, state and federal regulations, tribal law, treaties between the federal government and tribes governing fisheries, hydropower, and the refuges, all operate in the Basin generating a complex web of regulatory control that stakeholders

have to responded to.

Stakeholders' responses to these overlapping and complicated arrangements of regulatory control impact whether they participated in the KHSA and KBRA negotiations. For example, the FERC relicensing process initially brought many of the stakeholders to the table. Conservation organizations, fishing organizations, and tribal groups concerned with the fate of the fisheries due to hydropower infrastructure in the Basin were involved in the FERC relicensing process, and irrigators and other conservation groups were involved with the FERC process to deal with power subsidies tied to the fifty-year license. As the relicensing process proceeded, it transitioned into the KBRA and KHSA negotiations and groups began to advocate their positions within that process.

As others have discussed (Schlager & Blomquist, 2008), stakeholders' decisions to engage in these types of processes can be a response to the regulatory hammer they anticipate from state and more often federal agencies and also an attempt to direct the regulatory hammer towards other users within the Basin receiving benefits from regulation they do not agree with. In the Klamath Basin both of these scenarios occurred and were not fixed in time but rather evolved over the life of the agreements as social, political, and economic conditions changed.

**Personal Values & Identity.** Stakeholder decisions to engage or not in the Klamath Basin issues were reflected in their personal values of environmental

stewardship, ethics, and ideologies. Others have discussed how stakeholders' environmental ethics and stewardship (Tuler et al. 2002) can encourage stakeholder participation. Respondents in the Klamath for the most part echoed this notion, and discussed how these values encouraged their participation initially and throughout the life of the agreements. Klamath stakeholders also expanded on this idea, citing a need to solve not only the environmental issues in the Basin but also the social issues that operate in conjunction with the environmental issues. Klamath Basin residents and outsiders in some instances are, and were, very aware of the social implications of resource allocation and their impacts on the environment. This acknowledgement of the problem encouraged some to enter into negotiations.

Rowley and Moldoveanu's (2003) discussion of participation by groups that may not have an actual stake in the particular geographical place where negotiations are occurring, but do have a feeling of solidarity (or common identity) with a particular stakeholder group that is participating in a negotiation process was substantiated in the Klamath context. After the completion of the agreements, the process towards implementation has brought many to engage or disengage in the agreements in terms of supportive or non-supportive campaigns. At a meeting regarding the California State Water Boards' 401-certification process (a regulatory process to enforce the Clean Water Act), the Board had to make a call as to whether they would continue supporting the KBRA and KHSAs agreements. A multitude of organizations that had not participated

directly in the negotiation process came forward in solidarity with other groups that no longer were participating or supporting the agreements. They did this because they shared a common identity with one or more of the groups participating in the Klamath Agreements and wanted to help strengthen their argument. For example, a national Native American organization came forward in the 401-certification process to support a tribe no longer supporting the Klamath Agreements, with the intention of showing the California Water Board that this was more than one small tribe but a culture of people that should be heard and taken seriously.

**Results.** Results of negotiation processes are discussed within the literature in terms of process outcome and perceived success (Bingham, 1986; Buckle & Thomas-Buckle, 1986; Dukes, 2004; Foley, 2007), but there is much less discussion regarding the impact of process results on whether stakeholders continue to engage or reengage for implementation of the process outcome. In the context of the Klamath, one respondent discussed how they could no longer participate because at the end of the day the results were insufficient for their objectives. Others that had not participated in the process began to actively work against the agreements during the implementation phase. This suggests that an assessment of stakeholder participation (their active support or not) of a negotiation process may greatly influence the *success* of its implementation.

### **Factors Influencing *How* Stakeholders Participate**

Stakeholder participation encompasses more than just a decision of whether to engage (or not), but also informs how stakeholders participate. How stakeholders negotiate these processes has the potential to greatly shape the outcome of the process, not only in terms of implementation but also the perceived success of the process. Of the nine categories that emerged from the data analysis, past experiences, relationships, political and geographic context, process legitimacy, and process support and resources most saliently spoke to how stakeholders participate in EDR and collaborative watershed management negotiations.

**Past Experiences.** Once stakeholders came to the table, the repercussions of their past experiences did not go away. As discussed previously, the impact of past relationships (particularly strained relationships) with other stakeholders as a factor influencing stakeholders to not participate was not substantiated in the Klamath context, but it did influence *how* stakeholders participated once they made the decision to participate. Respondents discussed how negative experiences with other stakeholders were not forgotten, making it easier for some of the participants to look the other way when certain groups were excluding other stakeholders from the process: they didn't want to have to deal with them either.

Stakeholders' lack of success in solving resource conflicts in other arenas (such as litigation or other collaborative processes) also influenced how stakeholders participated.

Respondents, particularly ones that make a living off the resources in the Basin, discussed how they entered negotiations feeling that they had no other options. They had tried everything else and nothing had generated the desired outcome of resource security. This influenced some of these groups to let go of some of their traditional ideologies and be open to a different path, emphasizing how this influenced how they negotiated. They were able to only focus on their needs and stop worrying about what others got.

**Relationships.** In the literature, relationships between stakeholders in participatory processes more often focused on the relationships stakeholders had prior to a participatory process (Tuler et al., 2002; Lubell, 2004; Sabatier et al., 2005) or the outcome of the relationship after the process had ended (Talbot, 1983; Susskind & Weinstein, 1980; Buckle & Thomas-Buckle, 1986; D'Estree & Colby, 2004; Dukes, 2004; Foley, 2007). This suggests that stakeholders needed to have developed some trust to enter into negotiations, or that if they did decide to negotiate, the benefits of the developed relationships would have been worthwhile even if the results of the process were less than ideal. In the Klamath context, stakeholders' discussion of relationships mostly revolved around the development of relationships during negotiations and the value of those relationships regardless of process outcome, which is consistent with the literature. For example, relationship development during negotiations made some stakeholders want to see the process succeed even more, due to a feeling of camaraderie or a sense of coalition that formed between many of them. On the other hand, others

discussed how the lack of relationships between some groups contributed to the exclusion of certain groups from the process. This resulted in some stakeholders that were developing new relationships to express complicity to the exclusion of other stakeholders, because they did not want to strain their newly forming relationships with the groups that were excluding others.

The development of coalitions and the redefining of coalitions discussed within the Klamath context also impacted how stakeholders participated. When many of the conservation organizations would not support an issue regarding the refuges that a few conservation organizations were passionate about, the dynamics in the groups changed and coalitions were reformed and reworked, changing the path of the agreements and resulting in the exclusion of two conservation groups mentioned above. This suggests that group dynamics, relationships, and coalitions have the potential to change drastically over the life of an agreement and help generate the conditions that allow for situations (like the exclusion of two stakeholder groups) to occur that many otherwise would not be on board with.

**Political & Geographic Context.** Implications of the political and geographic context in the Klamath Basin not only impacted whether stakeholders participated as discussed above but also how they participated in the negotiation process. Stakeholders discussed concerns associated with their organization jurisdictions, political jurisdictions and boundaries, the natural or physical boundaries in the Basin, as well as their

perceptions of their and other stakeholder's *skin in the game* (or their legitimacy as a stakeholder). Much of the water governance literature discusses managing water resources at the watershed scale (Kenney, 1999; Weber, 2003), as was the case in the Klamath agreements, because they are *natural* and *real* boundaries and less likely to be bogged down by political externalities. Others discussing the implications of boundaries in watershed agreements have raised concerns regarding the implications of delineating boundaries, noting that problems can arise with using the watershed as a geographic unit for management (Schlager & Blomquist, 2008). Furthermore, others discuss challenges with boundaries and how they can be conceptualized as multi-contextual, multilayered social constructs that are constantly being reproduced in various social practices (Zimmerbauer, 2011) and how the increasing complexity of the contexts of boundaries requires that they be considered in relation to such categories as power and social practices (Paasi, 2009), which are very much present in any resource management conflict (Harvey, 1996; Swyngedouw, 2004).

In the context of the Klamath, the boundaries delineating the scope of the agreements were not agreed upon by all participating stakeholders. For example, one of the tribes participating in the agreements has reservation land located on the Trinity River, the largest tributary of the Klamath River. The Trinity River as discussed in previous chapters is connected to the Central Valley Project, ultimately linking an entirely different set of politics and stakeholders to the Klamath watershed. Not

surprisingly, no other stakeholders participating in the agreements other than the tribe on the Trinity wanted to incorporate any of the water allocation issues occurring in the Trinity into the Klamath agreements. The tribe on the Trinity wanted very much to deal with some of the Trinity issues because they believe they were closely related and they articulated that if the Trinity conditions improved, the Klamath conditions would improve. Both sides of this debate are very sound and are ultimately a debate about where to draw the boundary of the Klamath Basin watershed. The implications of drawing this boundary (to not include Trinity River issues) greatly strained the already tenuous relationships between the tribes and contributed to one of the tribes pulling their support from the agreements.

Beyond dictating what issues can be incorporated into a watershed agreement, delineated boundaries also dictate who should be involved in a watershed agreement. Scholars have advocated for both ends of the spectrum in terms of who should participate. Bates et al. (1993) advocate for the inclusion of everyone affected by or affecting a water resource, citing “fairness requires that all who are touched by the effects of water use, no matter how separated by time and distance, be involved in a meaningful way in decisions that affect it” (p. 197). On the other end of the spectrum, Ingram et al. (1984) note that the people who are often most affected by watershed uses are the communities situated within the watershed and more weight should be given to their concerns. The conflict with deciding whose interests should be weighted the most or who

even should be allowed to participate went well beyond a management question in the Klamath context. Every respondent interviewed discussed his or her idea of *skin in the game* or who had a legitimate stake in these agreements. The views diverged rather drastically with some favoring groups that lived in the Basin to others expressing a broader umbrella of the greater population. These diverging views of *skin in the game* within the Klamath context manifested into groups excluding others from the process and diminishing the concerns of others that were not considered as legitimate.

The rescaling of the Klamath agreement from the traditional management boundaries in the Basin (the Upper Basin and Lower Basin) to a larger watershed scale management regime complicated how stakeholders were able to negotiate the process. Federal representatives discussed challenges in getting their staff to see the Basin as one Basin, as opposed to the Upper and Lower Basin, the management regime they were accustomed to. It also took many of the stakeholders that lived in the Basin a long time to see past the Upper and Lower Basin as two separate worlds because in the Klamath Basin, political, social, and physical boundaries coincide, increasing the diverging ideologies and viewpoints within the Basin.

Boundary delineation in watershed management processes often hinges on the outcome actors are trying to achieve; they are political arguments (Schlager & Blomquist, 2008) and are subject to the current political and geographic climate of power differentials between stakeholders and competing interests, and need to be carefully

weighed to achieve an outcome supported by all who participate, which was not achieved in the Klamath context.

**Process Legitimacy.** As discussed previously, process legitimacy dealt with concerns associated with stakeholder representation, the transparency of the process, and concerns associated with science used in the process. Respondents in the Klamath, particularly respondents from the conservation community and one state agency discussed concerns with the transparency of the process and the prevalence of back door deals and inadequate stakeholder representation occurring throughout the entire process. These concerns diminished the level of trust these groups had while negotiating, resulting in diminished relationships and an inability for some to negotiate productively with other participating groups. Sabatier et. al (2005) highlighted the importance of process legitimacy in collaborative/participatory processes emphasizing three criteria: (1) participants must appropriately represent the full range of stakeholders; (2) participants must fairly consider the concerns of the full range of stakeholders; and (3) participants must genuinely consent to the policy decision. The concern of some stakeholders in the Klamath context was that these criteria were not met, influencing how they proceeded to negotiate, and ultimately producing a divide between groups.

**Process Support & Progress.** The EDR literature discusses the importance of support staff and resources such as neutral facilitation and the funds available for negotiated processes (D'Estree & Colby, 2004; Bingham & Bourget, 2011). Within the

context of the Klamath, stakeholders echoed the importance of neutral facilitation and were either happy with the facilitation that occurred throughout the process or expressed concern with the facilitation. A large portion of the facilitation that occurred in the Klamath agreements was led by a federal representative. Stakeholders unhappy with the outcome of the process noted concerns associated with the inability of the facilitation to be neutral, citing that the federal government had a stake in the outcome of the agreements. Other respondents had very different feelings regarding the facilitation, citing that the federal lead was a major factor in keeping the agreements going and the groups working cohesively. This divergence in views contributed to how the stakeholders participating in the process began to perceive the legitimacy of the process. Mistrust began to develop for stakeholders that were unhappy with facilitation and a sense of progress and accomplishment began to form for groups happy with facilitation.

Funds in the Klamath context were very rarely mentioned and if they were it was associated with a stakeholder's organizational funds. Many collaborative processes such as the process discussed by Rudeen et al. (2012) are completely stakeholder driven and do not have the financial support of state and federal agencies. The Klamath agreements were supported by both state and federal agencies and stakeholders did not express a concern regarding funds or costs.

### **Comparison of Factors Influencing Participation**

As shown from the above discussion the factors that influenced participation in

the Klamath Basin were context specific and not completely consistent with the factors influencing participation discussed in the literature. Below I have generated a side-by-side comparison of the factors influencing participation found in the literature with the factors emergent from this study (Table 3). This allows for a better understanding of where the literature lines up and diverges with the results of the study. The specific context of the Klamath River Basin played an important role in influencing stakeholder participation and should not be discounted as merely context when trying to generate a comprehensive understanding of the factors influencing participation in negotiated watershed agreements. All watershed agreements are subject to particular contexts and understanding how that influences participation will allow for a more comprehensive understanding of stakeholder participation.

Table 3 *Comparison of Factors Influencing Participation*

<b>Factors Influencing Participation</b>	<b>The Literature</b>	<b>The Klamath River Basin</b>	<b>Comparison</b>
<b>Objectives</b>	Participants want to make sure that the objectives of the process are consistent with their personal and professional objectives and that the strategy of the process is consistent with their objectives (Tuler et al., 2002).	Participants had concerns associated with their personal and professional objectives (i.e. organization mission statement, their job, financial interests, etc.), the efficacy of the process, and the ability of the strategy or approach of the process to allow stakeholders to achieve their agenda.	Stakeholders' discussion of their objectives in the Klamath context was consistent with the literature, but encompassed more considered objectives than was presented in the literature. For example, stakeholder concerns included organizational missions, the desire to promote and defend the economic and cultural needs of an organization's constituency, and the desire for a participatory process to achieve their objectives.

<p style="text-align: center;"><b>Past Experiences</b></p>	<p>The level of trust in other participants and the reputation or personalities of other stakeholder groups are considered (Tuler et al., 2002; Sabatier et al., 2005). Past experiences of participating in a similar process, for better or worse, may also influence participation (Tuler et al., 2002).</p>	<p>Prior processes that occurred in the Basin (EDR process, litigation, events, environmental commissions, etc.) did have implications. Stakeholders perceived <i>success</i> or failure of the outcome of those prior processes and the perceptions developed of other stakeholders from past experiences and events. Stakeholders were also influenced by experiences from other collaborative or water resource processes that had occurred in other river basins.</p>	<p>In the Klamath Basin stakeholders focused more intently on the impact of past events and prior processes that had occurred in the Basin rather than on the levels of trust or relationships from prior events (although this was considered). Klamath stakeholders participated even though their level of trust for some stakeholders was low from previous experiences, which differed from what the literature suggested would occur. Stakeholders also had experienced many failed resolution attempts prior to the Klamath Agreements, which did not sway their participation as the literature suggested, but in some instances encouraged it.</p>
<p style="text-align: center;"><b>Relationships</b></p>	<p>Participatory processes can transform relationships positively between traditionally conflicting parties, generating a perceived success of process outcome and potentially encouraging participation in subsequent processes (Buckle &amp; Thomas-Buckle, 1986; Foley, 2007; Rudeen et al., 2012).</p>	<p>Stakeholders discussed the influence of finding common ground, developing personal and professional relationships with other stakeholders, the impacts of developing and refining stakeholder coalitions, and the impacts of trust gained or lost between stakeholder groups.</p>	<p>Relationships were discussed in the Klamath context as affecting participation throughout the entire agreement process. The literature mainly focuses on the impact of relationships on perceived process outcome. The Klamath case demonstrates that the development of relationships (for better or worse) during the negotiation process influences participation in the process.</p>

<p><b>Political &amp; Geographic Context</b></p>	<p>Concerns associated with election terms, current political standing, and a need to respond to the political climate (Tuler et al., 2002) were discussed as influencing participation. Also, the implications administrative and political boundaries when delineating watershed boundaries (Schlager &amp; Blomquist, 2008) were discussed.</p>	<p>Concerns associated with political influence and interest by the current administration, the political and perceived power of stakeholder groups, jurisdictions of stakeholder organizations and political borders, election terms and turnover, and the implications of surrounding environmental conflicts were articulated by the participants.</p>	<p>Both the literature and the Klamath study reflect the influence of current political administrations, turnover and election terms, and the impact of political boundaries. But in the case of the Klamath, stakeholder political power was a substantial factor influencing participation, which was not discussed in-depth in the literature regarding stakeholder participation.</p>
<p><b>Process Legitimacy</b></p>	<p>Concerns associated with adequate representation of the full range of stakeholders, the fair consideration of the concerns of all stakeholders, and participants' genuine consent to the policy decision (Sabatier et al., 2005) were discussed as influencers on participation.</p>	<p>Concerns associated with adequate stakeholder representation, the transparency of the process and procedures, and the adequacy of the science brought to the table by the various stakeholders were discussed by study respondents as factors influencing participation.</p>	<p>Both the literature and the Klamath case emphasized the impact of adequate stakeholder representation in the negotiation process. Inadequate representation or perceived inadequate representation led to a diminished view of process legitimacy in the Klamath context, which was cited as a concern in the literature. Stakeholders in the Klamath context expanded on the impact of process legitimacy citing concerns with perceived back door deals, which was not heavily discussed in the literature.</p>

<p><b>Regulatory Framework</b></p>	<p>There's limited discussion in the literature of the impact of the regulatory framework on participation. If discussed at all it was generally associated with the political context.</p>	<p>Implications of the regulatory framework were significant in the Klamath Basin, most notably: The ESA, the FERC relicensing process, tribal water and fishing rights, and the Oregon water rights adjudication.</p>	<p>Within the Klamath context, policies and regulations were discussed frequently and played an important role in how stakeholders negotiated. This was not discussed in-depth within the literature and if discussed at all the regulatory framework was often lumped into the current political climate. The Klamath case highlighted that the implications of the regulatory framework outlast political administrations and have to be considered as separate from the current political climate.</p>
<p><b>Personal Values &amp; Identity</b></p>	<p>Civic duty, environmental stewardship ethics, and social identity may promote participation by confirming that value or identity (Tuler et al., 2002; Rowley &amp; Moldoveanu, 2003).</p>	<p>Stakeholders' identities, environmental ethics and stewardship, their ideologies, and desire to resolve conflict with others were significant factors discussed by respondents.</p>	<p>Stakeholders' discussion of personal values and identity was consistent with the literature, with the exception of how personal values and identity influenced participation. The literature emphasized how values and identity encouraged participation by confirming those values or identities. In the Klamath context it went either way, both encouraging and discouraging participation.</p>

<p><b>Process Support &amp; Progress</b></p>	<p>Concerns associated with process support and resources cited in the literature included the adequacy of staff support and the availability of funds (Bingham &amp; Bourget, 2011).</p>	<p>Concerns that participants discussed included the adequacy of process leadership and facilitation and the ability or need to make continual progress throughout the process.</p>	<p>Both the literature and stakeholders in the Klamath case emphasized the influence of adequate process support staff. Klamath stakeholders focused on facilitation, which was discussed but not emphasized in the literature. Klamath Basin stakeholders did not discuss funding for the participatory process, which is heavily discussed in the literature. This is potentially context specific due to federal financial support of the Klamath agreements.</p>
<p><b>Time</b></p>	<p>Concerns associated with the availability of stakeholders' personal and professional time (Bingham &amp; Bourget, 2011), the timing of meetings and events (Tuler et al., 2002), and the measure of elapsed time from decision making to decision effect (Smutko, 2002) were cited as significant factors.</p>	<p>There was limited discussion of time in the context of Klamath, most often associated with the grueling nature of the collaborative process.</p>	<p>Concerns associated with time were discussed throughout the literature. In the case of the Klamath, time was not a major influencer of participation. This is most likely context specific and potentially due to the high value ascribed to the negotiations.</p>
<p><b>Results</b></p>	<p>There's limited discussion in the literature of the impact of the process outcome or results of the agreement reached.</p>	<p>Stakeholder's perception as to whether the results of the agreement were sufficient and met their needs influenced continued participation.</p>	<p>Within the context of the Klamath stakeholders considered the results of the agreements before agreeing to commit to continued support of the agreements. This is not discussed in-depth within the literature and should be considered as a factor influencing participation.</p>

## **Conclusions**

This discussion suggests that the factors influencing stakeholder participation are dialectical in nature and need to be considered throughout the life of the agreement. An assessment of these factors needs to occur during the development of the negotiations, as the negotiations progress, and after the negotiations are complete to generate an equitable outcome that all stakeholders can support. Excluding an assessment of any of these factors in a water resources negotiation may reduce the efficacy and equity of the process outcome.

In looking at how these findings address the research question, it suggests that the factors influencing participation not only inform whether study respondents participated but also how they participated in the Klamath Basin agreements. The implications of whether stakeholders participate or not in watershed agreements has more obvious and well researched effects on process outcome but the subtleties of how stakeholders participate is complex and can be found in some combination of the nine categories discussed above.

In the following chapter, I focus on summarizing the main points of the thesis. In addition, I also discuss how this research may be relevant to current policy decisions concerning watershed management.

*Chapter 7***CONCLUSIONS**

The overall objective of this study has been to better understand what personal and external factors influence stakeholders' participation in watershed management processes. In previous chapters, I have examined the factors that influenced participation in the context of Klamath Basin and whether and how those factors influenced participation. In the introduction of this thesis, I posited that focusing on what influences stakeholder participation would allow for a more contextualized and nuanced understanding of participation (a key component to current management regimes) and this research suggests that what influences participation is a product of both the social and environmental factors surrounding a resource conflict. The remainder of this chapter summarizes the substantive findings of the nine categories influencing participation and potential for future research.

This study began by reviewing three interconnected dimensions of work by previous researchers: (1) The current paradigm of watershed management (collaborative/participatory) and how conflict and power are an inherent aspect of those processes; (2) the role of EDR in watershed management and its potential influence on the collaborative process; and (3) social and stakeholder participation in watershed management. These three dimensions together provided a background for understanding

stakeholders' perceptions of their motivations for participation and an acknowledgement of the impact of the complex relationships between the environment and sociopolitical processes that have the potential to inform participation. Working from these concepts, I investigated the physical, social, political, and economic background of the Klamath Basin as a case study to theorize what influenced stakeholder participation in the KBRA and KHSA.

In Chapter IV, I provided a narrative of the research process, which included a discussion of my choice of a grounded methodology and my theoretical approach. Semi-structured, in-depth interviews of a representative sample of stakeholders in Klamath Basin informed my analysis in Chapter V. Analysis for this study relied on a detailed and iterative exploration of the data allowing for the development of a localized theory concerning participation in the KHSA and KBRA, which can inform more broad theoretical assumptions surrounding collaborative/participatory management processes. The discussion of analysis focused not only on what informed *whether* stakeholders participated but also what informed *how* they participated. The results of this research suggest that nine themes were the most prevalent influencers of participation in the Klamath context: objectives, past experiences, relationships, political and geographic context, process legitimacy, regulatory framework, personal values and identity, process support & progress, and results.

As mentioned previously, the factors that encompass the nine categories have a

dialectical relationship and although the magnitude of response frequency is much higher for some categories, that does not discount the importance of less discussed factors. With that said, the degree to which factors were discussed suggests the saliency they held with stakeholders in the Klamath Basin. Stakeholder groups within the Klamath Basin had a very complicated and long path leading towards and throughout the KBRA and KHSA negotiations. They expressed the impact of their objectives and process objectives, the implications of past experiences, the importance of building relationships, their negotiation of the political and geographic climate, the need for process legitimacy, the impact of the regulatory framework, the implications of theirs and others personal values and ideologies, the need for process support and progress, and the importance of sufficient results on their participation.

Existing theory and empirical work suggest that three broad categories influence stakeholder participation in watershed management: (1) the character of individuals; (2) the context of the environmental conflict; and (3) the process itself (Tuler et al., 2002). My results suggest that these three broad categories encompass the factors that influence participation but do not adequately speak to the nuances that each of those three broad categories encompass. Stakeholder objectives has been characterized by others (Leach & Pelkey, 2001; Tuler et al., 2002) as encompassing stakeholders' personal and professional agendas and concerns as to whether the objectives of the participatory process are in line with their personal and professional agendas. My results build on these concerns,

demonstrating that the complexity of objectives stakeholders consider needs to be addressed and assessed when developing a participatory process. For example, stakeholders' professional objectives, organizational missions, the desire to promote and defend the economic and cultural needs of an organization's constituency, the desire of some to develop a professional legacy, and the desire for a collaborative/EDR process all influenced whether stakeholders came to the table.

Past experiences have been discussed in the literature in terms of the impact of past relationships with other stakeholder groups as encouraging or discouraging participation (Tuler et al., 2002; Lubell, 2004; Sabatier et al., 2005). In the Klamath Basin a lack of trust for other stakeholders did not translate into a decision to not participate as others have observed or predicted, but it did influence how stakeholders participated.

My results suggested that negative experiences with other stakeholders were not forgotten once negotiations began and resulted in stakeholders not supporting groups with whom they had strained past relationships, indicating that the dynamics of a negotiating group are affected by past relationships. My results also suggested that stakeholders' lack of success in solving resource conflicts in other arenas (such as litigation or other collaborative processes) resulted in some stakeholders letting go of some of their traditional ideologies and opening up to a different path. They were able to only focus on their needs and stop worrying about what others got, choosing to be less idealistic so that they could meet at least some of their objectives, indicating that past

experiences stakeholders bring to the table go well beyond prior relationships put also encompasses the implications of other process they participated in.

In the literature, relationships between stakeholders in participatory processes more often focused on the relationships stakeholders had prior to a participatory process (Tuler et al., 2002; Lubell, 2004; Sabatier et al., 2005) or the outcome of the relationship after the process had ended (Talbot, 1983; Buckle & Thomas-Buckle, 1986; Susskind & Weinstein, 1980; D'Estree & Colby, 2004; Dukes, 2004; Foley, 2007). My results suggest that stakeholders were mainly concerned with the development of relationships as the participatory process occurred and with the value of those relationships regardless of process outcome, which is only partially inline with the literature. The development of relationships during the negotiation and its impact on how it influenced participation is lacking in the literature. In the Klamath context, the development of relationships made stakeholders want to see the process succeed even more, due to a feeling of camaraderie or coalitions that formed between stakeholders groups. A failure to develop relationships during the negotiation processes contributed to the exclusion of certain groups from the process, and the complicity from other stakeholders to allow that exclusion because they did not want to strain their newly formed relationships with the groups wanting to exclude other groups. The group dynamics during a negotiation process intuitively seems extremely important and was in the Klamath context, but is very sparsely discussed in the collaborative and EDR literature.

Much of the writing on collaborative and EDR processes accepts politics as a given, but does not directly engage with the implications of politics on the process (Schlager & Blomquist, 2008). My research suggests, along with others (Harvey, 1996; Swyngedouw, 2004; Schlager & Blomquist, 2008), that political conditions are implicit in nearly all the decisions stakeholders make regarding participation and in many respects are intertwined in all the categories of factors influencing participation. Stakeholder power, political and geographic jurisdictions and boundaries, and stakeholders' perceptions of who had *skin in the game* were all influenced by the political and geographical climate in the Klamath Basin and beyond. Much of the water governance literature discusses managing water resources at the watershed scale (Kenney, 1999; Weber, 2003), as was the case in the Klamath agreements, but others have raised concerns regarding the implications of delineating boundaries (even at the watershed scale), noting that problems can arise in terms of who is included or excluded because of the differences in how stakeholders interpret boundaries (Schlager & Blomquist, 2008). In the context of the Klamath, the implications of delineating boundaries strained relationships between stakeholder groups and contributed to some groups disengaging from the process or not being taken seriously. My results support the literature scrutinizing the implications of boundary delineation in watershed management processes and highlighting that the delineation of boundaries has the potential to be driven by the outcome actors are trying to achieve.

Sabatier et. al (2005) discussed the importance of process legitimacy, particularly that participants must appropriately represent the full range of stakeholders in a resource conflict. Within the Klamath context, strong divides in what some perceived as single interests groups prompted some to try to engage in the process even though they were thought to already be represented at the table by other groups, suggesting that Sabatier et al.'s (2005) discussion of process legitimacy was present in the Klamath Basin and should be considered in any participatory process.

Although not discussed directly in much of the literature regarding participation and most often tied in to the sociopolitical context (Tuler et al., 2002), the regulatory framework surrounding a water resource conflict in the Klamath Basin was highly influential as to whether and how stakeholders engaged. Stakeholders' responses to overlapping and complicated arrangements of regulatory control in the Klamath Basin varied, impacting the process in a multitude of ways. This suggests that a consideration of the regulatory climate should occur in any participatory process.

The literature regarding personal values and identity suggests that stakeholders' environmental ethics and stewardship can encourage stakeholder participation (Tuler et al., 2002), and respondents in the Klamath for the most part echoed this notion. Klamath stakeholders also expanded on this idea, citing a need to solve not only the environmental issues in the Basin but also the social issues that operate in conjunction with the environmental issues. Klamath Basin residents and outsiders in some instances are and

were very aware of the social implications of resource allocation and their impacts on the environment. This acknowledgement of the problem may be unique to the Klamath Basin but certainly influenced stakeholders level of personal responsibility.

The EDR literature discusses the importance of support staff and resources such as neutral facilitation and the funds available for negotiated processes (D'Estree & Colby, 2004; Bingham & Bourget, 2011). Within the context of the Klamath, stakeholders echoed the importance of neutral facilitation and were either happy with the facilitation that occurred throughout the process or expressed concern with the facilitation. This divergence in views contributed to how the stakeholders participating in the process began to perceive the legitimacy of the process. Concern regarding neutral facilitation in the Klamath was not across the board, but impacted stakeholder participation and should be considered in participatory processes. For agencies and watershed based initiatives that are mandated, or those that strive for diverse stakeholder representation in watershed management decisions, the problem may not lie so much in whether stakeholders participate, but more so in recognizing what influences how they participate and if that will translate into continued participation.

The themes that emerged from this research project suggest that factors influencing participation are well beyond the control of the agencies and institutions tasked with managing watershed systems, and that a complete inventory of the complex social, political, economical, historical, and physical environment needs to be considered

when engaging stakeholders, particularly if a just and equitable participatory process is to be achieved. For the agencies and institutions tasked with facilitating participatory processes, engaging in the development of working relationships with stakeholder organizations may allow for a more nuanced understanding of the implications of these nine categories on stakeholders personal and professional perceptions regarding a watershed management negotiation.

### **Suggestions for Future Research**

There are several directions for future research that emerge from this study. First, extending this research to other watershed management regimes and regions or moving the study area to less rural watershed systems, such as Sacramento, California would provide an opportunity to see if the themes identified in this study are found in other populations that have more robust urban centers. Conducting studies similar to this in regions that have differing water rights systems or political systems would allow for a more complete understanding of the implications of regulatory frameworks on processes such as these. Secondly, responding to the call within the watershed management literature for iterative review, repetitions of this study throughout the life of a negotiation process could gauge how perceptions, attitudes, and influencers of participation change as the process evolves both internally and externally. Also, investigating whether the factors discovered in this study are present in other watershed initiatives, and how they are similar or different would allow for a more refined list of factors influencing

participation and a deeper understanding as to whether or not those factors are context based or more broadly applicable.

Finally, an understanding of the impacts of continued support (or not) from stakeholders on process outcome would be valuable. In the Klamath Basin, the KBRA and KHSA negotiations came to an end, but implementation of the agreements has yet to be fully realized. The requirement of congressional approval for complete implementation is rather unique to the Klamath agreements and is ripe for analysis. Continued stakeholder support in the wake of the signing of the agreements has been critical in giving Congress the political courage to move forward with the agreements. Many respondents in this study discussed the implications of a backlash against the agreements from stakeholder groups (primarily those that did not participate in the agreements at all) after the agreements were complete. Further inquiry into this final step of participation may inform the factors that influence participation beyond the negotiation phase and into the implementation phase.

This theme also touches on the limitations of this study, in that it has only looked at stakeholders that could be identified as stakeholders. There were indications in the study respondents that a backlash from Basin community members and the wider public has drastically hindered the implementation of the agreements. Theoretically the greater public was represented in these agreements by local, state, and federal representatives, but the after-the-fact participation has certainly influenced process outcome. Future

research into how wider societal or community participation can be incorporated into participatory process may offer important additional insights into how participatory processes can be most effectively facilitated.

In summary, this thesis has focused on examining what influences stakeholder participation in EDR negotiations within watershed management. This focus offers a more contextualized understanding of whether and how stakeholders participate or not in watershed management regimes. As the emphasis on participatory process grows in both the public and private spheres understanding why and how stakeholders engage in these process is necessary if a just and equitable outcome is to be achieved.

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**APPENDIX A**  
**EXECUTIVE SUMMARIES OF THE KLAMATH BASIN RESTORATION**  
**AGREEMENT & THE KLAMATH BASIN HYDROELECTRIC SETTLEMENT**  
**AGREEMENTS & SIGNATORIES OF THE KLAMATH BASIN RESTORATION**  
**AGREEMENT & THE KLAMATH BASIN HYDROELECTRIC SETTLEMENT**  
**AGREEMENT**

## **Summary of the Klamath Basin Settlement Agreements**

May 2010

### **Summary**

Representatives of 45 organizations, including Federal agencies, California and Oregon, Indian tribes, counties, irrigators and conservation and fishing groups have agreed to a comprehensive solution for the Klamath Basin. On February 18, 2010, most of the participants in the Klamath settlement process signed the Klamath Basin Restoration Agreement and Klamath Hydroelectric Settlement Agreement.

The Restoration Agreement is intended to result in effective and durable solutions which will: 1) restore and sustain natural fish production and provide for full participation in ocean and river harvest opportunities of fish species throughout the Klamath Basin; 2) establish reliable water and power supplies which sustain agricultural uses, communities, and National Wildlife Refuges; and 3) contribute to the public welfare and the sustainability of all Klamath Basin communities.

The Hydroelectric Settlement lays out the process for additional studies, environmental review, and a decision by the Secretary of the Interior regarding whether removal of four dams owned by PacifiCorp: 1) will advance restoration of the salmonid fisheries of the Klamath Basin; and 2) is in the public interest, which includes but is not limited to consideration of potential impacts on affected local communities and tribes. The four dams are Iron Gate, J.C. Boyle, Copco 1 and Copco 2 dams on the Klamath River. The

Hydroelectric Settlement includes provisions for the interim operation of the dams and the process to transfer, decommission, and remove the dams. Settlement organizations had 60 additional days to sign the agreements. The organizations that have signed the agreements are listed at the end of this summary. Organizations that participated in the settlement process and any other organization can apply to become a party. Key provisions of the agreements are summarized below; for a copy of both agreements please go to the following website: <http://www.edsheets.com/Klamathdocs.html>.

### **Klamath Basin Restoration Agreement**

#### **Rebuilding Fisheries**

**Goal:** the goals of the Fisheries Program are to: 1) restore and maintain ecological

functionality and connectivity of historic fish habitats; 2) re-establish and maintain naturally sustainable and viable populations of fish to the full capacity of restored habitats; and 3) provide for full participation in harvest opportunities for fish species.

**Program Elements:** The Fisheries Program will: 1) provide for reintroduction of anadromous species above the current site of Iron Gate Dam, including tributaries to Upper Klamath Lake; 2) establish conditions that, combined with effective implementation of the Water Resources Program and the Hydroelectric Settlement will contribute to the natural sustainability of fisheries and full participation in harvest opportunities, as well as the overall ecosystem health of the Klamath River Basin; 3) monitor the status and trends of fish and their habitats; and 4) assess the effectiveness of actions and provides for adaptive management.

**Approaches:** The Fisheries Program will use collaboration, incentives, and adaptive management as preferred approaches. In the basin above Upper Klamath Lake, program planning will involve and reflect collaboration among Upper Basin irrigators, tribes, and other appropriate parties. It will emphasize strategies and actions to restore and maintain properly functioning lake and river processes and conditions, while also striving to maintain or enhance economic stability of adjacent landowners. Further, it will prioritize habitat restoration and monitoring actions to ensure the greatest return on expenditures.

**Geographic Scope:** The focus of restoration and monitoring will be the Klamath River Basin, excluding the Trinity River watershed above its confluence with the Klamath River. The focus of reintroduction program will be the Upper Klamath Basin. The Restoration Agreement is not intended and will not be implemented to establish or introduce populations of salmon, steelhead, or Pacific lamprey in the Lost River or its tributaries or the Tule Lake Basin.

**Fisheries Restoration:** The Restoration Agreement provides a detailed process to restore fish in the Klamath Basin. Elements include:

- **Phase I Plan:** The plan will establish restoration priorities and criteria for selecting restoration projects over the next ten years. Specific elements will include, but may not be limited to, restoration and permanent protection of riparian vegetation, restoration of stream channel functions, remediation of fish passage problems, and prevention of entrainment of fish into diversions.
- **Phase II Plan:** Within seven years of finalizing the Phase I plan, the fish managers will develop a long-term plan based on the monitoring results of the Phase I actions. The Phase II plan will establish elements, restoration priorities, and an adaptive management process for the remainder of the Restoration Agreement. The fish managers will revise the plan as appropriate.

**Fish Passage and Water Quality:** In the Restoration Agreement the parties commit to support the Hydroelectric Settlement that establishes a process for the potential removal of Iron Gate, J.C. Boyle, Copco 1 and Copco 2 dams on the Klamath River. These dams

block coho salmon, Chinook salmon, steelhead, and Pacific lamprey from migrating above Iron Gate Dam. Removal of these dams would give salmon access to an additional 300 miles of habitat in the Klamath River Basin. The two agreements also include measures to improve water quality.

**Fisheries Reintroduction:** The Reintroduction Plan will include actions to reintroduce fish to the areas currently blocked by the hydroelectric dams (except the Lost River). The Oregon Fish and Wildlife Commission has adopted a policy to establish self-sustaining, naturally-produced populations of Chinook, steelhead, coho, and lamprey that were historically present in the Upper Klamath Basin.

- Phase I: This plan will address the near-term investigations, facilities, actions, monitoring, and decisions necessary to initiate and accomplish the reintroduction of anadromous fish species.
- Phase II: This plan will address the management of re-established fish populations in presently un-occupied habitats when fish have access to these areas.
- Screening Program: One objective for the reintroduction program is to prevent reintroduced salmon and other aquatic species from entering irrigation diversions. The Bureau of Reclamation will evaluate appropriate methods and locations to address such entrainment at Klamath Reclamation Project diversions, including: Lost River diversion channel or associated diversion points; North Canal, Ady Canal, and other diversions from Reclamation or Reclamation contractor-owned facilities diverting water from the Klamath River or Lake Ewauna.

**Additional Water for Fish:** The Restoration Agreement includes a number of actions to increase the amount of water to improve instream flows and maintain the elevation of Upper Klamath Lake; these measures include:

- Interim Program: The parties will support funding to implement a water leasing and purchase program to reduce surface water diversions from the Klamath River and from its tributaries above Upper Klamath Lake and to apply the water obtained toward improving the status of anadromous and resident fish. The parties intend that this program will be administered to increase, to the extent technically feasible, the amount of water in the Klamath River and Upper Klamath Lake toward the amounts which will result from the permanent instream water supply enhancement actions in the Restoration Agreement.
- Permanent Increase in Water for Fish Management: The Restoration Agreement establishes limitations on the quantity of water diverted from Upper Klamath Lake and the Klamath River for use in the Klamath Reclamation Project. The Restoration Agreement calls for the Klamath Water and Power Agency (KWAPA)—a joint powers entity comprised of irrigation districts—to develop a long-term plan, which will include measures to operate within the permitted diversion limits. The Department of the Interior and the Yurok Tribe have estimated that the limitation will result in the availability of water for irrigation being approximately 100,000 acre feet less than current demand in the

driest years, with irrigation water availability increasing on a sliding scale with increasingly wet conditions.

- Upper Klamath Basin Water Program: The Restoration Agreement establishes a voluntary program for water use retirement in the Wood River, Sprague River, Sycan River (excluding the drainage from the Sycan Marsh upstream), and the Williamson River (from the confluence with the Sprague River upstream to Kirk) that will be designed to secure 30,000 acre feet of water for additional inflow to Upper Klamath Lake. The program also includes a voluntary program to improve fisheries habitat and provides federal regulatory assurances to landowners in these sub-basins in a manner that seeks to maintain landowner economic stability.

- Additional Water Supply, Conservation, and Storage: The Restoration Agreement includes additional obligations to enhance water conservation and provide for further water storage. Measures to increase water supply in Upper Klamath Lake include the breaching of levees in the Williamson River Delta that reconnected approximately 28,800 acre feet of storage; reconnecting Barnes Ranch and Agency Lake Ranch to Agency Lake to restore approximately 63,700 acre feet of storage; and management of, and ultimate reconnection of Wood River Wetlands to Agency Lake to provide approximately 16,000 acre feet of storage. The parties will also support completion of the feasibility report under the Klamath Basin Water Supply Enhancement Act of 2000, ongoing investigations of additional storage, and criteria for the use of water from such storage.

- Protection for Additional Water: The Restoration Agreement has provisions to ensure to the extent permitted by applicable law that all the additional water generated by the programs will remain in Upper Klamath Lake or the Klamath River to benefit fish.

- Management of Environmental Water: All of the additional water will be managed for the benefit of fisheries in Upper Klamath Lake and the Klamath River. The Restoration Agreement establishes a Technical Advisory Team that will develop an Annual Water Management Plan that will provide recommendations to the Secretary of the Interior. During each water year, the Technical Advisory Team will also recommend ongoing, real-time operations to adjust for changing conditions.

- No Adverse Impacts from Groundwater Use: The Restoration Agreement includes provisions to ensure that groundwater use under the On-Project Plan in the Klamath Reclamation Project does not have significant impacts on river flows important to fisheries. If monitoring by the U.S. Geological Survey identifies defined adverse impacts, the Restoration Agreement provides procedures to implement a remedy. The agreement also sets up a process if further technical investigations warrant other measures to respond to effects on fisheries.

**Additional Water for Wildlife Refuges**: The Restoration Agreement provides specific allocations and delivery obligations for water for the Lower Klamath and Tule Lake National Wildlife Refuges. It also increases the water availability and reliability above historical levels.

**Drought Plan:** The Klamath Tribes, Karuk Tribe and Yurok Tribe, Upper Klamath Water Users Association, the Klamath Water and Power Agency (KWAPA), the Klamath Basin National Wildlife Refuges, Oregon Water Resources Department, California Department of Fish and Game, and a representative of conservation and fishing groups will develop a Drought Plan. This Plan will include a process to ensure increasingly intensive water management for agriculture, National Wildlife Refuges, and in-lake and in-river fishery purposes in drought years, and in preparation for the potential of an extreme drought to avoid or minimize adverse impacts to Klamath Basin communities and natural resources in response to drought conditions of increasing severity.

**Climate Change:** The parties will determine how long-term climate change may affect the fisheries and communities of the Klamath Basin. The parties will re-convene to negotiate in good faith any supplemental terms to the Restoration Agreement which may be necessary to address changes in the climate in order to achieve the parties' goal of maintaining sustainable fisheries and communities.

**Monitoring:** The fish managers will develop a fish monitoring plan that will assess the status and trends of fish populations and their habitats; this effort will also evaluate factors that are limiting the restoration of fish populations. It will provide information for the restoration actions and the management of fisheries. The Monitoring Plan will collect data on instream flows and Upper Klamath Lake elevations to evaluate the outcomes of the Water Resources Program. This information will also be used by the Technical Advisory Team in developing the Annual Water Management Plan. The Monitoring Plan will also assess the effectiveness of the restoration actions. This information will be used to determine restoration priorities and other adaptive management actions.

**Implementation:** The Restoration Agreement establishes an annual process to determine funding needs and funding availability, set priorities for the Fisheries Program, and engage with the public. The fish managers will also prepare annual reports on all activities that were implemented.

## **Sustainable Communities**

**Water Supply Reliability:** The Restoration Agreement contains a number of measures to provide water supply reliability:

- **On-Project Plan:** The Restoration Agreement establishes a permanent limitation on the amount of water that will be diverted from Upper Klamath Lake and the Klamath River for the Klamath Reclamation Project. KWAPA will have the sole responsibility to develop and implement the On-Project Plan. The plan will align irrigation water supply and demand for the project consistent with the diversion limits. KWAPA will evaluate the following measures to meet the purpose of the plan: conservation easements, forbearance agreements, conjunctive use programs, efficiency measures, land acquisitions, water acquisitions, groundwater development, groundwater substitution,

other voluntary transactions, water storage, and any other applicable measures.

· Funding: The parties will support the funding estimates for the plan that are in the Restoration Agreement. Reclamation will consider whether funds made available for the interim flow and lake level program that are not expended in a year should be made available to accelerate the implementation of the On-Project Plan.

· Additional On-Project Water: The Restoration Agreement would increase the allocation of water to the Klamath Reclamation Project in some years by 10,000 acre feet if the four PacifiCorp dams are removed or additional storage is available. The Klamath Basin Coordinating Council could also provide this increase after February 2020 after receipt of recommendations from the Technical Advisory Team.

· Change in Authorized Purposes of the Klamath Reclamation Project: The Restoration Agreement would provide support for federal legislation which would add fish and wildlife and national wildlife refuges as authorized purposes of the Klamath Reclamation Project, with terms to protect the existing agricultural uses in a manner consistent with the agreement. The change will facilitate the ability to provide reliable water supplies to the National Wildlife Refuges.

· On-Project Water Rights Assurances: The Restoration Agreement includes provisions to provide water rights assurances related to water diversions from the Klamath Tribes, Karuk Tribe, and Yurok Tribe, and the United States as a trustee of the tribes to the Klamath Reclamation Project and includes resolution of certain contests in the Klamath Basin Adjudication.

· Drought Plan: The Restoration Agreement identifies a number of strategies that would be used to deal with extreme drought conditions including voluntary water conservation measures, additional stored water, leasing water on a willing-seller basis, the use of groundwater (for irrigation purposes or to replace water that would otherwise be diverted), and reduction of water diversions by exercise of water rights priorities. Water diversions to the Klamath Reclamation Project could only be limited in an extreme drought (e.g. 1992 or 1994) and if these other measures were not sufficient.

· Off-Project Water Settlement: The Restoration Agreement establishes a process to develop an Off-Project Water Settlement (OPWAS) to: 1) resolve claims between Off-Project Irrigators, the Klamath Tribes, and the Bureau of Indian Affairs in the Klamath Basin Adjudication in Cases 277, 279, 280, 281, 282, 284, 285 and 286; 2) or provide reciprocal assurances for maintenance of instream flows and reliable irrigation water deliveries, notwithstanding the outcome of any unresolved contests; and 3) provide for a voluntary Water Use Retirement Program. This program will be designed to maintain the economic character of the off-project agricultural community and to not adversely impact the water rights of any remaining contestants who are not signatories to the OPWAS.

· Off-Project Reliance Program: The Restoration Agreement establishes a program consistent with the Water Use Retirement Program. The program's funds will be used to avoid having mitigated the immediate effects of unexpected circumstances that could affect the amount of water available for irrigation in the Off-Project area.

**Keno and Link River Dams**: The parties will support provisions in the Hydroelectric Settlement to transfer Keno Dam to the Bureau of Reclamation. Keno and Link River dams would continue to provide water to the Klamath Reclamation Project.

**Maintain Lease Land Farming**: Under the Restoration Agreement, parties will support continued lease land farming on Lower Klamath and Tule Lake National Wildlife Refuge that uses practices that enhance waterfowl management while optimizing agricultural use and maximizing lease revenues recognizing the authorities and obligations of federal agencies.

**Maintain Walking Wetlands and Other Wildlife and Agriculture Partnerships**: The Restoration Agreement would continue a refuge-approved program that incorporates managed wetlands into agricultural crop rotations on the National Wildlife Refuges as well as on private lands in the Klamath Reclamation Project. Such wetlands support the diversity of waterfowl species endemic to the Upper Klamath Basin. Walking wetlands that are returned to agricultural production enhance agricultural crop yields and reduce or eliminate the need for chemical inputs by enhancing soil fertility and reducing soil pests and diseases to crops.

**Consistency with State Water Law**: The Restoration Agreement would not limit the authority of the Oregon Water Resources Department to administer existing water rights or determine water rights in the ongoing Klamath Basin Water Rights Adjudication. The agreement also will not affect the California Water Resources Control Board's regulatory authority.

**Regulatory Assurances**: The Restoration Agreement includes commitments by the parties to take every reasonable and legally-permissible step to avoid or minimize any adverse impact, in the form of new regulation or other legal or funding obligation, that might occur to users of water or land upstream of Iron Gate Dam from introduction or reintroduction of aquatic species to currently unoccupied habitats or areas.

· Unforeseen Circumstances: If unforeseen circumstances result from reintroduction during the course of the agreements, the parties will meet and confer to determine any necessary future actions, including, but not limited to, consideration of whether narrowly tailored regulations or legislation is necessary to minimize any impacts.

· Endangered Species Act: The Restoration Agreement establishes steps designed to comply with the Endangered Species Act, including the preparation of biological opinions on specific federal actions called for in the agreement. The agreement also establishes a process to develop general conservation plans or habitat conservation plans

that would be designed to assist non-federal parties to comply with the ESA. Participation in these plans would be voluntary.

· Regulatory processes: Before seeking any further limitations on diversion, use and reuse of water related to the Klamath Reclamation Project beyond the limitations in the Restoration Agreement, NMFS and FWS will consider, to the maximum extent consistent with the ESA and any other applicable law, whether increased water supply in Upper Klamath Lake and all other relevant obligations for the protection of the affected resources have been implemented. NMFS and FWS will also consider whether there are any alternatives, including additional habitat restoration actions or alternative sources of water. If other parties believe that listed species are in jeopardy of extinction, the agreement also describes the steps that the parties would take to ensure timely implementation of the measures in the agreement, explore other alternatives, and pursue dispute resolution before a party would initiate litigation that could limit the diversions.

**Power Program:** The purpose of the power program is to ensure affordable electricity for eligible On-Project and Off-Project irrigators to maintain sustainable agricultural communities. The program includes a number of actions that are designed to achieve a delivered power cost target level at or below the average cost of similarly situated Reclamation irrigation and drainage projects in the surrounding area. The program includes an interim power program, access to federal power, and a long-term program to implement energy efficiency and new renewable resource generation. The program also delivers affordable power as part of the implementation of the On-Project plan and for moving water to the National Wildlife Refuges and the return of water to the Klamath River.

**Counties Program:** This program includes programs to reflect specific economic impacts associated with implementation of the Hydroelectric Settlement, including programs to offset potential property tax losses and address economic development.

**Tribal Program:** Under the Restoration Agreement, the parties will support the goals of each tribe to achieve the revitalization of tribal subsistence and related economies. The parties support the tribes as they strive to meet a reasonable standard of living, a standard recognized in the reservation of tribal fishing and other related rights, until the fisheries are restored to a level that allows full participation in harvest opportunities. Under the agreement, the parties will support funding to assist the tribes in developing the capacity to participate as grantees and in the collaborative management of the Fisheries Program.

The parties acknowledge that the Restoration Agreement addresses primarily tribal fishing and water matters, and accordingly agree that they will also support efforts by the tribes to secure economic revitalization programs and funds such that the tribes may achieve longterm economic self-sufficiency. Funding will be provided to each tribe that is a party for the development and planning of long-term economic revitalization projects. The parties will also support funding for the Mazama Forest Project in Klamath County, Oregon.

## **Implementation and Funding**

A key feature of the Restoration Agreement is a commitment by the parties to cooperate fully in its implementation.

**Coordination and Oversight:** The Restoration Agreement establishes the Klamath Basin Coordinating Council to facilitate coordination, cooperation, collaboration, and accountability by the parties to ensure that elements of the agreement are carried out effectively. The KBCC will provide for general implementation oversight, including activity and program coordination, information sharing, priority setting, fund seeking, and dispute resolution related to implementation of the agreement. It will also serve as the primary forum for public involvement. The agreement also establishes the Klamath Basin Advisory Council to advise federal agencies in the implementation of the agreement, consistent with the Federal Advisory Committee Act.

**Dispute Resolution:** The Restoration Agreement establishes a process to resolve issues among the parties. The process includes four steps: 1) clear notice of a dispute; 2) informal meetings to resolve the dispute; 3) referral of the dispute to the Klamath Basin Coordinating Council; and 4) mediation. The agreement also includes enforcement provisions and a party may take actions to enforce any contractual obligation under the agreement after complying with the dispute resolution procedures. The parties acknowledge that resorting to litigation will be a last resort, made only after careful consideration of the potential collateral consequences for the agreement.

**Funding:** The parties have developed estimates for the costs of implementing the Restoration Agreement and will support authorization and appropriation of funds from federal and state governments. The Klamath Settlement Group estimates that the cost of implementing the agreement in its first year would be approximately \$41 million. The longterm cost of the habitat, water programs, and other measures in the agreement would be about \$97 million dollars per year. Of the total, over 90 percent is budgeted for fisheries restoration and reintroduction and actions to enhance the amount of water for fish.

## **Klamath Hydroelectric Settlement Agreement**

### **Studies, Environmental Review, and Secretarial Determination**

**Studies and Environmental Review:** The Secretary of the Interior, in cooperation with the Secretary of Commerce and other Federal agencies, will:

- Use existing studies and other appropriate data, including those in the FERC record for this project;
- Conduct further appropriate studies, including but not limited to an analysis of sediment content and quantity;

- Undertake related environmental compliance actions, including environmental review under NEPA; and

- Take other appropriate actions as necessary to determine whether to proceed with facilities removal. Facilities removal is defined as the physical removal of all or part of each of the four PacifiCorp dams to achieve at a minimum a free-flowing condition and volitional fish passage, site remediation and restoration, including previously inundated lands, measures to avoid or minimize adverse downstream impacts, and all associated permitting.

These studies will be conducted in coordination with the parties to the Hydroelectric Settlement and the public. The California Department of Fish and Game will conduct review required under the California Environmental Quality Act, and the State of Oregon will address applicable Oregon state laws, prior to deciding whether to concur with any affirmative determination by the Secretary of the Interior as described below.

**Detailed Plan for Facilities Removal:** The Secretary will prepare a detailed plan that describes:

- The methods and timetable for facilities removal;
- Plans for management, removal, and/or disposal of sediments, debris, and other materials;
- A plan for site remediation and restoration;
- A plan for measures to avoid or minimize adverse downstream impacts;
- A plan for compliance with all applicable laws, including anticipated permits and permit conditions;
- A detailed statement of the estimated costs of facilities removal; and
- A statement of measures to reduce risks of cost overruns, delays, or other impediments to facilities removal.

**Secretarial Determination:** The Secretary of the Interior will use this information, in cooperation with the Secretary of Commerce and other Federal agencies, to determine whether, in his judgment, the conditions of the Hydroelectric Settlement have been satisfied, and whether facilities removal: 1) will advance restoration of the salmonid fisheries of the Klamath Basin; and 2) is in the public interest, which includes but is not limited to consideration of potential impacts on affected local communities and tribes. The Secretary will use best efforts to complete this determination by March 31, 2012.

**Conditions:** The Hydroelectric Settlement describes the conditions that need to be satisfied before the Secretarial Determination:

- Passage of federal legislation materially consistent with the proposed legislation to implement the Hydroelectric Settlement and the Restoration Agreement;
- The states of California and Oregon have authorized funding for facilities removal;
- Development of a plan to address any costs over the limits in the Hydroelectric Settlement; and

· Designation of a Dam Removal Entity, and, if the DRE is a non-federal entity, a finding by the Secretary that the entity meets the qualifications specified in the Hydroelectric Settlement, the states of California and Oregon concur, and the designated DRE has committed to perform facilities removal within the cost cap. The Hydroelectric Settlement also identifies other actions that need to be taken prior the Secretarial Determination.

**Affirmative Determination:** In the event of an affirmative determination, the Secretary will also decide whether the Department of the Interior or a non-federal entity will serve as the DRE. California and Oregon will provide notice to the Secretary and other parties within 60 days whether each state concurs with the affirmative determination. In its concurrence decision, each state will consider whether: 1) significant impacts identified in its environmental review can be avoided or mitigated as provided under state law; and 2) facilities removal will be completed within the state cost cap. If the Secretary selects a nonfederal DRE, the states would also decide whether to concur with that selection.

**Negative Determination:** If the Secretary determines not to proceed with facilities removal, the Hydroelectric Settlement terminates unless the parties agree to a cure for this potential termination event. Prior to adopting or public release of such a determination, the Secretary will notify the parties of his tentative determination and its basis. The parties will consider whether to amend the Settlement in a manner that will permit the Secretary to make an affirmative determination.

## **Costs**

**Cost cap:** The Hydroelectric Settlement sets a cost cap of \$450 million for facilities removal. In addition, pending regulatory approval, the Hydroelectric Settlement allows for the recovery of costs of the existing investment in the facilities, the ongoing operating costs and the costs of replacement power.

**Funding sources:** \$200 million of the costs would come from customer contributions on a pro rata basis (up to \$184 million from PacifiCorp's Oregon consumers and up to \$16 million from customers in California); Oregon has passed the law necessary to begin the collection of the Oregon share. These contributions are designed so they would not increase any rate by more than two percent. In addition, \$250 million would come from the sale of bonds in California. The United States will not be responsible for facilities removal costs.

**Management of the funds:** The states of California and Oregon would establish trust accounts and provide instructions for the management and distribution of the funds. If the customer contributions are determined to result in rates that are not fair, just, and reasonable, the surcharges would be refunded to customers in accordance with the Oregon Surcharge Act and the trustee instructions. If the California or Oregon public utilities commissions determine that there are excess funds in the accounts, the surplus funds would be returned to customers. If one or more of the dams are not removed, any

remaining funds would be returned, first, to costs of relicensing, and then to customers.

## **Implementation**

**Interim Measures:** The Hydroelectric Settlement includes detailed actions for the operation of the dams and mitigation activities prior to removal of the dams.

**Dam Removal Entity:** The DRE must have the following capabilities:

- Accept and expend non-federal funds;
- Seek and obtain necessary permits and other authorizations to implement facilities removal;
- Enter into appropriate contracts;
- Accept transfer of title to the Facilities for the express purpose of facilities removal;
- Perform, directly or by oversight, facilities removal;
- Prevent, mitigate, and respond to damages the DRE causes during the course of facilities removal, and, consistent with applicable law, respond to and defend associated liability claims against the DRE, including costs thereof and any judgments or awards resulting therefrom;
- Carry appropriate insurance or bonding or be appropriately self-insured to respond to liability and damages claims against the DRE associated with facilities removal; and
- Perform such other tasks as are reasonable and necessary for facilities removal, within the authority granted by the authorizing legislation or other applicable law.

**Definite Plan:** The DRE would develop a definite plan for facilities removal and include it as a part of any applications for permits or other authorizations. The definite plan will be consistent with the Settlement, the authorizing legislation, the detailed plan, and the Secretarial determination. The Settlement includes a detailed list of the elements that would be in the detailed plan.

**Schedule:** In the event of an affirmative determination by the Secretary, the target date to begin decommissioning the facilities is January 1, 2020. Preparatory work for facilities removal may be undertaken by the DRE before January 1, 2020, consistent with the Secretarial determination, the definite plan, applicable permits, and other provisions of the settlement. The target date for facilities removal is December 31, 2020. The Hydroelectric Settlement also provides a procedure to accelerate facilities removal by up to twelve months if certain conditions are met. If the parties determine that the schedule for facilities removal must extend beyond December 31, 2020, then the parties will also consider whether 1) modification of interim measures is necessary to appropriately balance costs to customers and protection of natural resources, and 2) continuation of the collection of the customer surcharges up to the maximum customer contribution is warranted.

**Yreka water system:** The parties understand that facilities removal may affect the City of Yreka. In recognition of this potential, the Hydroelectric Settlement includes provisions to mitigate impacts to the city's water supply system.

**Keno:** If the Secretary makes an affirmative determination, PacifiCorp and the Bureau of Reclamation would enter into an agreement to transfer Keno Dam to Reclamation. In preparation for such a transfer, the Secretary, in consultation with the affected parties would study environmental compliance, water quality, and fish passage with the goal of addressing these issues and maintaining the benefits the dam currently provides.

**Transfer:** PacifiCorp would transfer each facility when the DRE provides notice that all necessary permits and approvals have been obtained for removal of a facility, all contracts necessary for facility removal have been finalized, and facility removal is ready to commence. After the transfer, the DRE would remove the facility.

**Legislation:** Implementation of the agreements would require legislation. The parties are developing a proposal for federal legislation to recommend to the Administration and Congress. The proposed legislation includes the authorization for federal agencies to implement the two agreements and specific authorities that require Congressional action. Under the proposed federal legislation, operation of the four dams would continue under FERC annual licenses; in the event of an affirmative determination, the legislation would authorize the decommissioning and removal process in the Hydroelectric Settlement. In the event of a negative determination or if the Hydroelectric Settlement terminates, PacifiCorp would return to the FERC relicensing process. Another provision of the proposed legislation would provide liability protection for PacifiCorp from the effects of removing a dam after it had been transferred to the Dam Removal Entity.

## **Klamath Settlement Organizations**

### **United States**

National Marine Fisheries Service

The United States Forest Service

The United States Department of the Interior, including Bureau of Indian Affairs, Bureau of Land Management, Bureau of Reclamation, and Fish and Wildlife Service

### **State of California**

California Department of Fish and Game

California Natural Resources Agency

### **State of Oregon**

Oregon Department of Environmental Quality

Oregon Department of Fish and Wildlife

Oregon Water Resources Department

### **PacifiCorp**

**Tribes**

Karuk Tribe  
 Klamath Tribes  
 Yurok Tribe

**Counties**

Humboldt County, California  
 Klamath County, Oregon

**Parties Related to Klamath Reclamation Project**

Ady District Improvement Company  
 Collins Products, LLC  
 Enterprise Irrigation District  
 Don Johnston & Son  
 Inter-County Properties Co, which acquired title as Inter-County Title Company  
 Klamath Irrigation District  
 Klamath Drainage District  
 Klamath Basin Improvement District  
 Klamath Water Users Association  
 Klamath Water and Power Agency  
 Bradley S. Luscombe  
 Malin Irrigation District  
 Midland District Improvement Company  
 Pioneer District Improvement Company  
 Plevna District Improvement Company  
 Reames Golf and Country Club  
 Shasta View Irrigation District  
 Sunnyside Irrigation District  
 Tulelake Irrigation District  
 Van Brimmer Ditch Company  
 Randolph and Jane Walthall 1995 Trust  
 Westside Improvement District #4  
 Winema Hunting Lodge, Inc.

**Upper Klamath Irrigators**

Upper Klamath Water Users Association

**Non-Governmental Organizations**

American Rivers  
 California Trout  
 Institute for Fisheries Resources  
 Northern California/Nevada Council Federation of Fly Fishers  
 Pacific Coast Federation of Fishermen's Associations  
 Salmon River Restoration Council  
 Trout Unlimited

**APPENDIX B**  
**INTERVIEWEE INFORMATION SHEET**  
**UNIVERSITY OF NEVADA, RENO SOCIAL BEHAVIORAL INSTITUTIONAL**  
**REVIEW BOARD**  
**INFORMATION SHEET FOR PARTICIPATION IN A RESEARCH STUDY**

**TITLE OF STUDY:** Stakeholder Participation in Environmental Dispute Resolution Negotiations in Watershed Management: A Case Study from the Klamath River Basin, Oregon and California

**INVESTIGATOR (S):** Alex Horangic, University of Nevada, Reno and  
 Kate A. Berry, University of Nevada, Reno

**PROTOCOL #:** 2013E034

**PURPOSE**

The purpose of this study is to identify factors that influence stakeholder participation in environmental dispute resolution negotiations in watershed management, such as the diversity of stakeholder representation, process legitimacy, trust and, issues of time and cost, from the perspective of stakeholders in the Klamath Basin. This project involves research about your experiences as a stakeholder in the Klamath Basin Restoration Agreement (KBRA) and/or Klamath Hydroelectric Settlement Agreement (KHSA).

**PARTICIPANTS**

You are being asked to participate because you are an adult who self-identified as, or was recommended as being representative of a stakeholder organization affected by the KBRA and the KHSA and identifies as having knowledge of the KBRA and KHSA. This is a master's thesis that anticipates approximately 15-25 participants from various stakeholder organizations within the Klamath Basin.

**PROCEDURES**

If you agree to participate in this research study you will be asked to describe your experiences as being representative of a stakeholder organization in the Klamath Basin in an interview arranged at your convenience for time and place. An alternate to the interview is to choose to write about your experiences instead. Participation in this research will take approximately 2 hours. You may withdraw from the interview at any point.

You will be asked to review this information sheet prior to the beginning of the interview. The interview questions will involve a series of questions about your background in the organization at the time of the KBRA and KHSA, the dynamics of your participation in the KBRA and KHSA, and a few other questions. When the interview is complete, you will be asked if you have a preferred pseudonym that you would like to use in the analysis and writeup. If you wish to receive a copy of the transcribed interview and manuscript. Contact information will be collected to send this. This study is expected to be completed by September 1, 2014.

### DISCOMFORTS, INCONVENIENCES, AND/OR RISKS

No discomforts, inconveniences or risks are anticipated as you participate in this study, however, there may be unknown or unforeseen risks. If you have any negative or stressful feelings, you may withdraw at any time.

### BENEFITS

There may be no direct benefits to you as a participant in this study; however, this research project may contribute to a better understanding of why stakeholders chose to participate in negotiated watershed agreements.

### CONFIDENTIALITY

Your identity will be protected to the extent allowed by law and you will not be personally identified in any reports or publications that may result from this study. The Department of Health and Human Service (HHS), other federal agencies as necessary, and the University of Nevada, Reno Social Behavioral Institutional Review Board may inspect study records.

Your name and a phone number and/or email address will be needed to communicate with you if you would like to receive a copy of the interview transcription and manuscript. However, this and any other information gathered for this project will not be published or presented in any way that would allow anyone to identify you. Information gathered for this project will be stored in a locked file cabinet and only Alex Horangic and Kate Berry of University of Nevada, Reno will have access to the data.

You will also be asked to choose a pseudonym for use in published and/or presented materials. If you do not choose one, a pseudonym will be assigned to you.

### COSTS

There will be no cost to you for participating in this research study.

### RIGHT TO REFUSE OR WITHDRAW

You may refuse to participate or withdraw from the study at any time and still receive the care you would normally receive if you were not in the study. If the study design or use of the data is to be changed, you will be so informed. You will be told of any significant new findings developed during the course of this study, which may relate to your willingness to continue participation.

### QUESTIONS

If you have questions about this study or wish to report a research-related injury, please contact Alex Horangic at 916-704-8262 or by email at [amh422@gmail.com](mailto:amh422@gmail.com). Kate Berry is also working on this study and can be contacted at 775-784-6344 or 775-784-4719 or by email at [kberry@unr.edu](mailto:kberry@unr.edu) any time.

You may ask about your rights as a research informant or you may report (anonymously if you so choose) any comments, concern, or complaints to the University of Nevada,

Reno Social Behavioral Institutional Review Board, telephone number (775) 327-2368, or by addressing a letter to the Chair of the Board, c/o UNR Office of Human Research Protection, 205 Ross Hall / 331, University of Nevada, Reno, Reno, Nevada, 89557.

**CLOSING STATEMENT** Alex Horangic has explained the study to me and all of my questions have been answered. I have been told of the risks or discomforts and possible benefits of the study. If I do not take part in this study, my refusal to participate will involve no penalty or loss of rights to which I am entitled. I may withdraw from this study at any time without penalty. I have been told my rights as a research informant, and I volunteer to participate in this study. I have been told what the study is about and how and why it is being done. All my questions have been answered.

#### **AUDIO-TAPING AND TRANSCRIPTION INFORMATION SHEET**

This study involves the audio taping of your interview with the researcher. Neither your name nor any other identifying information will be associated with the audiotape or the transcript. Only the research team will be able to listen to the tapes.

The tapes will be transcribed by a professional transcriber hired by the researcher and erased once the transcriptions are checked for accuracy. Transcripts of your interview may be reproduced in whole or in part for use in presentations or written products that result from this study. Neither your name nor any other identifying information (such as your voice or organization you represent) will be used in presentations or in written products resulting from the study.

Immediately following the interview, you will be given the opportunity to have the tape erased if you wish to withdraw from participating in this study

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**APPENDIX C**  
**INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL**  
 Certification of Approval for New Protocol: Exempt Research  
 Exempt Institutional Review Board  
 FWA00002306

Date: September 27, 2012

To: Alexandra Horangic Department of Geography

Copy:

UNR Protocol Number: 2013E034

Protocol Title: Stakeholder Participation in Environmental Dispute Resolution  
 Negotiations in Watershed management: A Case Study from the Klamath River  
 Basin, Oregon and California

Sponsor Names:

Type of Review: Exempt Minimal risk

Meeting/Review Date: 09/27/2012

Approval Period: September 27, 2012 to September 26, 2013

This approval is for:

- Approved number of subjects: 25

Approved documents: 2013 E 034 app packet.pdf (MISC Complete Submission)

- The above-referenced protocol was reviewed and approved by one of UNR's Institutional Review Boards in accordance with the requirements of the Code of Federal Regulations on the Protection of Human Subjects (45 CFR 46 and 21 CFR 50 and 56).

**Problems Researchers Must Report to the Research Integrity Office or IRB Staff***(to be reported as soon as possible, but within 10 business days)*

- New or additional risks: Outcomes that the principal investigator believes are unexpected, related to the research, and suggest the research may place participants or others at greater risk of harm than was previously known or recognized
- Changes to expected harms or benefits: Any report indicating the frequency or magnitude of harms or benefits may be different than initially presented to the IRB
- Privacy: Any invasion of privacy related to an individual's participation in research
- Confidentiality: Any breach of confidentiality involving research data
- FDA Changes: Any change in FDA labeling or approval for a drug, device or biologic used in a research protocol

- Immediate harm: Any change to the protocol to eliminate an apparent immediate hazard to a research participant, prior to seeking IRB review and approval
- Prisoner: Any incarceration of a participant in a protocol not approved to enroll prisoners
- Sponsor: Any event that requires prompt reporting to the sponsor
- Sponsor: Any sponsor-imposed suspension for risk
- Protocol change: Any accidental or unintentional change to the IRB approved protocol that harmed participants or others, indicates participants or others may be at increased risk of harm, or has the potential to recur
- Device: Any unanticipated adverse device effect
- Department of Health: Any non-compliance identified by Department of Health audit or monitoring
- Federal agency: Any investigation or report by federal agency related to the research
- Medical license or practice changes: Any loss of license or hospital privileges by any researcher on the study
- Complaints: Any complaints that suggest participants or others may have been harmed or placed at increased risk of harm

#### PI Responsibilities:

- Maintain an accurate and complete protocol file.
- Submit continuing projects for review and approval prior to the expiration date.
- Submit proposed changes for review and approval prior to initiation, except when necessary to eliminate apparent immediate hazards to subjects. Such exceptions must be reported to the IRB at once.
- Report any unanticipated problems which may increase risks to human subjects or unanticipated adverse events to the IRB within 5 days.
- Submit a closure request 10 days after project completion to the IRB.

Reference the protocol number on all related correspondence with the IRB. If you have any questions, please contact Rebecca Thomas at 775.327.2368.

For Veteran's Administration research only:

VA Research: NoFlag VA Medical Record: N/A

## APPENDIX D INTERVIEW QUESTION GUIDE

Data will be collected using a verbal (unless an alternative format is requested by the participant), semi-structured interview format and will include the substance of these questions.

### Background Questions:

- What stakeholder organization(s) did you represent at the time of the KBRA and KHSA?
- What was your role at the time of the agreements in the organization?
- Were there others in the organization involved in the KBRA or KHSA? If so, how did this affect your involvement?
- Describe your current relationship with the organization, especially any changes in the past two years?

### Dynamics of Participation Questions:

- Explain what led to your involvement in the KBRA and KHSA agreements.
- Describe how you participated in the KBRA and KHSA agreements.
- What factors influenced your participation (or lack of participation)?
- Did you continually participate throughout the development of the agreements? If not, why did you stop? Did you re-involve yourself at a later time (and if so, why)?
- How did your organizations location or jurisdiction within the basin (upper or lower basin) impact your participation?
- Did your reasons for participating (or not participating) change throughout the development of the agreements? If so, how?

### Closing Questions:

- How do you feel about your involvement in the agreements?
- What advice would you give to others who are trying to resolve conflicts within their own watersheds or river basins?
- Is there anything else that you would like to add that you might have missed earlier?

- Is there anything you would like to ask me