BUILDING THE PLATFORM FOR COLLABORATIVE NATURAL RESOURCE MANAGEMENT: A CASE STUDY OF HUMAN DIMENSIONS IN PUGET SOUND SALMON RECOVERY

by

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ABSTRACT

Building the Platform for Collaborative Natural Resource Management:
A Case Study of Human Dimensions in Puget Sound Salmon Recovery

Ashley Rose McBee

When Chinook salmon, *Oncorhynchus tshawytscha,* were listed as threatened, in 1998, under the Endangered Species Act, citizens, tribes, and local governments in Washington State began developing and implementing the first bottom-up species recovery plan in U.S. history. This coordinated effort created the opportunity to study a place-based, collaborative approach to natural resource management. Utilizing interviews and primary documents, this case study explores the organizational structures and collaborative processes of watershed level organizations, Lead Entities, that are tasked with bringing together diverse groups of stakeholders to develop local salmon habitat recovery strategies. The robust data reveals a myriad of inter-related factors that influence collaborative processes within Lead Entities. These factors include the variation in physical and social landscapes Lead Entities exist within. Factors common among Lead Entities were also revealed in the data analysis, such as collaborative relationships, trust, communication, conflict, and conflict resolution. This study's findings and recommendations contribute to the field of collaborative natural resource management, which focuses on creating management approaches that pool knowledge and resources from diverse groups to create management plans that are more applicable and resilient because they are formed through inclusive, collaborative processes. Furthermore, this case study contributes data for use in the current transformation of the field of natural resource management. This transformation is characterized by a paradigm shift that moves away from identifying and addressing natural resource issues from a purely natural and physical science lens and towards the recognition that effective resource management outcomes are dependent on our ability to work together collaboratively.

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Acronyms

CAC	Citizen's Advisory Committee
ESA	Endangered Species Act
GSRO	Governor's Salmon Recovery Office
HCCC	Hood Canal Coordinating Council
LEC	Lead Entity Coordinator
MRC	Marine Resources Committee
NRC	Nisqually River Council
NRM	Natural Resource Management
PSSRP	Puget Sound Salmon Recovery Plan (Shared Strategy, 2007)
RCO	Washington State Recreation & Conservation Office
SRFB	Salmon Recovery Funding Board
TAG	Technical Advisory Group
WEF	Watershed Ecosystem Forum
WRIA	Water Resource Inventory Area

Terms

Collaboration: For the purposes of this study (i.e., collaboration within Lead Entities), collaboration is defined as "Lead Entity participants working together towards a common goal".

Committee members: Lead Entity participants who are formally reported to RCO as scoring and ranking projects on either the TAG or CAC committees.

Participant: For data analysis purposes (Chapters 4-7), participant refers to any individual involved in the Lead Entity (i.e., committee members, project sponsors, the Lead Entity Coordinator (LEC), public citizens, and individuals who represent a variety of local business, recreation, conservation, etc. interests).

Relationships: As utilized to describe the emergent theme found in Chapter 7 ("LEC Observations of Factors Influencing Collaboration"), relationships are defined as "emergent interactions between and among Lead Entity participants".

Salmon Recovery Act (HB 2496): The Salmon Recovery Planning Act

Chapter 1: Introduction

When Puget Sound Chinook salmon were listed as 'threatened' under the Endangered Species Act in 1998, Washington became the first state to demand the right and responsibility to organize and implement their own species recovery plan, rather than abdicate those rights to a federal agency (Judge, 2011). The citizens, tribes, and governments in the State of Washington felt they could create a recovery plan that more accurately reflected the needs of local economic, ecological, and social systems. Therefore, for the next 10 years, these participants organized to create a collaborative framework capable of coordinating planning efforts from the local watershed level to the state legislative level. These efforts led to the creation and adoption of the Puget Sound Salmon Recovery Plan (PSSRP) in 2007, and that collaborative framework persists today as the plan is being implemented.

Within the Puget Sound salmon recovery framework, 15 Lead Entity organizations were created to develop and implement salmon habitat recovery strategies at the watershed level. These organizations perform a key collaborative role in salmon recovery. Lead Entities bring together stakeholders from local communities and facilitate the integration of interests, knowledge, and skills between these local participants and technical experts from various institutional levels. Lead Entities also serve as the inter-organizational bridge between communities and groups at the watershed level and agencies at the regional and state levels. For this reason, they have been referred to as the "backbone infrastructure of recovery plan implementation in Puget Sound" (Judge, 2011).

1.1 Case Study Rationale

The current study explores the organizational structures and collaborative processes that are occurring within 7 of these 15 Lead Entities. Lead Entities were chosen as the subject of study largely because of the role collaboration plays in their process to develop and implement watershed level recovery strategies. In addition, Lead Entities were established under a common salmon recovery framework, with a common goal to restore and protect salmon habitat. This creates an ideal sample population for assessing both commonalities and variations among the organizations. Specifically, this study identifies commonalities and variation in the Lead Entities' organizational structures and collaborative processes.

This study also contributes to the current literature on collaborative natural resource management (NRM). This approach to resource management is grounded in the principle that ecological and social systems are intrinsically connected. Case studies in collaborative NRM have shown that management plans collaboratively developed by both local participants and technical experts are more robust, locally relevant, and create more opportunity to positively impact local ecological and social systems (Fraser et al., 2006; Sievanen, 2011). Lead Entities embody this principle, as they develop salmon habitat recovery strategies and implement projects based on collaborative decision-making processes that integrate the input of representatives from local communities and technical experts from various levels of local, state, regional, and government agencies/organizations. Therefore, the data gathered in this study contributes to the growing body of literature that informs the theory and practice of collaborative NRM.

In addition, NRM is moving towards the integration of social science practices into a field largely dominated by natural and physical sciences. At this stage in the transformation, NRM practitioners are still largely ill-equipped to manage groups of people for collaborative

success. This study contributes to this knowledge gap by exploring the collaborative processes occurring within Lead Entities and by gathering a portion of its data from Lead Entity Coordinators, the individuals largely responsible for facilitating the interactions among Lead Entity participants.

1.2 Chapter Descriptions

Chapter 2 ("Literature Review") is a review of studies that outline the transition away from top-down, exclusionary NRM approaches and towards collaborative NRM approaches that focus on integrating stakeholders and managing for positive outcomes for both ecological and human systems. The literature review then organizes and presents a summary of case studies that describe the challenges, benefits, and pathways to implementing collaborative NRM practices.

Chapter 3 ("Research Methods") outlines the methods utilized to conduct this case study. The research questions grounding the study are formally introduced, along with the two major forms of data collection, which are primary source documents and qualitative interviews. In addition, the chapter describes the methods utilized to conduct the qualitative interviews and analyze the data.

Chapter 4 ("Lead Entities Defined") analyzes primary source documents to identify the purpose and structure of Lead Entities, as they are defined by their establishment in the larger salmon recovery framework. Throughout the data analysis, the organizational evolution of Lead Entities emerges as a theme. This becomes evident as the data reveals the roles and functions Lead Entities perform have evolved since their establishment, and Lead Entities continue to evolve to remain relevant and active organizations.

Chapter 5 ("Lead Entity Descriptions") analyzes primary source documents and interview data to create descriptions of the geography and organizational structures characterized by the Lead Entities represented in this study. The chapter concludes with an analysis of the variation and similarities revealed among the Lead Entities' organizational structures and processes. The data analysis indicates Lead Entities have organizational histories and structures that reflect the diversity of local communities and the local needs for salmon habitat recovery. This connection between Lead Entities and the local landscape is also expressed, as the organizations appear to strive to evolve their structure and function to adapt to local needs and circumstances.

Chapter 6 ("Collaboration in Practice") analyzes primary source documents and interview data to report the commonalities and variation in processes Lead Entities utilize to carry out their basic functions. The chapter concludes with an exploration of the LECs' observations of the merits of various decision-making methods, based on the impacts of those methods on group functioning and overall outcomes. The continued evolution of the organization itself is an emergent theme that describes how and why Lead Entities develop collaborative processes and outcomes unique to that group.

Chapter 7 ("LEC Observations of Factors Influencing Collaboration") primarily analyzes data from LEC interviews and shifts from a focus on differences among Lead Entity structures and processes to commonalities in factors that shape collaboration within Lead Entities. The chapter is outlined by the major topics discussed in the qualitative interviews, such as fostering collaboration, practical barriers limiting collaboration, context and causes of conflict within groups, and pathways to conflict resolution. An analysis of the interviews constructs emergent themes within each topic, and it is these themes which provide the content of each section in this chapter. Relationship building, the impacts of relationships on group functioning and

collaboration, and the key role of LECs in collaborative functioning were key themes that emerged in this portion of the data analysis.

Chapter 8 ("Conclusions") presents the key themes that emerged throughout the case study. The limitations of this case study's methodologies are presented and followed by recommendations to build on the current study. The chapter concludes with recommendations of actions that are needed to build salmon recovery's capacity to function collaboratively. These recommendations speak directly to the need for a continuation in the paradigm shift that recognizes the vital role collaborative relationships play in NRM and salmon recovery.

Chapter 2: Literature Review

Natural resource management (NRM), in theory and practice, is currently undergoing a historical transformation. For several decades, researchers have been declaring that ecological and social systems are "strongly coupled, complex, and evolving integrated systems" (Folke et al., p. 437, 2002). However, the implication that NRM needs to respond with approaches that work within and for the benefit of both of these systems has been slower to catch on. This realization is continuously pushing NRM paradigms away from top-down, exclusionary approaches that are focused narrowly on ecological targets, and towards integration of participants and pathways capable of addressing both ecological and social systems simultaneously (Abrams et al., 2009; Folke et al.; Gunderson & Holling, 2002; Holling & Meffe, 1996; Keough & Blahna; 2005).

To achieve this objective, there is a growing acceptance that NRM is dependent on developing place-based, collaborative linkages between institutions and participants to successfully identify the needs of both ecological and social systems and develop management approaches capable of meeting those needs (Abrams et al., 2009; Carlsson & Berkes, 2005; Goldman, 2003; Sievanen, 2011). However, this transition faces the challenges of developing a framework capable of replacing ideologies, theories, and practices that are fundamentally engrained in our culture and within traditional top-down NRM approaches. Furthermore, research shows that developing processes and practices that create on-the-ground opportunities for effective collaboration is challenging, and the results are case specific (Abrams et al.; Folke et al., 2002; Goldman; Keough & Blahna, 2005; Margerum & Whitall, 2004; Pomeroy & Berkes, 1997; Sievanen; Wondolleck & Yaffee, 2000).

2.1 Cultural Backdrop for Natural Resource Management

To understand where we are attempting to go with collaborative NRM, and the problems we are attempting to solve, we must first look back to the cultural and scientific history that defines how we perceive the use and management of natural resources. This shared history has given rise to effects that directly shaped the environmental and institutional issues natural resource paradigms of the 20th century have developed in response to. Furthermore, the foundations created by this shared history established the top-down management theories and practices that collaborative methods strive to replace; however, it is an engrained and deep-seated history.

Natural resource management suffers from an inherent disconnect between ecological and human systems that stems from a continuous set of Western values, ideologies, and zeitgeists (Capra, 1982; Holling & Chambers, 1973; Worster, 1977). A significant point of departure for perceiving the reciprocal linkages between human and ecological systems is found in Judeo-Christian theology. The belief that humans are separate from and hold "dominion over nature" fosters a sense of having the right and responsibility to utilize natural resources for human benefit, without consideration of the ecological effects. Capra (1982) claims this ideological principle does not support sustainable use or management of natural resources.

During the Age of Enlightenment, the tenants of current scientific theory were developed under the auspice of a rational and authoritative source of 'truth' that can only be attained by trained scientists and experts (Volger & Jordan, 2003). This exclusionary ideology persisted to form a foundation for isolating the authority to manage natural resources within the realm of trained scientists and experts in the 20th century. Collaborative resource management responds directly to this ideology with evidence that participating actors from the local level have valuable

contributions to make to the formal scientific processes involved in developing and implementing resource management practices (Evans & Klinger, 2008; Fraser, Dougill, Mabee, Reed, & McAlpine, 2006; Keough & Blahna, 2005; Margerum & Whitall, 2004; Wondolleck & Yaffee, 2000).

In the last 175 years, the United States has undergone a series of technological advances that have heightened the demands for natural resources, as well as the disconnect between realizing the effects of those demands on ecological and social systems. The Industrial Revolution provided the impetus and means for increasingly intensive extractions from natural systems (Holling & Chambers, 1973; Gadgil & Berkes, 1991). Holling and Chambers recognize the Industrial Revolution as a phenomenon that heightened the intensity and extensiveness of problems facing NRM and the environment. Their synopsis of this event and its effects are captured here,

> Suddenly men could act as if the world was unlimited and the only constraints were economic. Responding to a past filled with crises of pestilence and poverty, we used our new powers to dispatch these past tormentors. We structured our institutions, our disciplines, and our behavior in response to aspirations for a long life and material possessions. And within a few years, we faced a new set of problems involving the environment. (p. 13)

Wondolleck and Yaffee (2000) report the Industrial Revolution also led to the creation of mechanical and administrative efficiencies that became a mainstay of operations within state and federal NRM agencies, which were created at the turn of the 20th century to manage publicly owned natural resources.

Wondolleck and Yaffee (2000) are the most referenced researchers in the literature on collaborative NRM, and it is at this point in history they begin to identify the influences social systems have on the theories and practices of resource management paradigms. Wondolleck and Yaffee introduce Progressive Conservationism as the movement that "articulated a set of principles for resource management that has provided operating guidelines for the past hundred years" (p.11). Progressive Conservatives, such as Gifford Pinchot, responded to the unrestrained exploitation of resources that characterized the latter half of the 19th century by developing an approach aimed at managing public resources to yield "the greatest good, to the largest number, for the longest time" (Pinchot, 1947). This approach viewed both underuse and overuse of resources as wasteful and established the belief that effective NRM was measured by maximization of growth and productivity of resources (Wondolleck & Yaffee).

2.2 Top-Down Natural Resource Management

Progressive Conservationism provided the foundation for the management approach commonly known as top-down resource management. Top-down NRM is characterized by the centralization of formal authority within governments or agencies that originate spatially outside of the ecological and social systems under management (Goldman, 2003; Wondolleck & Yaffee, 2000). Critics of this NRM point out that top-down management operates on the basis of three fundamental errors: (1) ecological systems can be commanded to provide sustained outputs, as though they are well-defined, well-bounded, linear systems (Berkes, Colding, & Folke, 2003; Holling & Meffe, 1996); (2) humans and nature act and exist as separate systems (Folke et al., 2002; Worster, 1977); (3) the information shaping our understanding of how these systems work and how to best manage them comes from the isolated and exclusionary knowledge base of scientists and experts (Smith, 2008).

Holling and Meffe (1996) define top-down NRM by its desire to "command and control" natural resources. "Command and control" approaches are explained by current social norms that seek to identify a problem and control for the outcome, as if the issue is "well-bounded, clearly defined, relatively simple, and generally linear with respect to cause and effect" (p. 329). Controlling for the outcome is done by controlling the processes that lead to the problem. In the case of top-down NRM, this is achieved by reducing variation in ecological systems in attempts to control for desired outcomes. Holling and Meffe claim this approach leads to the "pathology of resource management", which is defined as reducing the variation in structures and functions of ecological systems in order to maintain predictability and stability within the system. It is widely accepted in the resource management and conservation communities that this approach is fundamentally flawed because it treats ecological systems as if they can be managed without consideration for interactions between social systems and ecological systems and reduces the resiliency of ecological systems. Furthermore, it is widely accepted that top-down resource management approaches, by virtue of these principles, not only harm ecological systems with attempts to control for predictable outcomes but also have negative effects on social and economic systems as well (Abrams et al., 2009; Goldman, 2003; Holling & Meffe).

2.3 Bottom-Up Natural Resource Management

Bottom-up NRM developed in direct response to the shortcomings of top-down NRM, as it acknowledges ecological and social systems are complex and dynamic systems that operate in tandem. The effects each system has on the other are not linear and cannot be controlled with predictability (Berkes, Colding, & Folke, 2003; Folke et al., 2002; Holling & Meffe, 1996). Furthermore, bottom-up management intrinsically circumvents exclusionary ideologies by virtue of its fundamental definition as a paradigm that divests authority to develop and implement

resource management initiatives at the community or grassroots level (Abrams et al., 2009; Fraser et al., 2006; Goldman, 2003; Smith, 2008). Proponents for bottom-up NRM claim that engaging participants at the local level creates a wealth of benefits that add legitimacy and applicability to place-based resource conservation and/or management. Input at the local level creates opportunities to ensure management plans are built on knowledge and parameters that are relevant to local ecological systems and synergistic with local social norms (Evans & Klinger, 2008; Fraser et al.). Implementation costs can be lower due to stakeholder buy-in, compliance with outcomes, continued stewardship, and addressing conflict resolution without resorting to litigation (Agrawal & Gibson, 1999; Evans & Klinger; Fraser et al.; Jentoft, McCay, & Wilson, 1998).

Critiques of bottom-up NRM point out that "communities" are often misrepresented, in theory and practice, as homogenous, organic units, when in fact communities are made up of individuals with varying interests and social roles. When authority to manage natural resources is decentralized to communities, the first step in NRM planning should be to identify the various actors, interests, and their placement within the current power and social structures (Agrawal & Gibson, 1999; Smith, 2008). Furthermore, if bottom-up management is to mature in theory and practice, communities must be recognized for these complexities, rather than embraced for the romanticized image of community participation (Goldman, 2003; Smith).

Critiques of bottom-up management also indicate there are challenges associated with a lack of top-down structures to build on. Natural resource management initiatives that lack political influence can fail to gain legitimacy and garner support from outside the local level. Bottom-up NRM also has a propensity to experience financial capacity constraints and can suffer

from a lack of training or experience within the local community to facilitate general NRM processes and practices (Smith, 2008).

2.4 Collaborative Natural Resource Management

Collaborative NRM is being proposed in studies across the range of NRM paradigms to integrate top-down and bottom-up approaches, in order to mitigate for their shortcomings and capitalize on their strengths. The definition of collaboration most prevalent in NRM research comes from Gray (1985) who identifies collaboration as, "(1) the pooling of appreciations and/or tangible resources, e.g., information, money, labor, etc., (2) by two or more stakeholders, (3) to solve a set of problems which neither can solve individually" (p. 912). In reflection of the transition from top-down to bottom-up NRM, studies are identifying and evaluating key principles required to integrate these two NRM approaches and utilize collaborative processes that maximize the value of contributing institutions and individual participants from both ends of the management spectrum (Abrams et al., 2009; Fraser et al., 2006; Keough & Blahna, 2006; Sievanen et al., 2011).

These studies are often place-based and case-specific and come from a range of NRM paradigms such as such as ecosystem management, environmental policy, conservation biology, sustainable development, co-management, community-based conservation, coastal/marine resource conservation, and coastal/marine resource management. These circumstances render a definitive list of key principles infeasible; however, there are common threads that can be synthesized to create a summary of findings. First, researchers are reporting the challenges and pathways to integrate top-down and bottom-up NRM approaches, in order to maximize the benefits each approach has to offer and mitigate for their shortcomings. Secondly, researchers focus largely on ensuring this top-down and bottom-up integration is accompanied by an

equalization of power and authority between the participants that represent the opposite ends of these management approaches. And, finally researchers are speaking to the positive effects this truly collaborative integration has on social and ecological systems. The following sections examine these points more closely.

To begin with, let's revisit Gray's (1985) definition of collaboration and explore the value or resources that are being pooled from each end of the NRM spectrum. Governments, agencies, NGOs, policy, and regulations that represent the "top" of the spectrum have a large pool of resources that can provide structure and stability to NRM initiatives. Environmental policy, regulatory statutes, and laws come from the top-down; therefore, partners from governing agencies are often in a position to "authorize and legitimize the right to organize and to make and enforce institutional arrangements at the local level" (Pomeroy & Berkes, 1997, p. 478). While all participants should collaborate in the research process, technical assistance can be offered from the top-down to guide this process (Agrawal & Gibson, 1999). In general, there is usually more funding available from the top-down as well, and this can be harnessed in the form of economic incentives for implementation or crucial funding to underwrite various portions of the planning or implementation process (Keough & Blahna, 2005; Sievanen et al., 2011).

Community members, resource users, and other participants at the local level represent the "bottom" of the spectrum and have more to offer in terms of making NRM relevant and applicable to local systems. These participants can often contribute key insight and knowledge of local ecological systems and social norms, and this allows NRM initiatives to be more applicable and creates opportunity for outcomes with long-term impacts on local systems (Berkes, Colding, & Folke, 2003; Folke et al., 2002; Fraser et al., 2006). Sievanen et al. (2011) point out that planning occurs at large scales, with many organizations and agencies, while action

is carried out by individuals and organizations at the local level. Therefore, the on-the-ground time and effort required to implement NRM initiatives is often supplied from the local level.

Case studies and research investigating collaborative NRM identify challenges and benefits associated with the equalization of power and authority among top-down and bottom-up participants (Agrawal & Gibson, 1999; Carlsson & Berkes, 2005; Fraser et al., 2006; Keough & Blahna, 2006; Smith, 2008). Specifically, the literature focuses on equal participation while making decisions about the processes involved in developing and implementing various resource management plans and initiatives. Otherwise, governments are divesting the authority to implement plans but retaining the authority to make meaningful contributions to rules, decisions, and outcomes (Agrawal & Gibson; Smith). As already reported in the literature review, this approach is limiting to the overall outcomes of NRM and can lead to negative impacts on local social and ecological systems.

Wondolleck and Yaffee (2000) propose that this equalization is fostered when the full breadth of the research process is inclusive. This means participants collaboratively articulate the issues and concerns, formulate research questions and hypotheses, and interpret the data. Implicit in this approach is the integration of different types of knowledge, which creates a more robust and applicable management plan (Carlsson & Berkes, 2005; Fraser et al., 2006; Goldman, 2003; Pomeroy & Berkes, 1997). Sievanen (2011) also advocate for an integration of knowledge from technical experts and local fishers in their case study of the implementation of the U.S. National Ocean Policy and coined this inclusive process as, "collaborative fact-finding" (p. 299). Collaborative fact-finding was proposed as a means to build credibility in the fishers' perspectives of data and findings, which had traditionally been managed by "experts" only.

In order to achieve these collaborative research and planning objectives, the research shows participants should invest time and effort early in the process to identify all stakeholders who are affected or hold interest in the resource or issue of interest (Agrawal & Gibson, 1999; Fraser et al., 2006). Once stakeholders are convened, researchers found the overall outcomes of the collaborative process were improved if the group took the initial time to find common goals and firmly define their objectives (Sievanen et al., 2011; Wondolleck & Yaffee, 2000). Furthermore, participants must have a place to meet and interact face-to-face throughout the process (Keough & Blahna, 2005; Sievanen et al.; Wondolleck & Yaffee).

Margerum and Whitall (2003) point out inclusion of local community members in research processes requires an extensive investment in time and funding to facilitate continuous communication. In their case study of collaborative ecosystem management in the Rogue River basin, in Oregon, Margerum and Whitall found the lack of communication between technical experts and community members led to a lack of perceived legitimacy for the project at the state agency level and a lack of stakeholder buy-in at the community level. Cortner and Moote (1999) also note the increased cost associated with the time required to conduct collaborative NRM, compared to traditional top-down NRM. However, based on the widespread findings that collaboration can lead to better outcomes for NRM and local communities, it appears the solution is to plan for these costs early on in the planning process. Carlsson and Berkes (2005) go further to suggest costs should be divided into long-term and short-term expenditures. They propose the initial investment in collaborative processes such as information sharing could reduce later costs associated with time and resources consumed when managing conflict.

Wondolleck and Yaffee (2000) have conducted over 100 case studies of collaborative NRM partnerships in the past 25 years. From this combined experience, they claim that, while

there is no instant solution to tension or conflict among communities, scientists, and managers, a fully collaborative approach to all phases of research allows those affected by the decision-making processes to build a crucial platform of trust. They further claim this trust strengthens the legitimacy of the process and increases compliance. Other researchers have noted the positive effects of equal participation in research processes in the form of increased compliance and claim this lowered implementation costs in the long-term (Agrawal & Gibson, 1999; Fraser et al., 2006).

As noted above, when participation at the local level is fostered, researchers find management plans are more reflective of the ecological systems the natural resource(s) exists within (Carlsson & Berkes; 2005; Fraser et al., 2006). Conversely, Evans and Klinger (2008) found that when local participation was limited in the process of developing indicators to measure ecological and social indicators for measurement and monitoring, the indicators lost relevance and applicability to the overarching goals of the project.

Collaborative NRM also offers the opportunity to empower local level participants and create long-term stewards of natural resources. This is evidenced by case studies findings that through involvement in the collaborative planning and implementation processes, community members are engaged in learning about local ecological systems and can become invested in the perpetuity of natural resources (Abrams et al., 2009; Carlsson & Berkes, 2005; Jentoft, 2004; Keough & Blahna, 2006). Creating scenarios that allow for the sustained use and protection of natural resources is the over-arching goal of NRM; therefore, collaborative approaches that seek to engage, educate, and empower local level participants are integral to measuring our success as researchers and practitioners in the field of NRM.

2.5 Review & Conclusion

Top-down management approaches that marked the early and mid-20th century are now accepted as fundamentally incapable and organizationally ill equipped to respond effectively to the needs of both ecological and social systems. A new approach has been developing for several decades and focuses on divesting management authority from the 'top' and placing it within local communities and initiatives to develop a bottom-up management schema capable of incorporating the needs and interests of both local social and ecological systems. However, bottom-up approaches often lack the resources and capacity to develop, implement, and sustain management plans. As a result, we seem to be arriving almost naturally in the current era of collaborative NRM.

There are still many challenges facing a full integration of collaborative NRM. While it is widely accepted that resource management requires creating collaborative linkages between institutions and participants at varying spatial and organizational levels, collaboration as a basis for resource management is still establishing itself. Case studies, such as this specific body of research, remain at the core of our current attempts to build theories and inform practitioners of the challenges and practices that are formative to successful implementation of collaborative resource management plans. Even though these studies are found throughout the range of NRM paradigms, the field of collaborative NRM is still in need of a solid framework of conceptual theories and consistent practices. It is likely that even with the advent of such a framework, there is still the simple truth that time and patience are required to make such a transformational leap in the way current institutions are structured and function.

The literature indicates that top-down NRM is the only approach grounded in a well-defined set of theories and practices, and this framework is constructed on the tenants of natural

and physical sciences. As the literature review revealed, this traditional top-down approach is established and engrained in our culture, theories, and practices. And, while collaborative approaches seek to integrate human dimensions and social sciences into NRM, inserting social sciences into a field dominated by the practice of singularly addressing ecological systems is challenging and wrought with examples of success and failure. More than anything, this transition to a collaborative approach, grounded in tenants from the social sciences, is a process that requires continued research to prove its value and establish its place within the field of natural resource management.

The current study serves two purposes in the field of collaborative NRM. It contributes to the growing body of collaborative NRM literature by providing a case study of the first time in U.S. history that the rights and responsibilities to manage for the recovery of an ESA listed species were retained at the state level, rather than carried out and enforced from the federal level. Furthermore, the study contributes to this transition in NRM, as it is conducted from a social science perspective and utilizes research methods from the field of social sciences.

Chapter 3: Research Methods

3.1 Research Design

This study utilized a qualitative case study methodology to answer the following research questions: (1) How are Lead Entities defined? (2) How do Lead Entities vary in organizational structure and function? (3) What factors do LECs observe to influence collaboration within Lead Entities? These research questions provide the framework for a place-based, case-specific inquiry into collaborative NRM practices.

Two major forms of data collection were utilized in this case study. Primary source documents were collected and analyzed to determine the basic purpose, structure, and functions of Lead Entities. Qualitative interviews were conducted with LECs to discern the factors they observed to influence collaborative processes within Lead Entities. The data collected through both of these methods are integrated to analyze and report on all three of the research questions. The details of this data collection and analysis process are described below.

3.2 Primary Source Documents & Analysis

The primary source documents are delineated into two groups based on the purpose for which they were analyzed. The first group of documents were analyzed in order to: (1) identify the nested placement of all Lead Entities within the larger organizational framework of salmon recovery efforts in Washington State; (2) identify the purpose and structure of Lead Entities, as they are defined by their history and establishment in that larger salmon recovery framework; (3) provide a basic description of inter-organizational relationships pertinent to Lead Entity functioning. The documents collected to conduct this portion of the analysis include: the Salmon Recovery Planning Act (HB 2465), the Lead Entity Program Report and Evaluation

(Triangle Associates Inc., 2002), the Puget Sound Salmon Recovery Plan (Shared Strategy, 2007), and the 2011 Implementation Status Assessment: A Qualitative Assessment of Implementation of the Puget Sound Chinook Recovery Plan (Judge, 2011).

The second group of primary source documents were analyzed in order to: (1) identify the current organizational structures and functions of individual Lead Entities represented in this study; (2) describe the variation among participating Lead Entities' structures and functions; (3) combine with data from qualitative interviews to determine how organizational structures and functions influence collaboration within Lead Entities.

A portion of the primary documents described in the former group were also analyzed to achieve the purposes outlined above. The Salmon Recovery Planning Act (HB 2496) and PSSRP (Shared Strategy, 2007) provided a historically mandated baseline for establishing the common structure and function of Lead Entities. From this mandated baseline, variation among Lead Entities' organizational structures and functions could be analyzed.

At the request of the researcher, the LECs also provided primary documents that described each Lead Entity's current structures and functions. The documents LECs provided were varied in the purpose they served in the Lead Entities' processes, but they all effectively outlined the organizational structure and processes which are implemented to carry out common Lead Entity functions. These documents consisted of local salmon recovery strategies, guiding documents for creating the Lead Entity's annual habitat project list, 3-year work plans, and Interlocal Agreements that outlined the organization's establishment. In the end, primary documents were not sufficient to develop clear and robust descriptions of the way Lead Entities are structured and how they function. Therefore, interview data was combined with primary documents to effectively describe these organizational parameters.

3.3 Interview Participants

The target population for interviews was the Lead Entity Coordinators (LECs), who serve as the paid staff to facilitate processes and administrative tasks within the Lead Entity. Interviews were conducted with 7 of the 15 LECs in the Puget Sound region. However, data from one interview was lost due to technical error, and one of the LECs represented two separate Lead Entities. Therefore, the total number of interview participants in this study is 6, and the total number of Lead Entities represented is seven.

The Institutional Review Board at The Evergreen State College approved a Human Subjects Review prior to contacting potential interview participants. Once this approval was granted, two of the six LECs were contacted in-person, and a request was made for participation. The remaining four LECs were approached in-person at a regional conference on salmon recovery and agreed to receive more information regarding potential participation in an interview.

Immediately following in-person participation requests, an individualized email was sent. This electronic communication provided an introductory document outlining the purpose of the study and the credentials of the researcher, as well as a copy of the informed consent LECs would be asked to sign at the time of the interview. All six of the LECs agreed to participate.

3.4 Interview Methods

Interviews were performed between May 2 and June 5, 2013. Each LEC signed an informed consent and acknowledged the risks of participation, prior to beginning the interview. Three of the interviews were conducted in public settings, such as restaurants and coffee shops. Two interviews were conducted at the participants' place of work. One interview was conducted via phone. Interviews ranged in length from 2 to 2 ½ hours.

The interview methods utilized a semi-structured approach that relied on a preliminary script of questions and topics to discuss both the organizational structure and LEC observations of factors which foster or inhibit collaboration within the Lead Entity. From this initial script, the discussions were permitted to flow organically, while the researcher utilized knowledge gained from primary source documents and informal conversation with various members of the Puget Sound salmon recovery community to follow, prompt, and engage dialogue. This allowed LECs to discuss a multitude of topics and observations related to organizational structure and collaboration. The result was a robust data set that consistently referenced the core set of questions and concepts, and also contained a diversity of observations and perceptions reflective of the variation in interviewee and organizational individuality.

To begin the interview, the LECs were informed the goal of the actual interview process was to start by describing of the general organizational framework of the Lead Entity. It was explained to LECs this meant they were expected to describe the Lead Entity's history, organizational structure, and roles of Lead Entity participants. The LECs were informed that this portion of the interview would be followed by a discussion of collaborative processes within the group. It was explained to LECs that this meant they were expected to share their observations and perceptions of what collaboration looked like among Lead Entity participants, how collaboration is fostered, and what is challenging to the collaborative process. The LECs were also informed, prior to starting the interview, the case study did not seek to evaluate the Lead Entity in terms of succeeding or failing to carry out their basic functions or engage collaboratively. Rather, the goal was to gather information to build an understanding of how Lead Entities are structured, how they function, and capture LEC perceptions of what

collaboration looks like and what factors they observe as influencing collaboration within the organization.

The LECs were then informed that with the remaining time in each interview, they would be asked how they defined the term co-management, and if or how this term related to work being carried out at the Lead Entity level. Due to issues concerning the time frame for the current case study, the data surrounding co-management discussions, and other topics that arose organically to describe collaboration outside of the Lead Entity, were omitted from the case study analysis. This bound the discussion of collaboration to what is occurring *within* Lead Entities. However, this data could analyzed at a later point in time and contribute to a broader understanding of collaborative NRM practices throughout the Puget Sound salmon recovery community.

3.5 Interview Data Analysis

All six interviews were transcribed verbatim into Word documents. The transcriptions and the audio files were then saved on the interviewer's personal laptop and preserved on a flash drive to ensure the data would not be lost prior to completion of the case study. Upon completion of the study, the transcriptions and audio files were deleted from both devices.

Data analysis began with transcribing the interviews without attempting to identify or otherwise track commonalities or identify themes among interviews. Once transcriptions were completed, an Excel database was created with column headings populated by coded identifiers for each LEC and row headings populated with the initial topics of interest. These row headings consisted of structural topics (i.e., how the committees are structured, who is on the committees, where the Lead Entity is housed, etc.) and collaboration-related topics (i.e. collaboration, fostering collaboration, barriers to collaboration, conflict, etc.). The researcher also recorded a

general summary of the interview, as well as mention of local social, political, and geographical characteristics. The researcher then critically read through each transcript and made abbreviated notes of the discussion surrounding each of these initial topics. Each section of the transcript that discussed an initial topic was then re-read and new rows were added to capture further details related in that dialogue (i.e., conflict, examples of conflict, reason for conflict, method of resolution, effect of conflict on group, etc.). In addition, new rows were added to capture topics LECs discussed that were outside the range of the initial set of concepts (decision-making, relationship building, etc.). As each transcript was analyzed, new topics were introduced and the researcher would re-analyze the previous interviews and capture data related to those new concepts.

When an initial analysis of all the transcriptions was completed, the researcher shifted from analyzing individual transcriptions to a critical review of the entire Excel database to ascertain commonalities and differences among the LEC responses to individual topics. When a common theme was identified, the researcher once again analyzed the dialogue surrounding that theme in each interview. If commonality was in fact observed in each of the transcripts, that concept was recorded as an emergent theme. Those emergent themes are reported in Chapters 6 and 7 ("Collaboration in Practice" and "LEC Observations of Factors Influencing Collaboration") of the following data analysis. In addition, general quotes and data from interviews are reported in tandem with the primary document analysis presented in Chapters 4 and 5 ("Lead Entities Defined" and "Lead Entity Descriptions").

3.6 Personal Disclosure

In partial fulfillment of ensuring the validity of a qualitative study, the researcher's intentions and interests in this topic should be fully disclosed. As such, the researcher is driven

by a personal and professional interest in furthering the success of developing methods for effective collaborative, rather than top-down or command and control, natural resource management. It is the researcher's goal to identify those variables which practitioners' observe as both fostering and challenging effective collaboration at the local level, as a means to the end of furthering both science and society's ability to sustainably manage natural resources. With this said, the researcher makes every conscious effort to allow the observations, opinions, and voice of the participants to speak for themselves and avoid assumptions or additions which lend themselves towards seeking support for the implementation of collaborative management.

Chapter 4: Lead Entities Defined

Lead Entities are nestled within the complex, and sometimes convoluted, organizational framework of salmon recovery in Washington State. This chapter identifies the purpose and structure of Lead Entities, as they are defined by that framework. The chapter begins with a content analysis of the Salmon Recovery Planning Act (HB 2496), which mandated the creation of Lead Entity organizations and provides minimal directives for the purpose and responsibilities of the Lead Entity's two committees, the Citizen's Advisory Committee (CAC) and the Technical Advisory Group (TAG). The analysis then shifts its focus to primary source documents created post-establishment of the Lead Entities and explores the evolving purpose, structures, benefits, and goals, as defined through the process of organizational development and implementation. The chapter concludes with descriptions of the Lead Entity's purpose and functions, as reported in the LEC interviews. This chapter moves through these various sources of data and tells the story of why it is challenging to find or create a singular, comprehensive definition of Lead Entities.

4.1 Salmon Recovery Planning Act

The impetus to create Lead Entities came with the passage of the 1998 Salmon Recovery Planning Act (Salmon Recovery Act) (HB 2496, now codified with amendments under RCW 77.85). For context, this was before salmon recovery plans were developed, before a mechanism for funding allocation was established, and before Washingtonians knew what was required of an effective, strategic plan to achieve Pacific salmon recovery. At this point, there was very limited organizational framework to speak of; therefore, the Salmon Recovery Act was passed by the legislation in their best attempts to create guidelines for what that framework should look like.

The architects of this legislation wrote into law their intention to anchor salmon recovery in Washington State within a collaborative natural resource management framework. This is evidenced by the Salmon Recovery Act's statement of intent, which makes clear the State will maintain authority in managing Pacific salmon listed under the Endangered Species Act. In addition, the Salmon Recovery Act focuses its efforts for state-level management and salmon recovery on creating a "coordinated framework" to carry out habitat recovery projects at the watershed level. The following content analysis provides an overview of the actions the legislature deems necessary to achieve these goals.

First, the Salmon Recovery Act (HB 2496) makes clear the State will be the primary manager of listed Pacific salmon species, as opposed to surrendering those rights and responsibilities to the federal government. Then the legislature established that the best way to accomplish their recovery objectives was to create a statewide strategy and "integrate local and regional recovery activities" into that framework. Furthermore, this statewide strategy was to be "developed and implemented through an active public involvement process in order to ensure public participation in, and support for salmon recovery" (RCW 77.85.005). The legislation then identifies habitat restoration as a "vital component" of recovery efforts and calls for "a structure that allows for the coordinated delivery of federal, state, and local assistance to communities for habitat projects" (RCW 77.85.005). The next element is not a directive, but rather a statement that, "a strong watershed-based locally implemented plan is essential for local, regional, and statewide salmon recovery" (RCW 77.85.005).

The architects of this legislation state there is an immediate need for salmon recovery efforts to come under a coordinated framework and called for the creation of several organizations to serve as the cogs and wheels of this strategic and collaborative effort (RCW

77.85.005). The Salmon Recovery Act, and the soon to follow SB 5595, established the Governor's Salmon Recovery Office (GSRO) to coordinate the statewide strategy, the Salmon Recovery Funding Board (SRFB) to coordinate a state funding process, and Regional Recovery Organizations (RCW.75.090) to coordinate and monitor implementation of regional and watershed-based recovery plans.

Lead Entities are just one cog in this massive framework, as evidenced by a lack of prominence in the legislation, and they were partially chosen as the target group for this study because this group occupies the niche closest to the community level, in that larger organizational framework. The hierarchy for Puget Sound salmon recovery goes from watershed-based organizations, to regional organizations, to state organizations. This hierarchy depends on each level to develop and implement habitat recovery plans that incorporate local input and needs, and they are iteratively combined to create that coordinated, statewide framework. This is of course a simplistic description of the relationships between the organizations created by the Salmon Recovery Act. Input from the watershed level informs but does not dictate state level coordination. State level organizations require deliverables from and enforce mandates on the regional and watershed level organizations but also work to adaptively manage the framework to assist local efforts. The regional recovery organization for Puget Sound Chinook salmon is the Puget Sound Partnership, and they work closely with Lead Entities in a collaborative as well as oversight role, depending on the context. The nuances of these organizational relationships are continuously evolving and are outside of the purview of this study's analysis objectives.

Lead Entities are introduced in the Salmon Recovery Act under "Habitat Project Lists" (RCW 77.85.050). It states that local governments must "jointly designate…the area for which a

habitat project list is to be developed and the lead entity that is to be responsible for submitting the habitat project list" (RCW 77.85.050). Two of the six LEC interviews mention this collaborative establishment process, in which local governments were allowed to designate the Lead Entity's geographical boundaries and choose the organization to house the Lead Entity and serve as its fiscal agent.

For context, the fiscal agent serves as the intermediary who receives and distributes each Lead Entity's administrative and capacity funding. Funding comes from Washington State Recreation and Conservation Office (RCO), and fiscal agents vary in the amount of overhead they require to house the Lead Entity. The phrases "organization housing the Lead Entity" and "the fiscal agent" refers to the same organization. One effect of this arrangement is that the LEC's paycheck comes from the organization that houses them. It is the researcher's impression LECs are cognizant of potential misconceptions this funding process could create, as they appear to intentionally communicate to Lead Entity participants and communities that it is the Lead Entity they work for, not the fiscal agent. The legislation goes on to state the fiscal agent can be a "county, city, conservation district, special district, tribal government, regional recovery organization, or other entity" (RCW 77.85.050).

The legislation also tasks the Lead Entity with establishing a committee made-up of stakeholders from local,

> … counties, cities, conservation districts, tribes, environmental groups, business interest, landowners, citizens, volunteer groups, regional fish enhancements groups, and other habitat interests. The purpose of the committee is to provide a citizen-based evaluation of the projects proposed to promote salmon habitat. (RCW 77.85.050)

The legislation does not name this committee, but this study utilizes the common term provided by the salmon recovery community's nomenclature, the Citizen's Advisory Committee (CAC). The legislation tasks the CAC with compiling a list of habitat projects, establishing priorities, or criteria, to vet each project through, creating a sequence for projects to be implemented, identifying funding sources for those projects, and submit those projects in the form of a habitat project list to SRFB for funding (RCW 77.85.050). This process is also done in accordance with procedures developed and governed by SRFB and can be found in SRFB's guidebook for salmon recovery grants (Manual 18, 2013).

The Technical Advisory Group (TAG) is introduced under "Critical Pathways Methodology" (RCW 77.85.060). The Salmon Recovery Act (HB 2496) does not indicate the TAG is expected to operate within the Lead Entity. There may have been an initial connection in the Salmon Recovery Act that was lost in the legislative updating process, but the current content only assigns the TAG a list of responsibilities and requires the outcome be submitted to the CAC. The process is summarized as follows: developing an analysis of the limiting factors for salmon habitat, aiding landowners and projects sponsors in identifying how habitat projects will be monitored and evaluated, and reporting a review of the monitoring data and project performance to the CAC (RCW 77.85.060).

The legislation's definition of Lead Entity responsibilities and functions is condensed to the following. The Lead Entity is an organization whose boundaries and housing are established by a group of local governments. The Lead Entity is to develop a CAC, which is representative of local interests and governments within those boundaries. The CAC is to develop a habitat project list, based on an evaluation of potential local projects, and submit that list to the SRFB to request funding.

The TAG is essentially tasked with identifying the areas and ways in which salmon are limited or negatively impacted in their Lead Entity area, participate in project monitoring and evaluation, and make recommendations for projects to the CAC, based on their evaluation of monitoring data and project performance. It is the researcher's impression these original TAG tasks speak more to the role the TAG would play in preparing the initial local recovery plans. Today, the TAG has evolved to be a second committee within the Lead Entity. Both the TAG and the CAC visit potential habitat project sites every year and both committees conduct a scoring or ranking process to create a recommended list of habitat projects. The TAG does usually conduct their scoring process first, rather than with the CAC, and the CAC always makes the final decision on the sequencing of the habitat project list.

In essence, the Salmon Recovery Act provided the authority, funding, and a minimal description of the scope of work to create and guide the organizations tasked with developing and implementing coordinated plans and strategies for salmon habitat recovery. It appears these newly established organizations, including Lead Entities, were then left largely to their own collaborative wits to discover and define their structures, processes, and relationships, both within and among organizations. Furthermore, this is what appears to have happened as salmon recovery continued to evolve and define itself.

Combining the researcher's knowledge gained from conducting this study, there are other pieces of pertinent information that can be gleaned from the Salmon Recovery Act. First, habitat projects are defined within this legislation as, "…the list of projects resulting from the critical pathways methodology… Projects include habitat restoration projects, habitat protection projects, habitat projects that improve water quality, habitat projects that protect water quality,

habitat-related mitigating projects, and habitat project maintenance and monitoring activities" (RCW 77.85.010).

Efforts to recover Pacific salmon stocks in Washington State also include management of salmon harvests and hatcheries, in addition to habitat recovery. However, the Salmon Recovery Act targets salmon habitat recovery and does not address the coordination of efforts to manage the salmon harvest or hatcheries. It is the researcher's impression that harvest and hatchery management are not included here because they are managed at the tribal government and federal government level. It is not clear the extent to which the "coordinated framework for responding to the salmon crisis" is synchronized with the framework for harvest and hatchery management.

4.2 Primary Document Analysis Post-Lead Entity Establishment

4.21 Lead Entity Program Report and Evaluation (2002)

In 2002, the Washington Department of Fish & Wildlife (WDFW) commissioned a Lead Entity Program Report and Evaluation (Lead Entity Report). The Lead Entity Report states that the Lead Entities requested a self-evaluation to determine "the effectiveness of the overall Lead Entity program" (Triangle Associates, Inc., p.18). The WDFW moved forward with designing and implementing a survey. The results were compiled from 186 anonymous participants who work within Lead Entities across the state. An independent consulting firm analyzed the data and created the Lead Entity Report "to characterize the history of the Lead Entity program, highlight successes of individual Lead Entities and the program as a whole, and provide recommendations on how the Lead Entity role fits into the dynamic landscape of salmon recovery" (Triangle Associates Inc., p.18). The current study utilizes the Lead Entity Report to explore the extent to which Lead Entities developed in its purpose, structures, and functions of

Lead Entities in the first four years of their existence. Furthermore, the report provides robust descriptions of the key roles and benefits ascribed to Lead Entities.

The Lead Entity Report (Triangle Associates Inc., 2002) defines Lead Entities as,

> Voluntary organizations that function to solicit, develop, prioritize and submit salmon habitat protection and restoration projects for funding to the Salmon Recovery Funding Board (SRFB). Lead Entity areas typically follow Water Resource Inventory Areas (WRIAs). Each Lead Entity consists of, at minimum, a Coordinator … a committee of local technical experts, and a committee of local citizens. (p.6)

This definition remains in line with the minimal description of structure and function provided by the Salmon Recovery Act. However, the TAG and CAC are officially combined under the organizational structure of the Lead Entity. The report also elaborates on the processes and purpose of the committees with the following descriptions.

> **Technical Committee**: The technical committee, made up of local technical experts, rates the projects submitted by project sponsors on their technical merit. These local technical experts are often the most knowledgeable about the local watershed, habitat and fish conditions. Their expertise is invaluable to ensure priorities and projects are based on ecological conditions and processes. They judge projects on the basis of their technical merits, benefits to salmon and the certainty that the benefits will occur. (Triangle Associates Inc., 2002, p.11)
>
> **Citizen's Committee**: The technical committee submits its technical evaluation of projects to the citizens committee. In addition to local citizens, participants on citizens committees may include local, state, federal, and tribal government representatives, community groups, environmental and fisheries groups, conservation districts, and

> industry. The citizen committee is critical to ensure that priorities and projects have the necessary community support for success. Citizens' committee members are often the best judges of the community's social, cultural and economic values, as they apply to salmon recovery, and of how to increase community support over time through the implementation of habitat projects. The citizen committee ranks the project list, and submits it through the Lead Entity for SRFB funding consideration. (Triangle Associates Inc., 2002, p.11)

The functions of the "technical" and "citizen's" committees presented here appear to be more clearly defined and representative of the current processes Lead Entities utilize to create a habitat project list. Reference is made to criteria the TAG utilizes to evaluate habitat projects and is representative of criteria which are currently used, which indicates organization and solidification for technical review of habitat projects. The language also states the TAG "rates" the individual projects and the CAC "ranks the project list". This language is also indicative of the current process which separate the technical evaluation of individual projects and the citizen's process for prioritizing a final habitat project list. In general, it appears the two committees have come under the same organizational structure and have established their basic processes for interacting and creating the habitat project list.

In addition to the committees, each Lead Entity's organizational structure includes a Lead Entity Coordinator (LEC), who facilitates the committees, manages the administrative components of the program, and truly serves as the 'jack (or jill) of all trades' to ensure the Lead Entity is functioning and effective. However, this coordinating position is yet to be defined in these primary documents or recognized for its importance in descriptions of Lead Entities.

The Lead Entity Report (Triangle Associates Inc., 2002) indicates the groups were organizing beyond their basic structures and functions to develop their watershed based recovery strategies. These recovery strategies later become the basis for local recovery plans and are combined to create the core of the Puget Sound Salmon Recovery Plan (Shared Strategy, 2007). The report praises Lead Entities for developing their local recovery strategies and defines the function of these strategies as follows,

> … To guide its [the Lead Entity's] selection and ranking of projects. The strategy prioritizes geographic areas and types of restoration and protection activities, identifies salmon species needs, and identifies local socio-economic and cultural factors as they relate to salmon recovery. These stakeholder-supported strategies increase effective decision-making by Lead Entities and define and clarify roles between Lead Entities and the broader salmon recovery planning environment. (Triangle Associates Inc., p.11)

The Lead Entity Report also provides insight into the roles Lead Entities were carrying out in the larger salmon recovery community by 2002. The report indicates Lead Entities had established themselves as organized and "critical" components of salmon recovery and states,

> It is the only program that brings science and local community values into the decision-making process for directing salmon recovery funds. Without that, it is unlikely that citizen support will continue for achieving the broader salmon recovery goals under the Endangered Species Act. (Triangle Associates Inc., 2002, p.1)

Additionally, the Lead Entity Report (Triangle Associates Inc., 2002) speaks to other benefits the Lead Entities provide in the following statements:

- Over $60 million in match funds have been leveraged through the Lead Entity program. (p.1)

- The partnerships and relationships forged through the Lead Entity program over the past four years constitute a sustainable network of individuals and organizations devoted to making salmon recovery a reality within each watershed. Lead Entities provide an arena for participants of diverse interests to work toward common solutions for salmon recovery, making difficult decisions possible. (p.8)

- A strength of the Lead Entity Program is the ability to coordinate and facilitate salmon recovery activities and programs at the local level and to link existing and new organizations involved in salmon recovery. (p.19)

These statements indicate the Lead Entities were serving an important role in the local communities, as well as the larger salmon recovery framework, through their ability to develop funding and inter-organizational partnerships. These statements are also indicative of the key role Lead Entities had established to build bridges for garnering the community support and participation called for in the Salmon Recovery Act (HB 2496).

The following statements from leaders in the establishment of the salmon recovery community are provided and indicate further the essential position Lead Entities were perceived to have already established in salmon recovery.

> **Jay Watson, Lead Entity Advisory Group**: This report is an effort to show what Lead Entities (groups of local folks working near their own homes and in their own communities) are accomplishing for salmon. Equally important, it shows that we are developing a critical asset: local community support for, and involvement in, salmon recovery… While some things can be improved, it shows that we are getting better and

that we are open to making the process at our local levels the most efficient, effective and citizen-driven as possible. While projects alone will not recover salmon, they are a huge and tangible step towards that goal. I personally hope that our efforts in the local Lead Entity process represent the leading edge of building community support for this incredible natural, economic and cultural resource, the Pacific Northwest salmon. (Triangle Associates Inc., 2002, p.5)

Dr. Jeff Koenings, Director, WDFW: In the span of only four years, Lead Entities have grown from an idea to an integral and essential component of our state's salmon recovery strategy… The Lead Entity program has been a great success because of the local knowledge and dedication that Lead Entity participants have brought to bear on the salmon habitat problems and opportunities. Clearly, experience through the Lead Entity Program has shown us that those who live in the watersheds are in the best position to know what needs to be done. (Triangle Associates Inc., 2002, p.5)

William Ruckelshaus, Chair, SRFB: From the standpoint of the Salmon Recovery Funding Board, Lead Entities are absolutely essential for identifying the highest priority habitat projects for funding by the Board. The people participating in the local Lead Entities understand the needs of the fish and of their watersheds and are developing strategies to meet those needs. (Triangle Associates Inc., 2002, p.5)

These statements indicate Lead Entities were meeting the Salmon Recovery Act's (HB 2496) stated goal to allow local knowledge and watershed-based assessments to inform coordinated

regional recovery efforts. Furthermore, they indicate an appreciation and acknowledgement for local participation and local needs and interests to drive the recovery of salmon habitat.

There are also indications of processes that were still yet to evolve. At the time this report was written, there still was not a Puget Sound region or statewide salmon recovery plan, so the Lead Entities organized themselves, with funding and some guidance, to create their local habitat recovery strategies and processes for ranking habitat projects. The Lead Entity Report (2002) indicates the potential for Lead Entities' watershed-level recovery plans to inform the regional recovery plan, and indeed that is the course of events that occurred.

4.22 Puget Sound Salmon Recovery Plan (2007)

In 2007, after almost ten years of collaborative work at local, regional, and state levels, the National Oceanic and Atmospheric Association (NOAA) approved the Puget Sound Salmon Recovery Plan (PSSRP) (Shared Strategy, 2007). In this interim the non-profit organization, Shared Strategy for Puget Sound was established, and facilitated the process of developing the PSSRP. The robust history of Shared Strategy is a story of collaboration that includes over 150 representatives from federal, state, tribal, and local governments, as well as community members and restoration entities to develop a Shared Strategy for Puget Sound. This strategy is founded on a recognized need to build relationships and trust among these participants, and coordinate their interests and capacities to develop a strategy driven by local needs and interests. Shared Strategy for Puget Sound was a movement of historical significance, as there had never been a bottom-up, locally driven recovery plan developed in response to an ESA listing (Shared Strategy). Shared Strategy's spirit and goals are captured in the following quote,

> People involved in salmon efforts across the [Puget] Sound wanted the ability to tailor recovery strategies and actions to the political, cultural, economic and ecosystem needs of

> individual watersheds across the [Puget] Sound. They wanted to ensure that the plan would provide for economically viable fisheries, forestry, and agricultural industries. Furthermore, they wanted to place salmon recovery in the context of contributing to overall ecological benefits for other species and the marine environment. Thus, the Shared Strategy process was designed to meld ESA requirements with locally-driven recovery efforts and a vision for the future of the region. (Shared Strategy, p. 14)

The statements appear to speak further to the interest in managing salmon recovery at the local level, rather than abdicate those rights and responsibilities to a federal agency. The primary source documents are showing consistency in the expression that the people of Washington want to tailor an approach parallel to their social needs, as well as the needs of local ecosystems. Furthermore, it is believed the best representatives of these needs are citizens and agencies in Washington, both at a state and watershed level.

The Shared Strategy approach was unprecedented in its recognition of the need to build recovery efforts around these locally driven interests and needs, as evidenced by the following quote,

> One of the primary assumptions of the Shared Strategy has been that the efforts of people in the watersheds across Puget Sound are the fundamental building blocks for a recovery plan and its successful implementation, and that participation from every watershed is necessary to achieve recovery. Watershed residents are most directly aware of the conditions in their river systems and shorelines, and are being asked for commitments to carry out the recovery actions. (Shared Strategy, 2007, p.15)

While the Lead Entities are not directly referenced here, the mounting data suggests they are leaders in watershed-level salmon recovery initiatives. Furthermore, these statements indicate

the watershed-level recovery efforts are serving as the foundation upon which regional and statewide salmon recovery plans. This study chose to forego further analysis of the Shared Strategy for Puget Sound's history and strategies; however, a basic familiarization with this organization and its process is integral to personal or professional inquiry into salmon recovery in the Puget Sound.

Similar to the content of the Salmon Recovery Act (HB 2496), Lead Entities received minimal reference in the PSSRP (Shared Strategy, 2007). It is assumed these initial guiding frameworks were focused more on developing a larger coordinated framework for salmon recovery and Lead Entities were still a singular cog in a complex, ever-evolving mechanism that had a copious number of moving parts. In addition, Lead Entities were still taking on their own identities and defining their processes and functions. To the best of the researcher's knowledge, the PSSRP provides one description of the roles and responsibilities of Lead Entities in the almost 500-page long document. The PSSRP provides its interpretation of the Salmon Recovery Act's goals for Lead Entities as follows,

> The Salmon Recovery Act encouraged the formation of local "Lead Entity Groups" with citizen sub-committees and technical advisors to evaluate and prioritize restoration and protection projects for each watershed area. These locally-driven efforts were intended to allow local knowledge and relationships to assist planning and implementation, and to account for the differences between urban and rural communities and habitat conditions throughout the state. (Shared Strategy, p.88)

These statements are once again indicative of the role Lead Entities play in building recovery strategies at a watershed level. It appears this organizational structure was intended to increase the potential success of these recovery strategies by ensuring local biological and social factors

were identified by individuals and entities at the local level. Both the Salmon Recovery Act and the Shared Strategy for Puget Sound share the assumption that salmon habitat recovery has a greater potential for success if local citizens and governments are permitted to develop and implement these local strategies.

4.23 Implementation Status Assessment (2011)

In 2011, the National Marine Fisheries Service commissioned a qualitative assessment of the implementation of the Puget Sound Chinook Salmon Recovery Plan (same as PSSRP). The Implementation Status Assessment (Judge, 2011) was conducted as a midway assessment of the PSSRP's initial 10-year goals. An independent consulting firm utilized both quantitative and qualitative methods to report on the "status and pace of implementation" of the PSSRP. The study focuses on all three areas of habitat, hatchery, and harvest strategies and makes a compelling case for both the successes and shortcomings within each of these areas. The report's outcomes are currently useful for gauging the successes and challenges for salmon recovery in the Puget Sound. However, this data analysis is concerned with the content as it relates to the Lead Entities' continued organizational development and how they are characterized as participants in the implementation of the PSSRP.

The Implementation Status Assessment (Judge, 2011) provides the following description of Lead Entities,

> Both the creation of the Recovery Plan and its implementation are proceeding through voluntary, locally-based efforts that are led by 14 [*sic*] lead entity organizations throughout Puget Sound. The lead entity organizations in each watershed [*sic*] resource inventory area ("WRIA" or "watershed") are the backbone infrastructure of Recovery Plan implementation in Puget Sound. They consist of a lead entity coordinator, who

> supports a policy leadership group that typically includes local elected officials and representatives from all major stakeholder groups, and a technical group that includes representatives from the various participants in the watershed with special expertise in the scientific fields needed for salmon recovery (e.g., fish biologists, ecologists, engineers, and GIS staff). Together, these groups and staff set the watershed's annual priorities and carry out a number of functions including: working with their partners to develop capital restoration projects and programs in support of the annual work program, screening and ranking projects for funding, coordinating in the regional effort led by the Puget Sound Partnership ("PSP") in implementing the Recovery Plan as well as the new Action Agenda for Puget Sound, collaborating with other Lead Entities in areas of mutual interest, maintaining the Habitat Work Schedule (a computer database of projects), and preparing updates to the 3-Year Work Program list and narrative for the PSP. (Judge, 2011, p. 4)

This description is indicative of the extent to which Lead Entities roles and basic functions were established by 2011. The description begins with a report that Lead Entity level strategies and recovery plans did in fact form a foundation for the development, and now the implementation, of the PSSRP. The assessment also indicates the CACs have taken on a "policy leadership" function. Compared to previous descriptions of the Lead Entities, this appears to be a slight shift in the committees function, or perhaps it is merely a more concise reference. Regardless, the previous descriptions present these groups as participating citizens who form a vital link between the community's needs and salmon recovery. In the Lead Entity Report (Triangle Associates Inc., 2002), the CAC were defined and perceived as the "… best judges of the community's social, cultural and economic values, as they apply to salmon recovery, and of how to increase

community support over time …" (p.11). These are in fact functions normally assigned to local elected officials; therefore, it appears this specific population of citizens have become integral to the structure and function of CACs.

The Implementation Status Assessment re-iterates the Lead Entity's function to implement "capital projects" (habitat projects) but also provides the first account of some of the functions Lead Entities are now widely recognized for, such as the Habitat Work Schedule, 3-year work plans and narratives (Judge, 2011). These are all required deliverables the Lead Entity is responsible for managing on an on-going basis. The Habitat Work Schedule is essentially an online database of the priority habitat projects identified for development in each Lead Entity's watershed(s), and the 3-year work plan and narratives provide updates on the Lead Entity's progress for implementing these habitat projects.

The findings of the Implementation Status Assessment generally report the PSSRP is not meeting its goals for habitat recovery (Judge, 2011). The report states that habitat is still declining, habitat protection needs to come in the form of regulatory protection, and efforts to address habitat are too heavily weighted towards capital projects (habitat projects). Furthermore, the assessment's conclusions state there is not enough funding available to implement the prioritized habitat projects, and Lead Entities lack the capacity and resources to fully implement their recovery plans (Judge). The current study is not focused on the success or failure of habitat restoration; however, there is data here to further inform evolution in the roles and functions of Lead Entities.

First, these statements speak to the fact that Lead Entities lack authority to manage salmon recovery in their watersheds. They are voluntary organizations and require landowner permission to implement habitat projects, regardless of the project's potential impact on listed

salmon populations. This not only pertains to landowners, but also to informing the development and implementation of local planning and development policies such as the Growth Management Act or Shoreline Management Plans. Lead Entities can inform but they lack authority to impose any directives.

Secondly, the report states that too much emphasis is placed on implementation of habitat (capital) projects, rather than non-capital programs such as: education and outreach, funding development, and scientific research. This indicates a disconnect with the initial purpose and roles Lead Entities were ascribed in the Salmon Recovery Act's mandates to engage the public, garner public support, and ground all habitat work in sound science (RCW 77.85). The Lead Entity Report (Triangle Associates Inc., 2002) placed significant emphasis on the ability and importance of Lead Entities to carry out these functions as well. Organizing community level support, creating scientifically sound local strategies, and developing inter-organizational networks were listed as vital roles that established and defined Lead Entities within the larger salmon recovery framework. In addition, the Implementation Status Assessment found Lead Entities have only 20% of the funding needed to implement the habitat projects in their 3-year work plans, and they lack the capacity and resources to implement their recovery plans (Judge, 2011). These findings have significant implication for the current roles Lead Entities fill in the salmon recovery framework, as well as repercussions for the organizations' purpose and functions.

These limiting factors are indicative of an organizational tension the current researcher observed while carrying out this study. Lead Entities appear to be largely known for and expected to manage the habitat project list, rather than serving a vital role in organizing communities and partnerships to form a foundation for the implementation of habitat projects.

This appears to be indicative of a disconnect between the deliverables expected of Lead Entities and the functions required to achieve those deliverables. Especially given that Lead Entities lack authority to implement habitat projects, these organizations are likely dependent on the relationships and partnerships required to garner support for their habitat projects and recovery strategies.

The LEC interviews and informal discussions with participants in the salmon recovery community indicate Lead Entities are pulled between the basic function of prioritizing habitat projects and having the capacity and resources to build the collaborative partnerships necessary to coordinate and implement projects. Furthermore, the lack of funding needed to implement habitat projects is common knowledge within the salmon recovery community. When considering all of this information together, it appears the roles and functions of Lead Entities are in flux and a solution is needed for Lead Entities and the PSSRP to move forward. That solution will likely include another opportunity for re-defining and organizing Lead Entities.

4.3 Lead Entities as Defined By LEC Observations

The LEC interviews provide yet another perspective on the roles and functions of Lead Entities. Two of the six LECs stated early on in their interviews that they wanted to make it clear the Lead Entity is the people who participate and make up the group. Both of these LECs were preparing to describe their organizational structures and the organizations that house the Lead Entity when they made the following statements:

> **LEC 1**: The Lead Entity organization are the folks who sit around, all the stakeholders who sit around the table. I don't work for the [housing organization]. They cut my paycheck, but I work for, I am staff for the group of folks in there. I take my direction from them on how to move forward. We work collaboratively… I am not without a say

as to how that goes, but the [housing organization] does not direct the work that is taking place on the ground. They are just the mechanism by which money flows. They just administer the grant.

LEC 2: First off, to me, the Lead Entity is all of our participants that participate in the Lead Entity. So even though I'm housed in [*sic:* the housing organization's name], they are only one of the stakeholders.

These two LECs indicate the importance of local participants on the committees. The LECs were very clear the organizations that house the Lead Entity are not who or what defines the Lead Entity. Rather, the Lead Entity *is* the local group of technical experts and citizens who work collaboratively to implement the "work that is taking place on the ground".

One LEC reported the traditional definition of Lead Entities as facilitators of the process to develop and implement habitat project lists, but juxtaposed this primary function to other capacities the Lead Entity serves. The LEC was relating the nuances of being an advocate for salmon recovery while remaining sensitive to the interests of members of their CAC. The LEC stated,

The Lead Entity role is interesting, in that you are really just, all you do is facilitate committees. Committees make the decisions. 'What are the strategies? What are the Recovery Plans? What are 3-year work plans [*sic*]? What are the priorities? Okay, what are the criteria? How are we gonna run a process? Okay, I think those projects tell the SRFBD what you want funded.' That's what a Lead Entity does. Now that's kind of straight forward, but then you have rules outside of that. Often we are asked to be the advocates for salmon recovery and we can be out advocating for it and then find out we are advocating for something one of our member governments does not like and we have

> to pull back quickly in certain situations…. So, we don't advocate per se, except within defined mandates.

This LEC's statements indicate there are the "straight forward" functions of Lead Entities, in which they develop and implement processes to carry out those basic functions. However, the LEC indicates there are nuances to balancing the interests of salmon recovery with the interests of participants from local communities. This is not a topic addressed in the primary source documents, which express examples of positive outcomes that arise from incorporating local communities into habitat recovery efforts. Rather, this LEC indicates the Lead Entity is sometimes limited in the roles they can play in advocating for salmon recovery, in order to remain sensitive to the interests of Lead Entity participants. This LEC's report provides a glimpse into the challenges of managing these inter-organizational relationships.

Another LEC talked about the merit of utilizing education and outreach to achieve more in salmon recovery than is possible when just focusing on implementing habitat projects. The LEC made the following statements,

> … the Legislature said you have to have a Citizen's Committee. You can build the sound science, but in the end, the citizens have to support it and we are not going to get out of salmon extinctions by a purely technical, go out and fix the problem, with these projects [approach]. We are going to get to salmon recovery by bringing people along and changing their behaviors. The projects are part of that, but they are not all of it by any means… We [this particular Lead Entity] have the capability … to support education and outreach that would improve the ability to implement more projects. And, so that is where we can focus and take responsibility and try to emphasize and put more funding into that, recognizing that that will help us do more, bigger, better, faster things later.

> So, we need to talk to people. We need to work with people. We need to have cups of coffee out on sites, and go visit the neighbor, and all of those things, and go to the Oyster Fest and talk about salmon recovery projects, etc. That is all very important… It comes down to millions of people, doing hundreds of activities a day … and some of them could be done more environmentally correctly…. This is a democracy. People vote and elections matter. They choose people who will lead us, and the idea is to inform people so that they can make informed decisions and hopefully support the salmon recovery cause. Not just for the sake of salmon, but for the sake of people too. So, that is a big part of it, and it is hard, we are not really cracking that nut with salmon recovery Lead Entities processes because we are really kind of about the projects, but there is bleed over into the more general education and outreach efforts, and just, you know, interacting with people.

The final LEC is speaking directly to the need for more interaction with communities to achieve salmon habitat recovery, at a local scale, and salmon recovery in general, on a statewide scale. The LEC explicitly acknowledges restoration and science-based approaches are part of the solution for salmon recovery but will not achieve this mission on their own because it is ultimately human communities who continue to impact salmon populations. To this end, the LEC talks about behavior change and performing outreach to inform and garner support from local communities. The LEC states the CAC is one mandated avenue to reach communities, but the LEC makes it clear more outreach and interaction is needed to inform and create meaningful impacts on the behaviors of citizens all around the Puget Sound. The LEC implies Lead Entities are not the organizations to carry out this regional mission but does seem to make a case for Lead Entities engaging and building relationships within local communities.

4.4 Conclusion

This data analysis concludes the basic purpose of Lead Entities is to develop and implement a prioritized habitat project list that meets the needs of both salmon and human communities within their watershed(s). This purpose was set down into law when Lead Entities were established by the Salmon Recovery Act (HB 2496). This legislation defined the basic organizational structure and provided minimal directives for the functions Lead Entities would need to develop to achieve their purpose.

Implicit in this legislation was the role Lead Entities would fill in building salmon recovery plans and frameworks from the bottom-up. They were tasked with developing committees capable of assessing, developing, and implementing strategies and recovery plans that engage technical expertise and citizens at the local level. With the aid of a LEC to facilitate the Lead Entity, this is their basic organizational structure. Every Lead Entity has a LEC, TAG, and CAC. However, this oversimplifies the organizational structures of Lead Entities. As Lead Entities developed these committees and began engaging in processes to carry out their purpose, they naturally began to express variation in response to differences among the salmon recovery needs and the citizens and communities they operate within. Further investigation into this variation among Lead Entities occurs in the subsequent chapters of this data analysis.

Once established, the data indicates Lead Entities engaged in a process of self-organizing and self-defining their purpose and role in the larger salmon recovery framework. Lead Entities established themselves within the local biological and social communities as organizations that link and build bridges between science and policy, communities and salmon, and the local watersheds to the regional and state level recovery frameworks. Lead Entities preceded the regional and statewide recovery plans and many of the organizations that work at these levels;

therefore, the local frameworks developed by Lead Entities form the building blocks on which salmon recovery in Washington is built.

The data indicates this process of establishment, self-organizing, community-organizing, developing recovery strategies and then recovery plans, and then plugging into a statewide recovery network is characterized by a continuous organizational evolution. The following is an account of an informal discussion with a representative of the GSRO that speaks to this organizational evolution. The source observed that all organizations participating in salmon recovery were becoming more "sophisticated" in the process of implementing the PSSRP. When asked to elaborate, the source defined sophistication as the iterative process of building on experience and knowledge that can be used to inform future actions.

The researcher went to this source early on in the study and explained the research's initial mission to create a concrete description of the salmon recovery framework, clearly define the organizational relationships, and place Lead Entities within that framework. The source stated this was similar to trying to answer the question, "Who were you when you were 16? What was your relationship to the world?" When asked to clarify, the source shared that [paraphrased], as with the human experience, salmon recovery in Washington has been an adaptive learning process. It has been a process of evolution, and the answer to how these organizations are defined, what their purpose is, what they are tasked with, and how they collaborate with communities and organizations at varying scales, depends on the history and present needs of salmon recovery.

Lead Entities are continuing to evolve in response to their local communities, local salmon recovery needs, and the larger salmon recovery framework. All of these pieces are moving cogs and wheels in one coordinated effort to recover and sustainably manage Pacific

salmon species. The Implementation Status Assessment (2011) provided a brief indication of the challenge Lead Entities are currently faced with. If their past is any indication of the future, Lead Entities will likely evolve and re-define themselves once again within the larger salmon recovery framework

Chapter 5: Lead Entity Descriptions

The purpose of this chapter is to shift the study's focus from developing an understanding of the niche Lead Entities occupy within the broader salmon recovery framework to a descriptive analysis of the seven Lead Entities represented in this study. This approach grounds the study in the geographic and structural parameters of the participating Lead Entities and continues to familiarize the reader with the role locality plays in each Lead Entity's organizational evolution.

The outline of the chapter is organized by individual descriptions of the seven Lead Entities represented in this study, and each description provides an account of the local geography, primary land uses, limiting factors for salmon habitat recovery, and a breakdown of the Lead Entity's organizational structure. This creates context for the physical and social landscapes each Lead Entity operates within.

The description of each Lead Entity's organizational structure focuses on reporting where the Lead Entity is housed, pertinent information about the LEC, and the structure and function of each Lead Entity's TAG and CAC committees. The organizations housing Lead Entities become a larger topic of discussion in this chapter. As part of the pre-existing social landscape Lead Entities are established and evolve within, these organizations shape the way Lead Entities are structured and function. The chapter concludes with an analysis of the variation and similarities revealed among the Lead Entity descriptions and observations of connections between Lead Entities' organizational structures and the physical and social landscape.

5.1 Hood Canal Coordinating Council Lead Entity (Hood Canal)

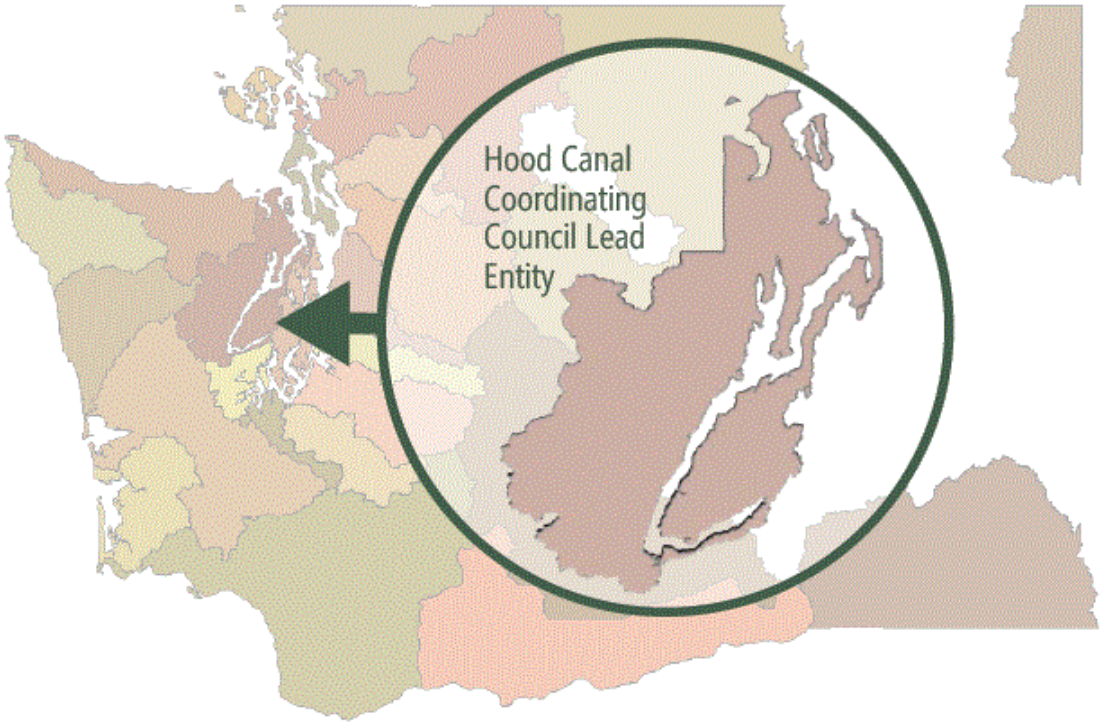

Photo Courtesy of RCO

5.11 Geography & Land Use

"Hood Canal" covers 940,000 acres (RCO, 2013) spanning from the Eastern Strait of Juan de Fuca in the north to the Olympic Mountains in the west and extending south to the Puget Sound lowlands. The boundaries encompass all or portions of WRIAs 14, 15, 16, 17 (RCO), as well as all of Jefferson County and portions of Mason and Kitsap Counties. Hood Canal itself is an ancient glacial fjord that served as a drainage route when glaciers last receded from the Puget Sound region approximately 15,000 years ago. The result is a canal, 62 miles in length, with a total of 358 miles of shoreline, or 25% of the shoreline in Puget Sound proper (Shared Strategy, 2007). There are 5 major rivers in the Hood Canal watershed, which all have their headwaters protected in the Olympic National Park. These rivers are the Dosewallips, Duckabush, Hamma Hamma, Skokomish, and Big Quilcene.

Even though the population within this large area is approximately 70,000 (RCO, 2013), the land ownership and resulting land use is quite varied. Forty-eight percent of the land within the watershed is federally owned and includes portions of Olympic National Park and Olympic National Forest, 39% is privately owned, 12% is state and local, and 1% is Tribal trust land (Shared Strategy, 2007). This translates to a variation of land uses, some of which are, or historically have been intensive. Land uses include forestry, agriculture, aquaculture, urban development, rural residential development, light industry, and recreation (Shared Strategy).

5.12 Limiting Factors

For the purposes of recovery planning, two populations of Chinook salmon were identified in the Hood Canal: the Mid-Hood Canal Rivers Chinook and the Skokomish River Chinook (Shared Strategy, 2007). The LEC interview reported the Skokomish Chinook recovery plan was submitted for formal approval in 2012. The Mid-Hood Canal recovery plan was written and approved by NOAA in 2005. Therefore, the current summary of limiting factors for habitat recovery work is informed by the Mid-Hood Canal Chinook Recovery Plan.

The Mid-Hood Canal Rivers Chinook population is comprised of Chinook sub-populations located in the Dosewallips, Duckabush, and Hamma Hamma watersheds (Shared Strategy, 2007). Limiting factors for habitat include: (1) loss and degradation of estuarine and nearshore habitat; (2) loss of channel complexity; (3) loss of large woody debris (LWD); (4) lack of LWD recruitment. In the upper reaches of the rivers, logging roads have exacerbated unnatural sediment loads downstream. In the lower reaches, floodplain modification, diking, and channelization have impaired spawning and rearing habitats. Climate change and dissolved oxygen levels were identified as future threats to salmon habitat (Shared Strategy, 2007). The PSSRP also listed issues associated with harvest and hatchery as limiting factors. Concerns

regarding harvest management were stated as over-fishing that peaked in the Hood Canal area in the 1980s and continued beyond this area into the 1990s. The PSSRP also stated there are concerns about the potential negative impacts of hatchery juvenile Chinooks released in Mid Hood Canal streams up until 1991 (Shared Strategy).

5.13 Organizational Structure

Hood Canal is an example of a Lead Entity established within a pre-existing organization, and this organization is the Hood Canal Coordinating Council (HCCC). This type of organizational structure has several implications for the functioning of the Lead Entity. One pertinent effect is that the Lead Entity is one program, or stakeholder group, managed by an organization with a broader mission and practice, rather than being an independent organization with a singular mission. The HCCC at large was created in 1985 to respond to the local communities' concerns about water quality and natural resource related issues in the Hood Canal watershed. To address these concerns, an Interlocal Cooperation Agreement (ILCA, 2011) was created to formally establish the authority and purpose of the HCCC, which continues to work with partners and communities to "implement regionally and locally appropriate actions to protect and enhance Hood Canal's environmental and economic health" (ILCA, p.2).

The HCCC "operates under a variety of authorities, [such as] a Public Benefit Corporation, a 501(c)3 Non-profit Corporation, the "Management Board" for aquatic rehabilitation, the "Lead Entity" for Chinook Salmon Recovery, the "Inter-WRIA Coordinator" for watershed planning, and the "Local Integrating Organization" for Hood Canal**" (**HCCC, n.d.). The HCCC also serves as the Regional Recovery Organization for Chum salmon, much the same as the Puget Sound Partnership is the Regional Recovery Organization for Chinook salmon in the Puget Sound.

The HCCC is designated as both a Council of Governments and a 501(c)(3) non-profit organization (ILCA, 2011). However, LEC data interview suggests the non-profit status was sought and achieved mostly for reasons relating to financial operations. Five local governments, two tribal and three counties, and the local Land Use Authority constitute the HCCC's Board of Directors. The tribes (Skokomish and Port Gamble S'Klallam) have one representative each. The county governments (Jefferson, Kitsap, and Mason) are represented by their County Commissioners. Each county has three County Commissioners, and, while they are all invited to participate in the Board of Director meetings, each government only gets one vote. This results in a Board of Directors with up to 11 attending board members, but there are only five votes.

The LEC's title is "Director for Habitat Programs", which includes but is not limited to coordinating the Lead Entity. The LEC has been employed by the HCCC since 2001 and has been the LEC since 2003. Hood Canal has developed a Habitat Project List Committee (HPLC), a Technical Advisory Group (TAG), and a Lead Entity Joint Committee (LEJC).

The HPLC serves as the mandated CAC and is made up of two citizens from each of the Lead Entity's four geographical areas (WRIAs 14, 15, 16, and 17), as well as one representative from each past and present project sponsor (HCCC, 2013). The LEC interview reported the TAG is comprised of professionals with expertise in fields such as planning, hydrology, biology, and ecology. Lead Entity staff with applicable expertise are also permitted to participate on the TAG. See Appendix A for a comprehensive list of each Lead Entity's TAG and CAC members.

The TAG & HPLC are collectively known as the LEJC. The LEC interview reported this group was developed "to improve communication and information sharing across technical and socio-economic factors". Hood Canal's 2013 Salmon Recovery Grant Process Guide states the LEJC is specifically tasked with annually reviewing and updating the Lead Entity's process and

planning documents (i.e., the process guide, salmon recovery plan, and 3-year work plan). This implies the Lead Entity committee members are collectively reviewing the policies and procedures embedded in these documents, such as the conflict of interest policy, ground rules for Lead Entity participants, scoring and ranking criteria, and local salmon recovery strategies. The researcher asserts there are potential benefits to creating a committee composed of both the TAG and HPLC, or CAC, members. When committee members make decisions regarding group processes together, this likely contributes to fostering commitment to collective outcomes and decreases opportunity for conflict. Simply assigning a common name to a group of participants working towards a common goal could benefit group cohesion and commitment to those common goals.

5.2 Nisqually River Salmon Recovery Lead Entity (Nisqually)

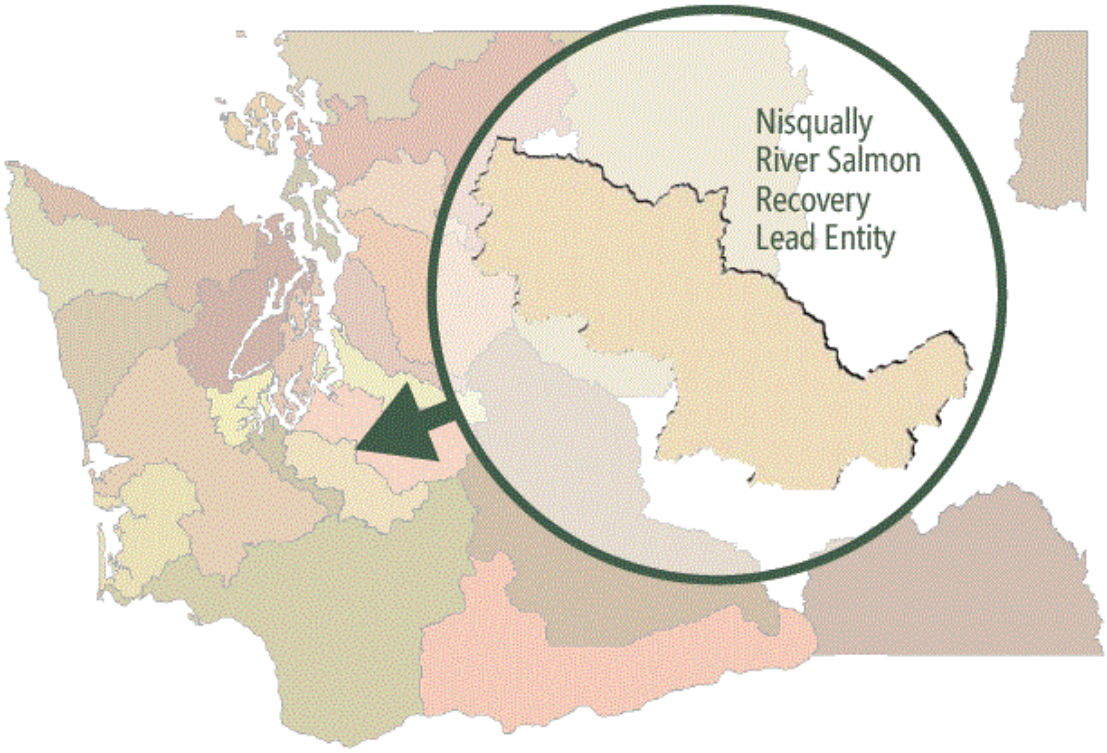

Photo Courtesy of RCO

5.21 Geography & Land Use

"Nisqually" covers 491, 258 acres spanning from the headwaters of the Nisqually River in the Cascade Mountains to its estuary in the South Puget Sound. The boundaries encompass all of WRIA 11, and portions of Thurston, Pierce, and Lewis counties (RCO, 2013). The Nisqually River watershed is the major defining feature of this Lead Entity's boundaries, and it is the only river in the Puget Sound whose headwaters and estuary are both protected by federal land designations.

The population in the Lead Entity's boundaries is approximately 89,000 people, and Yelm is the largest city. Forestry and recreation account for 96% of the land use in the watershed, and the remaining 4% is characterized by urban and agricultural use (RCO, 2013). However, these statistics simplify the various interests and values held by a diverse group of

stakeholders participating in Chinook salmon recovery efforts. The PSSRP acknowledges there are representatives from "rural communities, national and state parks and forests, public and private timberlands, municipal hydropower dams and reservoirs, farmlands, the Nisqually Indian Reservation, Fort Lewis Military Reservation, and the Nisqually National Wildlife Refuge" (Shared Strategy, 2007, p. 284).

5.22 Limiting Factors

The upper portion of the Nisqually River watershed is protected within the boundaries of Mt. Rainier National Park and the lower portions of the river are characterized as "some of the best remaining salmon habitat in the [Puget Sound] region" (Shared Strategy, 2007, p. 284). Even so, the PSSRP (Shared Strategy) identifies several physical obstructions and population growth as limiting factors for Chinook salmon populations in the Nisqually watershed. The limiting factors include: (1) the restriction of the main channel's migration and estuary due to the placement of the I-5 bridge and surrounding fill; (2) Centralia Dam; (3) conversion of land use to urban and rural residential development, due to population growth; (4) shoreline hardening created by shoreline development.

5.23 Organizational Structure

Nisqually's LEC is employed full-time and had been in this position for 10 months at the time of the interview. The Lead Entity has developed a Habitat Work Group (HWG) that serves as the TAG, and the CAC is housed in a pre-existing organization, the Nisqually River Council (NRC). The Nisqually Lead Entity is housed within the Nisqually Tribe's Department of Natural Resources and has been since it was established. The Nisqually tribe has been involved in the process of developing and implementing a watershed-based management approach to restoring, conserving, and protecting natural resources throughout the Nisqually watershed since the 1980s.

Therefore, the Nisqually Lead Entity is organized within a larger watershed-based management framework. Both Hood Canal and WRIA 9, presented below, are operating within watershed-based management frameworks. However, WRIA 9 and Hood Canal were established *within* the organizations actually facilitating the partnerships and management approaches, WRIA 9 Forum and HCCC respectively, and the Lead Entity staff have other programs and functions outside of the Lead Entity. The main entity organizing and facilitating a watershed-based management plan in the Nisqually River basin is the NRC. In addition, Lead Entity staff in WRIA 9 and Hood Canal work in other capacities, managing programs and functions outside of the Lead Entity, whereas Nisqually's staff are tasked solely with managing the Lead Entity.

The NRC is "a non-regulatory coordination, advocacy, and education organization … [that] seeks to integrate the history, culture, environment, and economy of the watershed into [a] healthy and sustainable future" (NRC, n.d.). The LEC interview reports that the NRC has been working for over three decades to bring together stakeholders, from entities across the watershed, to develop and implement a plan capable of balancing human and ecosystem needs in the Nisqually watershed. The organization updated the Nisqually River Management Plan in 2003 to create the Nisqually Watershed Management Plan, which is a community-based plan that depends on the combined efforts of 24 partnering organizations and local citizens, to carry out a holistic approach to sustaining resources and humans in the Nisqually watershed. The group's activities earned them the honor of the Department of Interior in 2005, when the agency deemed this organization's management plan as a "blueprint for cooperative conservation projects" (NRC, 2005, p.1).

Nisqually's TAG is referred to as the Nisqually Habitat Workgroup (HWG). Primary source documents and interview data indicate the HWG does not exhibit unique roles or

structural permutations to report in this description. See Appendix A for a comprehensive list of each Lead Entity's TAG and CAC members.

5.3 North Olympic Peninsula Lead Entity for Salmon (NOPLE)

Photo Courtesy of RCO

5.31 Geography & Land Use

"NOPLE" covers 460,000 acres of the northern Olympic Peninsula, from Sequim Bay to Cape Flattery. This area encompasses all or portions of WRIAs 17, 18, and 19; Clallam and Jefferson counties; and the Elwha and Dungeness Rivers' watersheds (RCO, 2013). Both the Elwha and Dungeness Rivers are within WRIA 18. WRIAs 17 and 19 also encompass several watersheds, such as the Quilcene River and Hoko River; however, these watersheds are not addressed in the PSSRP (Shared Strategy, 2007).

The Elwha River is a glacial fed river that flows 45 miles from its headwaters in the Olympic National Park to its delta in the Strait of Juan de Fuca (Shared Strategy, 2007). The Elwha supports stocks of all 5 native Pacific salmon species and historically supported runs of Chinook considered by many to be the largest in the Puget Sound, with reports of Chinook salmon weighing more than 100 pounds (Shared Strategy). However, the Elwha and Glines

Canyon dams have cut off 95% of the watershed's salmon habitat since their construction in the early 20th century (Shared Strategy). Removal of both dams began in September 2011. At the time of this study (2013), the Elwha Dam was completely displaced and 170 feet of the 210 foot tall Glines Canyon Dam had been removed. Removal and restoration efforts within the watershed are ongoing processes and creating historical opportunities to pioneer new fields of research in salmon recovery, ecological restoration, and the developing field of hydroelectric dam removal. Land use in the Elwha watershed is primarily National Park and rural residential. The largest town in this watershed is Port Angeles, whose population in 2012 was approximately 19,000 (Shared Strategy).

The Dungeness River flows 28 miles from its headwaters in the Olympic National Park to its delta in the Dungeness Bay and the Strait of Juan de Fuca. The river's upper stretch is made up of steep mountains and the lower 10 miles traverse the broad Sequim-Dungeness Valley. Glacial dams melting approximately 14,000 years ago created large alluvial fans of sediment that spread across this valley and currently provide a productive substrate for agriculture (Shared Strategy, 2007). However, the Dungeness River watershed lies within the rain shadow of the Olympic Mountains and only receives a fraction of the rain amounts common to rivers on the Olympic Peninsula. As a result, 70-80% of the agricultural land in the valley is irrigated from the Dungeness River and water resources become strained in the summer. The lack of available water resources is further exacerbated because this glacial-fed river's peak flows occur in spring-early summer (Shared Strategy). This creates practical challenges for managing the needs of both the agricultural community and the spawning cycle for salmon, considering both depend on this resource most when water levels are most depleted. Land uses other than agriculture in the

Dungeness watershed include private and public timberland and rapidly increasing residential development (Shared Strategy).

A smaller population of approximately 59,000 people and the large area of land protected within National Park boundaries creates a greatly simplified perspective of the land use, and resulting stakeholder interests, across the vast geographic area covered in NOPLE's boundaries.

5.32 Limiting Factors

The PSSRP (Shared Strategy, 2007) does not explicitly list limiting factors for the Elwha and Dungeness River watersheds. However, the obstacles created by the hydroelectric dams in the Elwha watershed, and the competition for water resources in the Sequim-Dungeness valley are referenced at length in the PSSRP as major limitations. It is noted the dams not only cut off fish passage to habitat but have also starved the Elwha system of nutrients and sediment required to support salmon populations. In addition, the PSSRP references the presence of hatchery-origin Chinook in the Elwha River as a threat to native stocks. The PSSRP does not indicate additional challenges for habitat recovery, in the wake of dam removal, as these events had not occurred when the PSSRP was written. In the Dungeness River watershed, the PSSRP attributes the decline of Chinook in the Dungeness to intensive land use. The PSSRP cites specific causes of habitat decline in Dungeness River, such as pervasive commercial logging in the upper watershed, and the installation of dikes and levees and channelization of the river in the lower watershed (Shared Strategy).

5.33 Organizational Structure

The Lead Entity is housed in Clallam County's Department of Community Development. The LEC is employed full-time solely in this capacity and has been in this position for seven years. NOPLE has developed a Lead Entity Group (LEG) and a Technical Review Group

(TRG), which respectively serve as the CAC and TAG. The LEG is made up of representatives from six Initiating Governments and three local citizens. The local governments include two cities (Sequim and Port Angeles), one county (Clallam), and three tribes (Jamestown S'Klallam, Elwha S'Klallam, and Makah). Neither the LEC interview nor primary source documents indicate the positions these representatives hold within their respective governments. The 2011 Salmon Recovery Strategy states the LEG "is a policy group composed of government staff appointees" (NOPLE, p. 12). Interview data indicates the citizens are appointed from each of the Lead Entity's regions (East, Central, and West) in an effort to be sensitive to equal representation across this vast geographical area.

Primary source documents and interview data indicate the TRG, or TAG, does not exhibit unique roles or structural permutations to report in this description. See Appendix A for a comprehensive list of each Lead Entity's TAG and CAC members.

There are also three citizens' groups within NOPLE's boundaries. One represents citizens in WRIA 19 (Watershed Planning Group) and the other two represent citizens in WRIA 18 (Dungeness River Management Team and Elwha Morse Management Team). These groups are assigned a formal role in the organizational structure in the 2011 Salmon Recovery Strategy (NOPLE, 2011), but interview data suggests these organizations currently interact more informally with the Lead Entity. The Salmon Recovery Strategy document (NOPLE) states theses citizens' groups historically scored and ranked projects and passed their recommendations on to the LEG for consideration in the final habitat project ranking process. However, the interview data reported one of these groups was currently inactive, but the other two citizens' groups were still encouraged to provide input on the project ranking list.

5.4 San Juan County Community Development Lead Entity (San Juans)

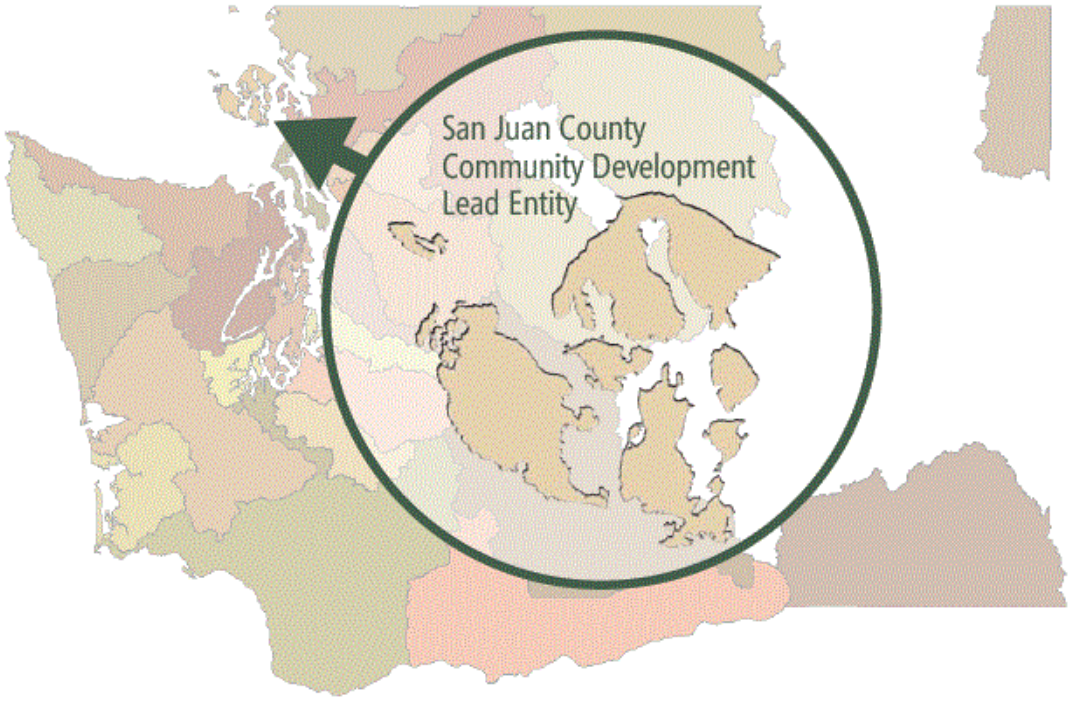

Photo Courtesy of RCO

5.41 Geography and Land Use

The "San Juans" is geographically defined by a county and a watershed that cover 175 square miles at the junction of the Strait of Juan de Fuca, Strait of Georgia, and the Puget Sound. This convergence yields waters rich in nutrients and abundant with sea life. The land mass that makes up the San Juans Lead Entity is an archipelago of four major islands (San Juan, Orcas, Lopez, and Shaw) and over 170 smaller islands (Shared Strategy, 2007).

There are no major rivers in the watershed, but there are over 400 miles of shoreline. San Juan County is the smallest county in the Puget Sound but contains more miles of shoreline than any other county in the United States (Shared Strategy, 2007). All 22 populations of Puget Sound Chinook salmon, as well as Sockeye, Pink, Chum, Coho salmon, Steelhead Trout, and Coastal Cutthroat Trout have been observed utilizing the San Juan's nearshore habitat in transit

to and from the ocean. However, none of the freshwater streams support salmon spawning (WRIA 2, 2013).

Despite an 80% population growth in the last 20 years, there are still just over 14,000 inhabitants on the San Juan Islands (Shared Strategy, 2007). The land use is predominantly residential development, with the vast majority of humans living and recreating in the shoreline and nearshore areas (Shared Strategy). This heavily utilized shoreline is integrally connected, via natural processes, to the nearshore that supplies habitat and resources for migrating salmon, and this dual reliance on the same geographic area creates an obvious challenge for natural resource management and salmon recovery efforts.

5.42 Limiting Factors

The PSSRP (Shared Strategy, 2007) does not list limiting factors for this Lead Entity's area. However, it does state the primary concern for future salmon habitat viability is land and shoreline development expected to accompany continued population growth on the islands.

5.43 Organizational Structure

The Lead Entity was housed in the San Juan Conservation District the first five years of its existence but has been situated in San Juan County's Community Development and Planning Department for the last eight years. The LEC has been employed in this position for eight years. Interview data indicates the LEC was required to start working part-time in 2012, due to lack of available funding. San Juans has developed a TAG and a Citizen's Advisory Group (CAG), which serves as the CAC.

The San Juan's CAG is made up of members from the local Marine Resources Committee (MRC). There are seven MRCs in the Puget Sound region and they receive federal funding, as well as coordinating resources from the Northwest Straits Commission (San Juan

County MRC, 2010). These organizations are citizen-based with representatives from the local governments, as well as "scientific, economic, recreational, and conservation communities" (Northwest Straits Initiative, 2011). The San Juan MRC serves several functions in their efforts to restore and protect marine habitat and resources in and around the San Juan Islands. They link science and policy by performing and funding research, as well as serving as an advisory body to local, state, and federal governments. They develop plans for marine habitat recovery, such as the San Juan County Marine Area Stewardship Plan, and conduct outreach and education programming within local communities. And, as San Juan's CAC, they prioritize funding for salmon recovery (San Juan County MRC). Due to the type of local representatives working with the MRC, San Juan's CAG membership is heavily weighted towards citizens and local business owners, compared to other Lead Entities.

The interview data indicates the TAG membership has a higher concentration of professors and retired natural scientists. The interviewer stated this pattern could be due to the population demographics of the San Juan Islands, and the LEC agreed this was a good possibility. The LEC went on to share an observation that citizens of the San Juan Islands tend to be more engaged in local recovery efforts and local government in general. See Appendix A for a comprehensive list of each Lead Entity's TAG and CAC members.

There is also a Salmon Core Group, made up of volunteers from both the CAG and the TAG. This group is referenced minimally in the primary source document and interview data but appears to serve the function of meeting annually to review, update, and finalize the grant cycle timeline and scoring criteria for habitat projects (WRIA 2, 2013).

5.5 Green, Duwamish, & Central Puget Sound Watershed Lead Entity (WRIA 9)

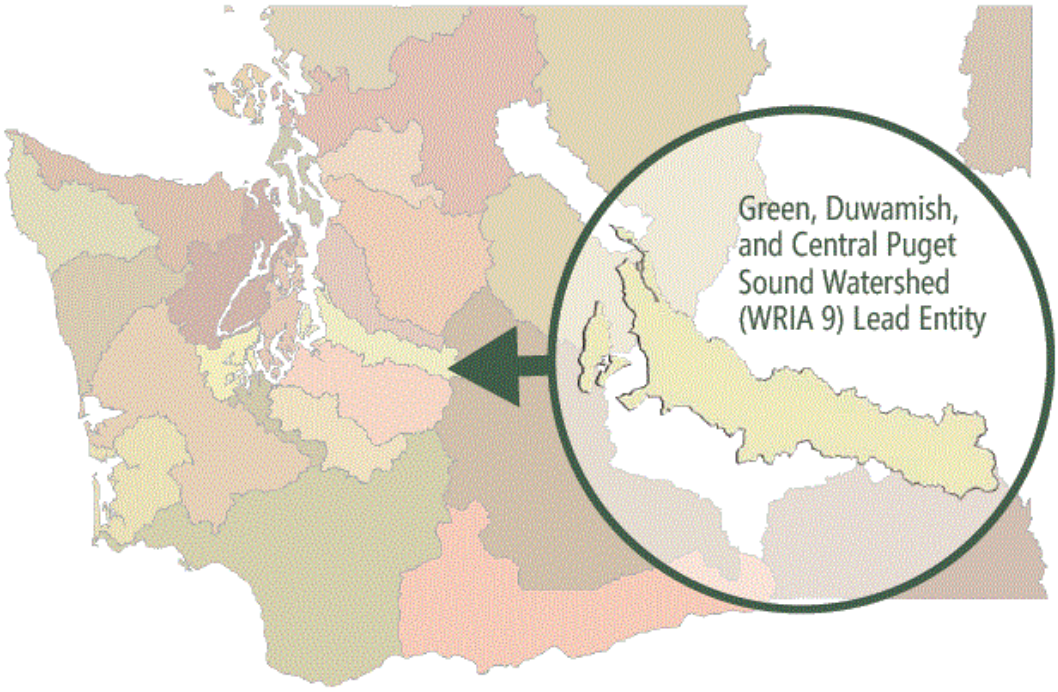

Photo Courtesy of RCO

5.51 Geography & Land Use

"WRIA 9" covers 368,000 acres spanning from the upper reaches of the Cascade Mountains in the east to Vashon and Maury Islands in the west. These boundaries encompass all of WRIA 9 and portions of WRIAs 8, 10, and 15 (WRIA 9, 2006). WRIA 9 is located entirely within King County and is home to approximately 694,000 people (RCO, 2013; WRIA 9 3-year work plan, 2013). The Green River is the main river within this Lead Entity's boundaries, and it flows 82 miles from its headwaters on the western slopes of the Cascade Mountains to become the Duwamish River at the historical convergence of the Green and Black rivers. From this point, the Duwamish River makes an 11-mile journey to its estuary in Elliott Bay (WRIA 9 3-year work plan).

The land use in the Green/Duwamish watershed changes with the landscape as the river makes its way from the Cascade Mountains to the Puget Sound. The upper 1/3 of the watershed

is marked by steep slopes and deep valleys and a large portion of this area is commercially logged. The Howard Hansen Dam was built northeast of Enumclaw in 1961 to provide flood control and serves as the water supply for the City of Tacoma. The Green River is then marked by broad valleys utilized for agricultural practices, until the river reaches the sprawling suburbs of metropolitan Seattle. As noted above, the Duwamish River runs the last 11 miles to the highly developed estuary, in which the river passes through an increasingly urbanized and industrialized landscape (Shared Strategy, 2007).

5.52 Limiting Factors

Green/Duwamish Chinook salmon populations persist in spite of pervasive habitat alteration and degradation, as well as historical mixing with hatchery origin fish (Shared Strategy, 2007). The watershed is "30% of the size it was a century ago, with about 1/3 of its historic habitat and about 30% of historic flows [and] a mere 2-3% of the historic estuarine mudflats, saltwater marshes and wetlands remain" (Shared Strategy, p. 252). The PSSRP groups the limiting factors under the categories of: (1) reduced water quality; (2) hydromodification; (3) loss of marine and nearshore habitat; (4) reduced sediment quality; (5) alteration of habitat forming processes; (6) riparian degradation; (7) non-native species. The limiting factors are extensive and insightful to the effects of urbanization on nearshore and freshwater habitats. More information can be found on pages 252 -253 of the PSSRP (Shared Strategy).

The PSSRP (Shared Strategy, 2007) also mentions future threats in the form of 1) lack of coordination between local tribes, state, and other habitat managers to ensure habitat work is synergistic with hatchery and harvest management, and 2) increased urbanized growth in a watershed already bearing 10% of the Washington State's population. This concern is coupled

with high population growth projections in the Middle Green River, which contains pertinent, functioning habitat but has limited restoration options.

5.53 Organizational Structure

WRIA 9 is another example of a Lead Entity established within a pre-existing organizational structure. The LEC interview provides the following account of the history of this organizational framework. In the mid-1990s, King County government spearheaded an initiative to address water resources management across the jurisdictional boundaries of local governments within King County. The program was set up with a 3-year startup phase and at the end of that time the consortium formalized a collaborative watershed-based management program. Through an Interlocal Agreement (WRIA 9, 2006), the WRIA 9 Forum (Forum) was officially created. The Forum is made up of 17 governments in King and Pierce Counties. Each government provides a cost-share and available technical guidance for "addressing long-term watershed planning and conservation of the aquatic ecosystems" within WRIA 9 (WRIA 9, p. 1).

As a leader in this partnership, King County Department of Natural Resources (King County DNR) was chosen to be the service provider for the initiatives developed by the newly organized Forum. From this position, King County DNR is responsible for providing staff to carry out the Forum's scope of work and maintaining the Watershed Ecosystem Forum (WEF). The WEF functions include serving as an advisory body to the Forum, monitoring implementation of the WRIA 9 Salmon Habitat Plan, and functioning as the CAC for the WRIA 9 Lead Entity (MOU, 2008, p. 1).

The Lead Entity is housed in King County DNR. The LEC's title is "Green/Duwamish Watershed Coordinator", and the LEC has held this position since the Lead Entity was formed in 1999. The LEC is employed full-time and is one of three full-time and one part-time staff

members who make up the Salmon Habitat Recovery Team. This team works on salmon habitat recovery and water quality improvement throughout the watershed via capacity garnered by several authorizing mandates, partnerships, and funding sources. Again, the Lead Entity is only one of several programs providing funding and tasks for these staff members.

As stated before, the CAC is known as the WEF and is made up of representatives from 17 local governments, as well as local businesses, environmental groups, non-profit organizations, and various state and federal agencies. The primary source and interview data indicate each local government sends one representative and holds one vote, as it pertains to Lead Entity related processes. There are sub-committees within the WEF, but relating their role and function is outside the scope of this research. Interview data indicates the TAG does not meet throughout the year or seek to maintain the same members over multiple years. Instead, the TAG is queued annually for the sole purpose of prioritizing habitat projects for the Lead Entity grant funding cycle. See Appendix A for a comprehensive list of each Lead Entity's TAG and CAC members.

5.6 WRIA 13 Salmon Habitat Recovery Committee Lead Entity (WRIA 13)

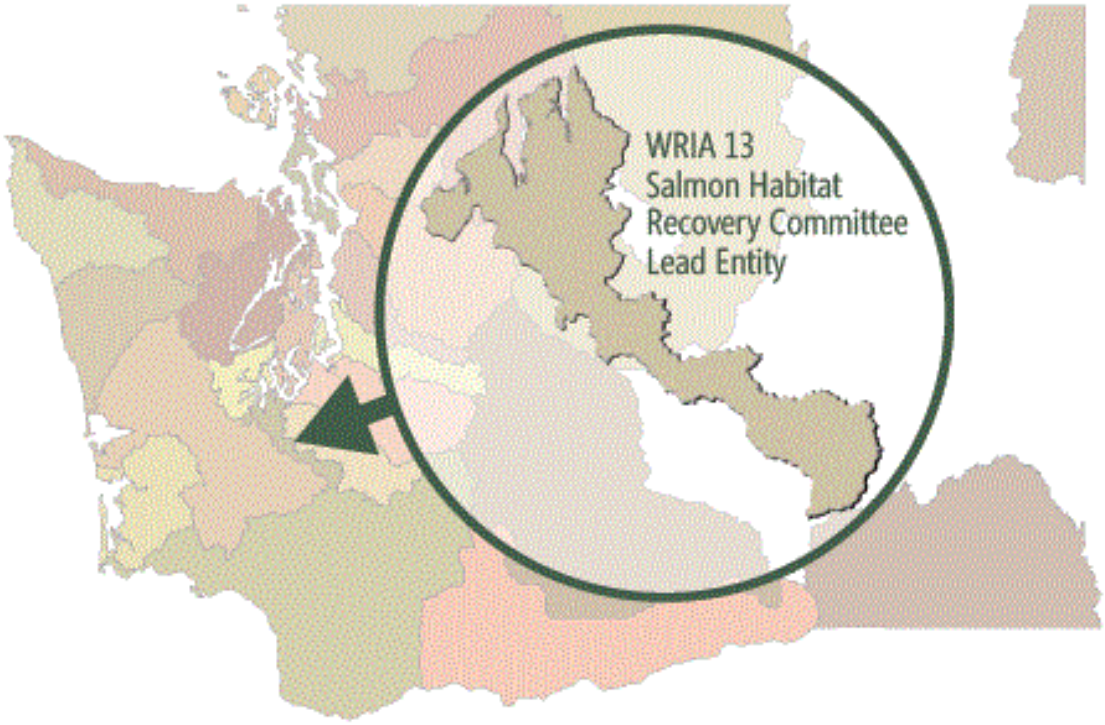

Photo Courtesy of RCO

5.61 Geography and Land Use

"WRIA 13" covers 186,912 acres of land in the Puget Lowlands region of South Puget Sound (RCO, 2013). Four of the seven Lead Entities represented in this research encompass regions wholly or partially made up of the physiographic landscape known as the Puget Lowlands. This landscape is characterized by the broad, low-lying glacial plains found between the Cascade Mountains to the East and the Olympic Mountains to the west. These glacial plains are noted for their numerous streams and heavy dissection by the South Puget Sound's many inlets. These hydrographic characteristics are markedly different from other watersheds in the Puget Sound basin and are indicative of smaller freshwater rivers and streams and the shallower, more extensive nearshore environments found in the South Puget Sound area.

WRIA 13 is almost entirely within the bounds of Thurston County and encompasses the Deschutes River watershed and other freshwater streams that drain into Henderson, Budd, and Eld Inlets (Shared Strategy, 2007). The Deschutes River is one of two major river systems in South Puget Sound, but it has not historically supported native runs of salmon due to a natural fish passage barrier created by Tumwater Falls. Washington Department of Fish and Wildlife (WDFW) have been stocking the Deschutes River with hatchery origin Chinook and Chum salmon since the 1950s. Interview data indicates that, due to this lack of ESA listed salmon populations in the WRIA 13, the Lead Entity receives the lowest allocation of habitat project implementation funding in the state.

Thurston County is also the third fastest growing county in Washington state and home to the capital city of Olympia (RCO, 2013). Therefore, the increase in population and demands of urban development are challenging forces shaping attempts to implement salmon habitat recovery. Other land uses within WRIA 13 include a varied matrix of private and state-owned timberlands, agriculture, and aquaculture (RCO).

5.62 Limiting Factors

WRIA 13 and WRIA 14 share a common chapter in the PSSRP (Shared Strategy, 2007) and; therefore, have the same listing of limiting factors. They are listed as follows: (1) nearshore erosion and interruption of sedimentation processes due to shoreline armoring and development; (2) loss of riparian vegetation; (3) loss of connectivity and productivity in wetlands and estuaries; (4) input of toxic compounds from industrial and agricultural development: (5) increased predation and competition from invasive species; (6) loss of nearshore habitat and habitat diversity due to shellfish cultivation; (7) loss of available habitat and water quality associated with population growth.

5.63 Organizational Structure

The Lead Entity is housed in Thurston Conservation District and has been since its establishment. The LEC has been in this position for approximately 10 years and works part-time in WRIA 13, as well as part-time in WRIA 14. The LEC's title is "Environmental Program Manager", which includes but is not limited to coordinating the Lead Entity.

WRIA 13 has developed a Habitat Recovery Work Group (HWG) that consists of the TAG and CAC combined. This group carries out their functions together, rather than separately. The LEC interview provides the following explanation for how the group meets the requirements to the separation of TAG and CAC member roles and responsibilities. Even though the TAG and CAC work collaboratively to score and rank their habitat project list, they also meet the mandated directive that states the CAC has final say on the habitat project list. The interview data indicates the LEC verbally designates these occasions and directly asks CAC members to individually express their thoughts, opinions, or cast their vote on a course of action. The HWG group does not exercise a formal process for assigning individuals to a particular committee. Rather, the LEC introduces new members to the history and goals of the Lead Entity. They are then permitted to participate in the HWG process before establishing, with the LEC, which committee they will formally represent. In essence, each member provides input for both technical and citizen committee criteria, but their personal expertise and interests are utilized to determine their required placement on either the TAG or CAC. See Appendix A for a comprehensive list of each Lead Entity's TAG and CAC members.

5.7 WRIA 14 Salmon Habitat Recovery Committee (WRIA 14)

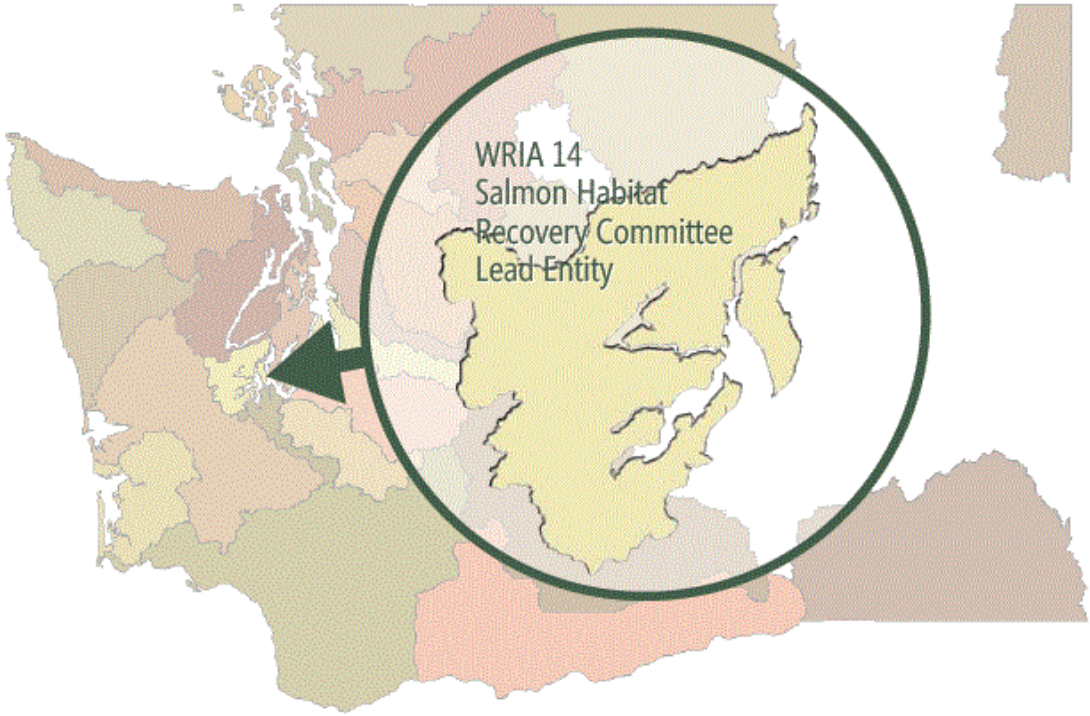

Photo Courtesy of RCO

5.71 Geography & Land Use

"WRIA 14" covers 244,146 acres of land and includes all the freshwater systems that flow into Eld, Totten, Oakland Bay, Hammersley Inlet, and Case Inlet (RCO, 2013). There are no major rivers in this watershed, and, like WRIA 13, much of this Lead Entity's area is characterized by the Puget Lowlands landscape.

The population in WRIA 14 is approximately 30,000 and the majority of the land use is rural residential, private and public logging, and aquaculture (RCO, 2013; Shared Strategy, 2007). In fact, two-thirds of the United States' annual manila clam harvest comes from Oakland Bay. "A stable economy, high quality of life, and low cost of living" are projected to usher in a major population expansion in the next 25 years (RCO, p. 47). In the meantime, WRIA 14 is poised for protection of an abundance of natural resources and intact habitat (RCO).

5.72 Limiting Factors

See WRIA 13 Limiting Factors.

5.73 Organizational Structure

WRIA 13 and WRIA 14 are more similar than different in their organizational structures. Both Lead Entities are housed in the local Conservation District. The former is housed in Thurston Conservation District and the latter in Mason Conservation District. They share the same LEC, who has held this position for 10 and 12 years, respectively. In both Lead Entities, the organization's functions are guided by a single Habitat Recovery Workgroup (HWG) made up of the CAC and TAG combined. However, the LEC indicates there is variation between these two Lead Entities by stating, "Their make-up [of committee members] is different. Their needs are different. The people are all different". See Appendix A for a comprehensive list of each Lead Entity's TAG and CAC members.

5.8 Conclusion

5.81 Geography & Land Use

The seven Lead Entities participating in this study are representative of three of the four geographic regions in the Puget Sound salmon recovery area (Central, South, and West). Three of the seven Lead Entities are based in the south Puget Sound region, which is characterized by terrestrial and hydrographic features associated with the Puget Sound lowlands. Two of the seven Lead Entities encompass watersheds in the central Puget Sound region. One of the central Puget Sound Lead Entities has a watershed characteristic of the variation in physical landscapes from the Cascade Mountains, through broad river valleys, and into the heavily developed and managed estuaries of central and southeastern Puget Sound. The second central Puget Sound Lead Entity is an archipelago situated at the convergence of three major waterways (Strait of

Juan de Fuca, Strait of Georgia, and the Puget Sound). The remaining two Lead Entities are situated on the Olympic Peninsula and encompass large areas representative of the physical landscapes found along the dramatic descent from the Olympic Mountains to both the Hood Canal and the Strait of Juan de Fuca.

The data indicates the Lead Entities in this study are representative of the physical landscapes, primary land uses, and associated limiting factors for salmon habitat recovery that are characteristic of the Puget Sound region as a whole. This establishes these 7 Lead Entities as representative of the larger group of 15 Lead Entities found within the Puget Sound region. The study acknowledges only one Lead Entity is representative of the Puget Sound's highly urbanized landscapes and; therefore, the study lacks the ability to analyze for variation or similarity among the structures or functions of Lead Entities that encompass highly urbanized areas.

The variation among physical landscapes, and their associated human uses and impacts, also speaks directly to the variation among participating Lead Entities. Referring to data presented in Chapter 4 ("Lead Entities Defined"), the Lead Entities are tasked with creating their TAGs, CACs, and habitat recovery strategies around the needs and interests of their local watersheds. The variation shown among geography, land use, and limiting factors are indicative of the variation in organizational structures, which are explored in the next section of the conclusion.

5.82 Organizational Structure

As mandated in the Salmon Recovery Planning Act (HB 2496), each Lead Entity has a committee structure that serves the purposes of a TAG and a CAC. The data indicates organizational structures among Lead Entities participating in this study vary significantly within this minimalistic guiding framework. Where Lead Entities are housed, the roles and functions of

their LECs, and the structures and functions of each Lead Entity's committees appear to differ according to the physical and social landscapes that organization was established and continues to evolve within. The following analysis explores this variation and highlights the connections between the Lead Entities structures and these local landscapes.

5.82a *Housing*

Five of the seven Lead Entities were established to operate as *independent* organizations who are housed under the umbrella of an existing organized entity. These umbrella organizations include two conservation districts, one county department of planning, one county department of community development and planning, and one tribe. While Lead Entities are physically housed within these umbrella organizations, the Lead Entity programs operate separately. The umbrella organizations are fiscal intermediaries who administer the state and federal grant monies provided to employ LECs and fund the administrative and programmatic functions of the Lead Entity. However, the LEC interviews indicate these umbrella organizations influence the Lead Entities directly and indirectly via their own stated goals and functions.

The LEC who works within the conservation districts stated their appreciation for being established within an organization that is non-regulatory. It is implicit the Lead Entity implements habitat projects that require working with private landowners, or on issues such as water quality or stream restoration. Efforts to work in such capacities can potentially benefit from lack of an immediate association with a regulatory agency. The LEC housed within the tribe stated their appreciation for opportunities to participate in culturally-driven activities, such as berry picking. Not only was this personally gratifying for the LEC, but they reported this experience led to discussions of opportunities to connect the implementation of habitat recovery

projects to existing areas and practices of berry cultivation. These two umbrella organizations share similar missions with the Lead Entities, such as conservation and perpetuation of natural and cultural resources. It is the researcher's impression from other LEC interviews that umbrella organizations focused on planning and development can have organizational goals that sometimes run counter to the Lead Entity's goals to protect and restore habitat. These examples indicate that even though Lead Entities are organizationally independent from the entity they are housed within, they are still mutually influenced by their proximity and/or organizational goals. However, unlike the Lead Entities described below, the Lead Entity remains a separate entity, solely responsible for and reliant on their own fiscal and human capacity.

Two of the seven Lead Entities were established to operate in conjunction with their umbrella organizations, and CACs for three of the seven Lead Entities are comprised of participants from an umbrella organization. In these situations, there appears to be even more organizational overlap. The two LECs operating within their umbrellas organization are actually employed by that organization, and the Lead Entity is not the only program the LEC manages. Furthermore, these two Lead Entities have additional staff who work for the umbrella organization as well.

These two Lead Entities and three CACs appear to mutually benefit from their organizational structure in that all of these umbrella organizations are implementing watershed-wide conservation and resource management initiatives in the Puget Sound. By virtue of the Lead Entity's mission to conserve and restore salmon habitat, both organizations likely provide leveraging resources such as shared funding, access to research or resources to conduct research, outreach and education programming, and/or extended partnership networks. This overlap with umbrella organizations also appears to create potential limitations and/or tensions for Lead

Entities. This is evidenced by two LECs' statements in the interviews that there were times they were not able to take a particular political or advocacy stance on an issue because they not only represent the Lead Entity, but they also represent the mission and interests of the organization that houses the Lead Entity.

The Salmon Recovery Act (HB 2496), the Lead Entity Report (Triangle Associates Inc., 2002), and the PSSRP (Shared Strategy, 2007) all indicated Lead Entities were to organize themselves to create opportunity for community interests and needs to drive local habitat recovery planning and implementation. Up to this point, that function has been referenced in terms of the onus put on the Lead Entity to incorporate these components into their CACs, habitat project lists, and local recovery plans. However, the umbrella organizations are also serving as an avenue to incorporate the needs and interests of local salmon and communities into the Lead Entities functions and identities. The relationship between the housing organizations and the Lead Entities are indicative of the broader inter-organizational synergy referenced in the Lead Entity Report (Triangle Associates, Inc.). To a large extent, these umbrella organizations are focused on bringing together local citizens, governments, technical experts, and other entities with local interests to work on initiatives that involve salmon recovery. It appears they are extending the Lead Entity's reach beyond their limited capacity and funding by incorporating them into watershed-based management plans and well-established partnership networks.

5.82b *LECs*

The LECs vary in their length of employment in these positions, with tenures ranging from 10 months to 15 years (x = 10.5 years). Five of the six LECs have been in their job position for over 5 years. Three of the six LECs work solely as an LEC and three of the six LECs manage other programs in addition to the Lead Entity. Three of the six LECs have more than

one staff member working for the Lead Entity. Two of the six LEC positions are part-time, while the remaining four LECs are employed full-time. Interview data indicates LECs who are employed part-time struggle to effectively carry out the roles and responsibilities they see as integral to Lead Entity functioning, and both LECs indicated a lack of funding as the sole reason they were not employed full-time. Furthermore, both LECs referenced the lack of listed salmon species in their local watersheds as a partial reason for the funding deficit. This is an example of the physical landscape the Lead Entity exists within influencing the structure and function of the Lead Entity. In turn, these two LECs are limited in their capacity to carry out the tasks and functions necessary to meet the needs of local communities, the Lead Entity itself, and implement local habitat recovery strategies.

5.82c *Committees*

The TAGs appear to be largely similar among Lead Entities, compared to the variation among other aspects of the organizational structures. One of the TAGs is re-created annually, just to perform the project scoring and is then dissolved. But, the other five TAGs meet either monthly or bi-monthly throughout most or all of the year. One LEC reported both of their committees perform phone or web conferencing. The individual TAGs are largely working together with the same set of people annually to prioritize the habitat projects list and other pieces of the Lead Entities technical strategies.

The CACs express more variation than TAGs. One obvious variation is that all of the Lead Entities' CACs go by a name other than CAC. (i.e., HPLC, LEG, WEF). The general variation among CACs is likely a function of the Salmon Recovery Act's mandate that Lead Entities develop citizen-based stakeholder groups representative of local entities and interests.

Therefore, as the physical landscape and land uses vary, so do the communities and interests present in that area and are represented on the CACs.

The San Juans are a prime example of this connection between the local community and the structure of the CAC. In reflection of their small, insular community, their CAC is almost entirely made up of citizens and local business owners. The San Juans also provide an example of how the physical landscape can shape the Lead Entity's structure. In the San Juans, the CAC is the local MRC. This organization is focused on performing research, outreach, and advocacy to protect marine resources. These functions are aligned with the Lead Entity's recovery strategy, which is focused more on research to build baseline data of where and how salmon utilize the nearshore areas. The MRC and the San Juan Lead Entities' strategies and functions are both aimed at the needs and challenges present in their local watershed. The data also indicated members of the TAG in the San Juans Lead Entity is reflective of the social landscape, as the members appeared to be representative of the demographics in the San Juan Islands.

Both NOPLE and HCCC are dispersed over large areas and they are the only two Lead Entities who formally reserve a set number of seats on their CAC for citizens, and they go even further to ensure equal representation across these vast areas by formally reserving a seat for a citizen from each geographical area in their Lead Entity.

Three of the seven Lead Entities' CACs are organizations or entities working collaboratively according to watershed-based management plans. The committee membership indicates these CACs are made-up of individuals representing the interests particular to those watersheds. For example, Nisqually's NRC includes representatives from major landholders in the watershed, such as Nisqually Tribe, National Forest Service, National Park Service, National Wildlife Refuge, and Joint-Base Lewis McChord.

Two of the seven Lead Entities formally reserve seats on their CACs for government representatives. The LEC interviews indicate CACs whose members are made up of local government representatives can have more turnover as local political officiates are voted in or out of office. Two LEC interviews indicated this turnover influenced institutional memory and could require more communication and relationship building to incorporate new members. And, one of these LECs observed these processes of bringing in new people continuously can lead to organizational evaluation and evolution.

Four of the seven Lead Entities combine all or a portion of their TAG and CAC members to form a separate committee. Two of these four Lead Entities combine all of their members and carry out all of their meetings and processes as a singular group. The third Lead Entity combines all of their TAG and CAC members to perform annual reviews and updates on their recovery strategies, scoring criteria, and general policies. The fourth Lead Entity has a sub-committee made up of an undetermined number of volunteers from the TAG and CAC. This group appears to serve the same functions as the former Lead Entity, reviewing the Lead Entities strategies, scoring criteria and processes annually and making recommendations to the CAC for updates.

One LEC stated the committees working together fostered cohesion, has produced better outcomes in their processes, and has improved their communication. However, the LEC also reported other changes implemented to foster these effects. These are discussed in the next chapter. Still yet, the researcher claims this act of bringing committees together likely has a significant effect on their group functioning. Combining participants from both committees and assigning them a common name and goal provides opportunities for communication among committees, increased commitment to processes and decisions because they are collaboratively developed by the group, and likely decreases potential for conflict.

The creators of the Salmon Recovery Act (HB 2496) intentionally called for the creation of organizations to work at the local level to develop and implement viable recovery strategies that both incorporate local communities and meet the needs of local communities. The legislature had the foresight to recognize the importance and benefit of "allow[ing] local knowledge and relationships to assist planning and implementation, and to account for the differences between … communities and habitat conditions" (Shared Strategy, 2007, p. 88). The individual descriptions of the Lead Entities indicate they indeed have organizational histories and structures that reflect the diversity of local communities and the local needs for salmon habitat recovery. Furthermore, the data indicates Lead Entities strive to respond to the local landscape, through an evolution of their structures and functions.

Chapter 6: Collaboration in Practice

This study defines collaboration as the Lead Entity participants working together to achieve a common goal. Analysis of the primary source documents and LEC interviews indicate the Lead Entity's most fundamental goal is the annual creation of a habitat project list. Therefore, this study chose to analyze the processes Lead Entities utilize to achieve this goal in order to learn more about the practice of collaboration within Lead Entities. On the ground practices/processes shared across organizations provide a platform for identifying challenges and best practices that are independent of a specific organization, and therefore can be applied to the larger scale of collaborative management. To achieve and report these research goals, the contents of this chapter are written in an iterative form, as it starts with a description of the Salmon Recovery Funding Board (SRFB) grant round all Lead Entities participate in and progresses through the pertinent processes all Lead Entities collaboratively undertake to create that final habitat project list. However, the focus of the data analysis is not on the commonalities in the processes, or the habitat project list. Rather, these common processes and goals provide a framework through which to describe and analyze the variation among Lead Entities' collaborative processes.

Once these commonalities are established, the data analysis focuses on reporting the variation among: (1) guiding documents Lead Entities have developed to guide participants through the SRFB grant cycle; (2) the criteria utilized to score and rank projects; (3) each Lead Entity's scoring and ranking process; (4) decision-making methods the participants engage in to finalize the habitat project list. The chapter ends with an exploration of these decision-making methods, from the perspective of the LEC interviews, and reports their observations of the merits

of various decision-making methods, based on the impacts of those methods on group functioning and overall outcomes.

6.1 Salmon Recovery Funding Board Grant Round

The year this study was conducted (2013) marks the 14th annual grant round for SRFB allocations in Washington State. It is through the SRFB grant round that projects seeking funding from the SRFB for salmon habitat restoration or protection are reviewed and receive a prioritized recommendation from a Lead Entity (RCW 77.85). Herein lies the most basic and well-known function of Lead Entities. Each Lead Entity develops and facilitates a process for managing a prioritized list of habitat projects in their watershed(s) and then facilitates the process of queuing the highest priority projects annually to submit for a funding request. In many ways, these watershed level processes are similar, as they are all guided by requirements set forth in the Salmon Recovery Act (HB 2496) and the SRFB funding policies (Manual 18, 2013); yet, the processes also vary according to, as one LEC put it, "those things that create the local fabric that you respond to and create your process within".

In the simplest terms of process, each Lead Entity undergoes an annual repetition of developing and prioritizing a habitat project list to recommend to SRFB for funding. To be clear, the Lead Entities have 3-year work plans and a Habitat Work Schedule, which contain a rolling list of prioritized projects in their watersheds. However, this does not always mean the next project of high priority is queued and funded that year. Leveraged funding may not be available or secured, landowners may not agree to cooperate, and political or cultural interests may not align; there are any number of factors with potential to prevent the most strategic and high priority of projects from being chosen for funding in a given grant cycle. Therefore, Lead Entities often pull from further down their priority list or make the opportunity available for

project sponsors to present applications for new projects. The projects must still be strategic and applicable to the geographical areas and biological components of habitat work deemed of most value to listed salmon stocks in the Lead Entity's watershed(s).

The easiest way to track similarities in the Lead Entity grant process is by tracking the calendar year of the grant cycle. Each year's new grant round starts with the new calendar year. Lead Entities accept letters of intent from project sponsors in the late winter to early spring. For several Lead Entities, this is also a time to update 3-year work plans, scoring criteria, and/or guiding documents, discussed below. Either a sub-committee or the Lead Entity as a whole utilize this update as an adaptive learning exercise to improve any part of their process, based on the previous year's grant cycle experience or new oversight policies.

Throughout the spring, Lead Entities receive pre-proposals for projects, conduct site visits, and receive final proposals for projects. Throughout this process, the Lead Entity committee members and technical review teams from SRFB and Puget Sound Partnership supply feedback to project sponsors regarding project concerns and opportunities for improvement. Project sponsors are expected to incorporate the feedback into their project planning and final project application and presentation.

In the summer, scoring and ranking meetings are held. Lead Entities vary in how each undergoes the process of individual committee members scoring individual projects, but every Lead Entity has a meeting in which the goal is to reach consensus on a ranked project list to submit further up the proverbial ladder. The TAG will submit a recommended ranking to the CAC, and the CAC will produce the Lead Entity's final ranked habitat project list to submit to SRFB. After the final ranking is achieved, the LEC begins an administrative process of preparing and submitting their annual grant proposal.

By late summer, the singular most recognized and pertinent function of the Lead Entity has been accomplished. A ranked project list has been created and submitted to the SRFB! It is the researcher's impression the Lead Entity can appear to significantly reduce their work activity until the next year's grant round, especially to individuals out of the Lead Entity process. This misconception is likely a product of a pervasive reduction of the Lead Entity's role and function in salmon recovery to the creation and implementation of a habitat project list. While a major annual milestone has been accomplished, there is still the matter of seeing the funding request all the way through the grant round, which ends in December.

In addition, some LECs reported this as another time of the year in which their Lead Entity undergoes adaptive learning with post-ranking meetings to discuss the year's experiences, lessons learned, and updating processes to meet goals more effectively and efficiently for the next year. The LECs are responsible for a myriad of mandated reporting deliverables throughout the year, and it appears this is another administrative activity occurring post-ranking. In addition, LEC interviews indicated community outreach, funding development, and cultivating partnerships were important objectives that many Lead Entities lack the capacity to fully engage in. However, it is likely the short Pacific Northwest summer is the ideal time for LECs to work on these activities to the extent they have time or funding. There is also the fact that grant monies still have not been allocated. The LEC, committee members, and sponsors continue communicating as the proposed projects go through several stages of the SRFB's technical review processes. After what can be several rounds of addressing SRFB concerns regarding individual projects, the SRFB announces final project funding decisions in December.

6.2 Variations in Scoring and Ranking Processes

Lead Entities all participate in the annual SRFB grant round and are bound by the same funding guidelines set forth by the SRFB. In addition, each Lead Entity operates under the same legislative directives that define their basic committee structures and roles. However, each Lead Entity has developed their own process to facilitate the group through the grant round. This portion of the chapter explores these differences in Lead Entity approaches to scoring and ranking projects and creating their final habitat project list. To achieve this goal, this portion of the chapter builds iteratively upon itself and is broken down into three main sections.

This section contains an analysis of variation in the documents Lead Entities utilize to guide participants through the scoring and ranking processes. The next section ("6.3 Context for Scoring and Ranking Processes") focuses on providing context by which to analyze and understand the variation among Lead Entities' scoring and ranking process. This context information consists of a description of the general differences between scoring and ranking, as they appear to be segregated to the TAG and CAC respectively. Section 6.3 also defines the criteria utilized by all Lead Entities, to score and rank individual projects, and then goes on to analyze the variation among Lead Entities' criteria. The final section ("6.4 Variation in Decision-Making Methods") describes how each Lead Entity scores and ranks projects and focuses on reporting when and how Lead Entities utilize dialogue and/or numerical scoring methods to make decisions regarding the habitat project list. This section concludes with LEC observations of the advantages and drawbacks of each of these decision-making methods.

6.21 Guiding Documents

This study performed a content analysis on a set of documents whose primary purpose is to guide Lead Entity participants through the grant round process and timeline. These

documents do not have a common name; therefore, the researcher has dubbed them "guiding documents". Guiding documents are significant because they contain data on the basic processes and policies Lead Entities utilize to move through the grant round. These guiding documents also provide information and context to continue familiarizing the reader with the Lead Entity's basic structures and functions.

Five of the seven Lead Entities were able to provide the researcher with a guiding document. Of the two remaining Lead Entities, such a document may exist, but the researcher was not able to communicate the request effectively to the LECs or find the document online. Therefore, the following analysis is based on data from five of the seven Lead Entities.

Beyond meeting the basic function to guide participants through the grant round, these documents vary widely in the amount and type of information contained. No two guiding documents are the same among the five Lead Entities. The content varies in response to the guiding document's targeted audience, the amount of organizational framework discussed, the level of detail and method used to relay the scoring and ranking processes, and the level of detail used to describe roles and expectations for participants.

Two of the five guiding documents are limited to an outline of the annual grant process, expectations for the contents of the project applications, and some description of the scoring criteria used to evaluate projects. The first guide is chronologically formatted to provide directions and information in a template that moves through the grant cycle and speaks directly to project sponsors as the audience. The intent of the guide is to provide a detailed timeline for each phase of the grant round, with minimal description of the criteria utilized to score projects, no indication of how criteria are utilized in the scoring process, or information on the scoring process itself. The guide does provide a brief reference to the types of information considered in

the ranking process and states the CAC takes that information into consideration when creating a final habitat project list. This Lead Entity does have a template for project scoring, but it is unknown if this document is supplied to project sponsors in addition to the grant round timeline. As stated above, this guiding document appears focused on outlining the timeline for the grant round and relating expectations for project sponsors.

The second Lead Entity has two guiding documents. The first is an abbreviated timeline of important dates in the grant round. The second document provides a brief description of the Lead Entity's current habitat strategies and expounds on the information and criteria utilized at the preliminary and final proposal phases of the application process. The majority of the document's content focuses on descriptions of the criteria committee members will use to score projects. This guiding document appears to speak to project sponsors as the target audience.

The remaining three Lead Entities' guiding documents are organized around their stated intention to serve as a reference, not only to project sponsors but also committee members, Lead Entity staff, and members of the public. They appear to be documents intended to guide participants through the grant round but also serve as an informational guide for those outside the process as well. These guiding documents are referred to as Process Guides and they each go beyond a basic outline of when and how the projects are scored and ranked to include a wealth of background information about the Lead Entity. They contain descriptions of the Lead Entity's goals and strategies for salmon recovery, which provides context and guidance for submitting projects of strategic importance and potential funding consideration. They contain descriptions of the Lead Entity's structure and explicitly state the roles and responsibilities of all the participants involved in the Lead Entity. The Process Guides also provide explanation of processes developed to safeguard and appropriately guide the scoring and ranking processes,

such as conflict of interest policies, decision-making methods, established ground rules, and code of conduct policies. Finally, the Process Guides contain grant round timelines and copies of the actual scoring sheets used by the committees.

As stated before, no two guiding documents are the same. These three Process Guides, while very similar in their content, also differ. The templates of the process guides differ in that one of them is a singular document. It moves seamlessly from a table of contents to an extensive attachment of appendices. The other two process guides consist of several documents, with different names, attached together. Otherwise, the content of these three Process Guides varies only in respect to the variation of the Lead Entities themselves (i.e., the differences in their committee structures, scoring criteria and processes, etc.)

The five guiding documents can be split into two categories. Two of the five guiding documents appeared focused on relating the basic information necessary to adhere to the Lead Entity's grant round timeline and relate the requirements and process for project applications. These two guiding documents appeared to speak to project sponsors as the target audience. The remaining three guiding documents' stated target audience was all Lead Entity participants, as well as individuals outside of the Lead Entity. As such, these three guiding documents appear to focus on providing a description of the Lead Entity's structure, functions, and basic processes utilized to carry out those functions. These three guiding documents also offered visual and template-oriented cues that indicated they were in fact formal Process Guides.

While it cannot be assumed these three Process Guides provide adequate or necessary information for the target audience, they were more descriptive in comparison to the first two guiding documents. Moreover, they offered more information in this study's objective to understand the Lead Entity's structure, functions, and basic processes. However, it is noted that

continuity among Lead Entities' guiding documents may not be advantageous or realistic. Some Lead Entities may not have the capacity to create and update such a document. After reviewing other primary source documents, it appears Lead Entities have other documents that contain similar information as the three Process Guides. These Lead Entities' participants may have decided to put their capacity into those oversight reporting or strategy development documents and feel the current grant round guiding document serves its purpose. "The local fabric", as one LEC referred to it, created the impetus for these processes to evolve and be documented; therefore, asking all Lead Entity's to create a similar guiding document could erode the autonomy, efficiency, or applicability of the local process. At the same time, five of the six LECs shared on one or more occasions in their interviews that they were not aware of how a certain process was carried out in their neighboring Lead Entities. In this context, Process Guides could serve as one resource for Lead Entities to share information among their organizations. For an example of a Process Guide, see WRIA 13's website: www.thurstoncd.com/salmon-recovery (WRIA 13, 2013).

6.3 Context for Scoring & Ranking Processes

This section's primary objective is to describe the general framework Lead Entities utilize to score and rank projects. It begins with a brief description of apparent nuances between the acts of scoring and ranking to provide context for these processes. The section then defines the criteria Lead Entities utilize to score and rank projects and provides an account of the general scoring and ranking process itself. Essentially, this section iteratively builds on itself to supply background data necessary to undertake an analysis of the variation among Lead Entity scoring and ranking processes, in the next section.

6.31 Differentiating Scoring & Ranking Processes

Lead Entities generally segregate the scoring and ranking processes to the TAG and CAC, respectively. This separation is evidenced by one LECs statement that the "The TAG doesn't actually rank. They provide technical scores". This distinction likely goes back to the legislative mandates concerning committee structures and purposes of the TAG (RCW 77.85.060) and CAC (RCW 77.85.050). Paraphrased, the legislation requires TAG to submit a recommendation of habitat projects to the CAC, who then performs a final ranking. In practice, the TAG creates this recommendation by scoring projects on a set of technical criteria, and the CAC vets each project through their own set of socioeconomic criteria, before deciding on a final ranked list of habitat projects. However, when researching these processes it becomes apparent TAGs often provides their recommendation to the CAC in the form of a ranked list, and three of the seven CACs utilize a scoring component, somewhere in their process, to make decisions on the final ranked habitat project list. The researcher is unsure if this issue is a matter of semantics or legislative history and current mandates to separate committee tasks/roles. Either way, to understand these processes, one needs to understand this nuance. Follow-up interviews with LECs should include a discussion of this topic and ask the participants if they perceive scoring and ranking processes to be delegated to each committee.

6.32 Defining & Utilizing Criteria to Score & Rank Projects

As stated in the Guiding Documents section, five of the seven Lead Entities provided a guiding document, and all five documents provide a description of the scoring criteria and process for utilizing these criteria. The following analysis is based on these five Lead Entities.

Each Lead Entity has a set of criteria upon which project merit is determined in the scoring and ranking processes. The TAG and CAC have their own set of criteria, relevant to

each committee's purpose. The TAG's criteria are derived from three categories utilized in the SRFB's technical review of grant applications: (1) benefit to salmon; (2) certainty of success; (3) cost appropriateness. Some Lead Entities' TAGs also include a category to capture whether or not the project exhibits "fit" and "synergy" with their current recovery strategies. Within these categories, examples of criteria are as follows: (1) benefit to salmon (address key limiting factors, high priority geographic area); (2) certainty of success (landowner approval, adequate project design, stewardship/maintenance plan). These examples undermine the variety of criteria and how they are presented on scoring matrixes but are provided to give the reader some context. See Appendix B for WRIA 13's scoring template. However, note that it is provided as an example and is not representative of other Lead Entities' processes (WRIA 13, 2013).

Of the five TAGs being analyzed here, all five score criteria based on a total points possible scenario. Each committee member scores a project by choosing a numerical value (i.e., 1-5 points or 1-10 points) to assign to each criteria. Individual committee member scores are totaled for that project, and then all committee members' scores are combined for that project. The outcome is a list of projects ranked according to how they scored in comparison with each other. Again, there are variations in the scoring processes. Two of the five TAGs weight their criteria, resulting in certain criteria influencing the final score more than other criteria. One TAG has one criterion they discuss openly, rather than assigning a numerical score.

Four of the five guiding documents list the CAC's criteria and how those criteria are utilized to create the final project ranking. A brief account of the variation in criteria is reported here, but the utilization of these criteria to make decisions on the final project is reported in the next section, ("6.4 Variations in Decision-Making Methods").

The CACs usually have one broad "socioeconomic" category, but none of the CACs have the same criteria within this category. One TAG may require an education and outreach plan with each project application, and that serves as the majority of their criteria. Another CAC may have a list of criteria that includes education and outreach but also the project's potential for cultivating partnerships in the community. It is the researcher's impression the CAC criteria hold some basic commonalities around community outreach, community support, and impacts on the community but vary depending on the CAC's decisions regarding proper assessment to reflect the community needs within the Lead Entity's boundaries.

This overview of criteria developed by the Lead Entities' committees provides continued insight to the ways local physical and social landscapes can influence Lead Entity processes. The TAGs' criteria for scoring projects appear to be grounded more in a general technical review framework. This gives the criteria a semblance of commonality around evaluation of the project's potential to benefit biological and physical components of salmon habitat. However, the biological and physical components of salmon habitat vary according to the physical landscape of the watershed and the social landscape driving land use and limiting factors. This requires Lead Entities to develop TAG criteria that speak directly to the types of habitat in their watershed and the types of limiting factors they are working to address. Interview data also indicated one Lead Entity has spent the majority of their existence building data sets to inform the location, status, and patterns in habitat and salmon populations, rather than implement habitat restoration projects. Therefore, this Lead Entity's chosen strategy to address lack of data likely shapes their chosen criteria.

It is the researcher's impression the CACs' criteria are even more integrally connected to the social landscape. The CACs and TAGs are both committees created to represent local

communities at the habitat recovery table, but the impression is the influence of communities on CACs is more nuanced. The CAC committees may be considering political or cultural aspects that are not listed on scoring templates. At other times, the connection between local communities and CAC criteria appears direct and straight-forward. This is evidenced in the San Juans' CAC's criterion that inquiries into sustainable disposal of waste. This is likely an example of a criterion developed to address a factor that weighs more heavily in the San Juans community: waste must be managed appropriately when you live on an island. Criteria are developed by a local group of Lead Entity participants, who are striving to create methods that best assess which projects are most suited to their watersheds, and this appears to be a process of considering which projects are best suited to the local physical and social landscapes. As these landscapes vary among the Lead Entities, so do the criteria they utilize to match their efforts to their watersheds.

6.4 Variation in Decision-Making Methods

This section provides an analysis of the scoring and ranking processes each Lead Entity undergoes to achieve their final ranked habitat project list. The analysis first establishes the prevalence of a consensus-based model among Lead Entities before describing each Lead Entity's scoring and ranking processes. The analysis focuses on reporting when dialogue-based and/or numerical scoring methods are utilized to inform final decisions on the projects chosen to constitute the habitat project list. This section also analyzes LEC interviews to report observations and perspectives on the merits and drawbacks of each of these methods. This interview data provides further insight into why these decision-making methods are utilized and how their deployment may influence general group functioning, as well as the scoring and ranking processes.

6.41 Consensus-Based Decisions

Primary source documents and interview data combined indicate all seven Lead Entities represented in this study work on a consensus-based model. This means seven of the seven Lead Entities' TAGs and CACs strive to reach unanimous agreement on a decision. If the group cannot reach consensus, seven of the seven Lead Entities committees stated process is to take a majority vote. However, LEC interview data indicates six of the seven Lead Entities "very rarely" have to vote on a decision. Three of the LECs, representing four Lead Entities, stated they could only remember one or two occasions in which the group had to vote because they could not reach consensus.

The researcher wants to be careful not to oversimplify decision-making processes or the frequency or ease of reaching consensus. The data suggests there have been occasions when decisions have been tabled and required more than one discussion, or individual participants may not have fully agreed with the outcome but do not choose to push for a vote. It is also recognized these observations are coming from a singular source within the Lead Entities. Another participant may remember other occurrences of voting. What can be said with assurance is the use of consensus-based methods is more prevalent among Lead Entities than majority voting methods.

6.42 Dialogue vs. Numerical Scoring Processes

Detailed data is not available on the scoring and ranking processes for one of the Lead Entities; therefore, this analysis refers to six of the seven Lead Entities. Two of the six Lead Entities have their TAG and CAC score projects together. The guiding document and LEC interview indicate both committees score each project on all of the criteria, to create an initial ranked project list. The LEC interview reported this initial ranking provides a platform on which

both committees generally discuss how they "feel" about the initial ranking. The interview data suggests this discussion includes opportunities for individual participants to express concerns, ask questions, and the group as a whole has the opportunity discuss potential solutions that address concerns and project weaknesses. The LEC also observed this dialogue allows the CAC to ask questions that the TAG may not have considered. The goal is for the whole group to reach consensus on the final project list, and the LEC indicated they verbally cue each participant to ascertain if both committees agree with the final outcome.

The third Lead Entity has the TAG and CAC score and rank projects separately. However, both committees incorporate both scoring and dialogue methods to reach consensus on their final project ranking. The TAG utilizes a dialogue-based method to assess projects at the pre-application phase, as well as for one of the scoring criteria. The dialogue-based process is the same in both of these situations. When reviewing a project's pre-application, the TAG assigns the project either a "green", "yellow", or "red" designation. "Green" means the TAG has decided to allow the project to move forward in the application process, "yellow" means the project sponsors must address TAG questions or concerns about the project. Projects assigned a "yellow" designation require TAG consensus to move the project to a "green" designation. Projects receiving a "red" designation are not permitted to move forward in that year's application process. When scoring projects, the TAG utilizes a numerical scoring process for two of the three categories (benefit to salmon and fit to plan/strategy). The third category (certainty of success) undergoes the same "green", "yellow", "red" designation process. However, the CAC makes the final decision on whether or not the project will be included in the final ranked list. This Lead Entity's CAC scores projects based on their set of socioeconomic criteria. It appears the CAC then takes all of the information provided by the TAG and combines

that with their own scores, to discuss the final project ranking. The guiding document and LEC interview do not indicate the extent or content of this discussion.

The fourth Lead Entity has the TAG and CAC score and rank projects separately. The TAG members submit their scores electronically, rather than scoring in the same room, and then the scores are sent to an unbiased third party to be statistically normalized. Once the initial ranking results are available, the TAG meets to review the outcomes. The extent to which the group collaboratively discusses or considers moving projects from their original ranked position is unclear. However, the LEC reported that moving a project requires full consensus from the TAG members, and the LEC observed individuals may limit their efforts to initiate a discussion to move a project if it is apparent one or two individuals appear steadfastly opposed.

The fifth Lead Entity has the TAG and CAC score and rank projects separately. The TAG members submit their scores electronically, rather than scoring in the same room, and then the scores are sent to an unbiased third party to be statistically normalized. In addition to the numerical scores, each criterion has a space allotted for the TAG member to enter comments. Once the initial ranking results are available, the TAG meets to review the outcomes. However, this Lead Entity utilizes a "blind ranking" process. Therefore, when TAG members reconvene to approve the initial ranking results, they see the project scores but do not see which project those scores are associated with. The TAG recommendation to the CAC appears to be a 'cut off' line on the habitat project list. In other words, the TAG will recommend the CAC review all projects above a certain point on the range of scores. The guiding documents and LEC interview do not indicate the extent or content of the TAG's discussion-based portion of their scoring process. It is the researcher's impression this group does not engage in discussions to move or augment projects, as much as some other Lead Entities.

This Lead Entity's guiding documents indicates the CAC does not score projects. Rather, the CAC combines information and recommendations from the SRFB's technical review team, the TAG, and watershed groups within the Lead Entity boundaries. The CAC also reviews local restoration strategies established in their recovery plan and 3-year work plan. The CAC creates a final ranked project list based on their review of all of this information. Primary source documents and the LEC interview do not indicate the decision-making process this CAC undergoes, but it is the researcher's impression this CAC does not score projects but relies on some variation of a dialogue-based decision-making method.

The sixth Lead Entity's TAG and CAC score and rank projects separately. The study does not have data to report on the TAG's scoring methods. However, the interview data indicates the LEC went through an informal process of presenting projects the TAG recommended to the CAC, and the CAC approved the project list. The LEC reported this process was straightforward due to the continuous updates the LEC provided to the CAC throughout the year. Therefore, when it came time to approve the project list, the CAC had no further questions or concerns about the projects and there were no "surprises". The researcher's impression of these statements were that the CAC knew which projects were going to be presented before-hand and had been part of reviewing, providing feedback, and receiving feedback to questions and concerns throughout the application process. When the final presentation was made to the CAC, there were no final concerns, and the ranked list was simply accepted.

The data is largely inconclusive on the extent to which each Lead Entity utilizes dialogue to make decisions during scoring and ranking meetings, as well as the content of the dialogue. What can be gleaned from this data is that the TAGs and CACs for three of these six Lead

Entities appear to rely on a combination of numerical scoring and dialogue to create their final ranked project list. Of the remaining three Lead Entities, data is not available to determine the decision-making method utilized by one of the TAGs, but the other two TAGs appear to place more emphasis on numerical scoring as a decision-making method. Of these remaining three Lead Entities, the CACs do not have a numerical scoring system; therefore, they must be utilizing dialogue to make decisions on the final ranked project list.

6.43 Pros & Cons of Dialogue vs. Numerical Scoring

6.43a *Pros for Dialogue (Cons for Numerical Scoring)*

The LECs' interviews provide observations of the pros and cons surrounding the use of dialogue versus numerical scoring to drive decision-making processes. Three of the six LECs shared their observations of the positive impacts dialogue-based decision-making has on individuals or the group as a whole. The first LEC described an example in which the group was not in agreement on a project's placement on the ranked list. The LEC observed that dialogue was important because it allowed everyone to express their personal opinions and concerns.

The second LEC observed that dialogue-based decision-making has positively impacted the Lead Entity group's functioning, process development, and overall outcomes. The LEC started by reporting that criteria which rely on having a "conversation" to reach a collective decision creates a sense of cohesion amongst the group. One example they gave of this cohesion was that the group was more "resolved" in their outcome. The LEC reported the group seemed better equipped to represent the projects and show the whole group "felt strongly" about their decisions. The LEC went on to state, "My personal opinion about it is I think it [discussion to reach decisions on ranking] actually leads to a group that feels more cohesive, I think it leads to a group that feels like they're actually making a difference".

The LEC also made statements that implicitly spoke to dialogue serving as a potential avenue to avoid conflict or disagreement. They observed that when individuals did not feel good about a score, if they were not able to engage in an open discussion, they would not have the opportunity to view the issue in a different "context". When asked to elaborate, the LEC went on to say that when there are concerns about a project, the group could discuss potential ways to address those concerns, by making recommendations to improve on the project's weaknesses. This not only indicates a potential to proactively address conflict, but it also appears to foster creative problem solving by sharing ideas about how to improve upon projects. The LEC stated that when, "you bring more ideas to the table, you get a better outcome". The interview's discussion of this topic culminated with the LEC's next statement,

> I never thought of this in this way, but my TAG likes to get together. They like to do this process. They enjoy it. They feel like they're making a difference, and that's why probably some of them are as long lived as they are because they are getting something out of this too. I just feel like, if all you're doing is, 'Here are my sores. Ok, throw it under the fence.' … It makes it feel less like that individual has a specific point of view that they are able to bring.

The third LEC reported similar observations about potential for creative problem solving when the group is able to engage in dialogue. The LEC was talking about the initial project list, rendered from the first round of scoring, and expressed that the Lead Entity is not able to fully fund all of their priority projects. This appears to be a common issue among all Lead Entities in this study. When the committee members saw the initial ranking, they could start to brainstorm ways to stretch their funding among projects. The LEC reported the group would come up with ideas for turning projects into phases or eliminating one part of a project to fund another project.

This LEC also observed that the "nuances" of projects were lost when looking at a "mathematical representation" of all the projects. The LEC stated that they put that mathematical representation up on the board and say, "Here is what we said. Now let's talk about the realities".

6.43b *Cons for Dialogue (Pros for Numerical Scoring)*

One LEC shared observations of potential problems with dialogue-based decision-making and how numerical scoring served as a method to avoid these issues. The LEC stated,

> I think it's really important when you have a collaborative thing, which I think is really good and really needed, but we also still are over-seers of this public grant process that is utilizing public funds. And we want to be able to show that this is defensible. Someone may come in and say, 'Wow, collaborative or too cozy?' And what we want to do is be able to show that we have a process in place that is based on science and that we are trying to be as defensible as possible.

The LEC also observed there are power dynamics at play within the groups and that some individuals or entities may have more opportunity to influence outcomes in a dialogue-based decision-making process.

It appears LECs see merits in both dialogue and numerical scoring methods. This is first evidenced in the fact that both methods are utilized to some extent in all Lead Entities. The two LECs who spoke strongly about the positive effects of dialogue on their Lead Entities' decision-making processes and group functioning, also have a numerical scoring component in their process. One of these LECs was reported above as stating that the dialogue was built on an initial scoring. It is the researcher's impression this combined methodology allows Lead Entities to ground their decision-making process with numerical scoring, which is transparent and

uniform, and then build on this initial outcome with dialogue, which capitalizes on sharing input representative of the expertise and skills individuals are bringing to the table.

In addition, the outline for reporting this data is dictated by this study's goal to maintain a confidential disconnect between LEC interviews and the Lead Entities they represent. If each Lead Entity's decision-making processes were reported in tandem with the respective LEC's interviews, more information surrounding how and why committee members utilize the methods described would be revealed.

6.5 Conclusion

The data, once again, indicates significant variations among participating Lead Entities. In previous chapters, this variation was largely concerned with the structure of Lead Entities, while this chapter begins to reveal more about variation in process. Provided with the same framework and guidelines from the SRFB and the Salmon Recovery Act, each Lead Entity has developed their own unique set of processes to facilitate the group's collaborative creation of a habitat project list. Content analysis of primary documents and interviews revealed that variations in how group processes are developed and how they are implemented, manifests in a multitude of tangible and intangible outcomes. This study could not cover the full breadth of the Lead Entities' processes and outcomes, so it resorted to analyzing processes most representative of the Lead Entity's primary functions. Key processes were identified as the guiding documents, scoring criteria, scoring and ranking processes, and decision-making methods.

To both develop and achieve these outcomes, Lead Entity participants have to work collaboratively. It is the researcher's claim that it is partially this collaborative approach that leads to the variation in outcomes. Return to the definition of collaboration, as defined in this study. Collaboration is Lead Entity participants working together to achieve a common goal

(outcome). From this platform, one can see variation among individual participants, local and organizational history, and physical landscape are all factors that come together to create a unique stakeholder group, or a unique set of Lead Entity participants. When the collaborative efforts of this group are directed towards a common goal, the process and the outcome are going to be unique to that group of people. Collaboration is therefore a source of variation in process development and process implementation identified by this study.

It also appears variation in process, much like the variation in structure, is connected to the physical and social landscapes Lead Entities exist within. Scoring criteria are a prime example of this connection as they are developed and updated by Lead Entity participants. Even though they may follow general SRFB guidelines, the participants look at biological, ecological, political, and cultural concerns in their local watersheds to create criteria they believe will lead to implementation of projects with the best outcomes for local salmon and human communities. Scoring and ranking and decision-making processes sometimes require casting a broader net to see these connections. One example is the LEC who reported receiving project ranking approval from the CAC with what appeared to be limited engagement in a formal process. This CAC is one of the pre-existing organizations working on watershed-based management of natural resources. The LEC's housing organization has been an active and collaborative participant in this watershed-wide partnership since its inception. Therefore, in addition to the LEC reports, consistent communication allowed the CAC to be prepared for the habitat project list proposal in advance. At several points in the interview the LEC referenced the strength of the existing collaborative relationship and how this relationship was born from their extensive collaborative history. It appears this relationship, years of working together on a strategic watershed-based

management plan, coupled with continued communication amongst all participants in the Lead Entity has led to the development of a fairly informal CAC ranking process.

The continued evolution of the organization itself appears to be an emergent theme that describes how and why Lead Entities develop processes and outcomes unique to that group. Two LEC interviews indicated their Lead Entities come back after their scoring and ranking meetings and discuss what worked well, what did not, and what needs to be changed to better the process. Two of the Lead Entities have also designated sub-committees with the formalized role of reviewing and recommending such updates on an annual basis. These appear to be proactive attempts to continuously evolve the organization and processes to create better outcomes. This directly results in updates to the guiding documents, scoring criteria, scoring and ranking processes, and decision-making methods. In addition, as Lead Entities go through years of grant rounds and habitat project implementation, the scoring criteria are updated to reflect changes in the geographical areas and limiting factors targeted by the Lead Entities.

Decision-making methods appear to be a process that is integral to the Lead Entity's collaborative functioning and serve as an avenue for specific groups to uniquely shape themselves according to local influences. This chapter's analysis shows Lead Entities vary in the extent to which they utilize dialogue versus numerical scores to inform decisions on individual project merit and reach consensus on the final project list. Data reveals Lead Entities generally depend on a combination of dialogue and numerical scores to make decisions and effectively achieve their common goal. However, the groups vary with respect to the points in their process at which they deploy each method.

The LEC data indicates giving participants the opportunity to engage in dialogue-based decision-making had several potential positive impacts on the group's functioning and the

group's collaborative outcomes. Two of the LECs spoke to the potential for dialogue-based decision-making to create opportunities for participants to improve collaborative outcomes by addressing weaknesses in habitat projects. As one LEC observed, it is challenging to address the nuances of these outcomes through a numerical score. Participants, and the outcome, appear to benefit from being able to express their opinion and contribute their perspective and expertise. This is evidenced by one LEC who observed increased participant engagement and enjoyment in the process, when utilizing dialogue-based decision-making methods. It appears these same observations can be applied to other group processes and outcomes, such as updating guiding documents, recovery plans and strategies, scoring criteria, and even the scoring and ranking processes themselves. This was demonstrated above with the example of Lead Entities or sub-committees utilizing collaborative dialogue to review and improve upon their processes.

Another LEC's comments indicate numerical scoring methods are especially suited to Lead Entity processes that concern decisions on which projects to fund because the group is managing public funds. In this situation, it seems pertinent to develop and implement a process that is transparent and is able to show decisions were made based on scientific evidence. While only one LEC directly expressed power dynamics exist among Lead Entity participants, two other LECs indirectly expressed this observation with statements regarding the challenges of moving projects forward if certain entities did not agree or want the project to happen. It is the researcher's impression that this is a simple but uncomfortable truth in local stakeholder groups. Some entities likely hold more power in the form of authority or funding. It could also be assumed some individuals may exercise more skill in verbally delivering their perspective or argument. If the group's facilitator lacks the appropriate skills to manage the dialogue, individual participants may be able to dominate or sway the argument or make others

uncomfortable with expressing their opinion. The data suggests both dialogue-based and numerical scoring methods have positive merit and drawbacks. When and how to employ these decision-making methods should be given careful consideration, and above all, depends on the characteristics unique to each collaborative group and their goal.

Considering that decision-making is a fundamental process in collaborative work, there is a need to continue data collection to be able to draw conclusions on the execution and impacts of specific decision-making methods utilized by Lead Entities. This information would likely be of great benefit to Lead Entity facilitators and participants. Therefore, follow-up interviews with LECs would focus heavily on this subject area. The interviews would explicitly inquire into the process and content of dialogue CAC members engage in when scoring and ranking projects. Aside from the CAC, deeper examination is needed to ascertain how dialogue-based methods proceed, the content of these discussions, and observed effects of this approach on group functioning. A deeper investigation of the concerns surrounding dialogue-based methods is needed as well. This is likely a harder subject to engage participants in but would provide insight to inform the most effective decision-making methods. The researcher also suggests examining why and how the Lead Entity developed processes to utilize dialogue-based and/or numerical scoring methods to shape and inform decisions.

Chapter 7: LEC Observations of Factors Influencing Collaboration

The purpose of this chapter is to report the factors which shape collaboration within Lead Entities, from the perspective of the LECs. The study's analysis shifts to primarily reporting data from LEC interviews and changes from a focus on differences among Lead Entity structures and processes to commonalities in factors observed to shape collaboration within Lead Entities. However, the researcher guides the reader to a broader understanding of collaboration by combining findings from previous chapters into this new context. Collaboration is broadly defined as working together to achieve a common goal, and interviews with LECs reveal a robust range of factors that either foster or inhibit collaboration within Lead Entities. Interviews focused on discussing broad topics such as fostering collaboration, practical barriers limiting collaboration, context and causes of conflict within groups, and pathways to conflict resolution. An analysis of the interviews constructs emergent themes within each topic, and it is these themes which provide the content of each section in this chapter.

The term 'relationships' is utilized in this data analysis to describe emergent interactions between and among Lead Entity participants. Relationship building and impacts of relationships on group functioning and collaboration are two key themes that emerge throughout each of the topics listed above. As such, these two themes are referenced within each topic's section and as a section that stands alone. In addition, the chapter contains frequent references to the connections *between* relationship building and impacts of relationships on group functioning within each section. The LECs themselves emerge as key factors that influence collaboration, and, as such, their roles in fostering collaboration are referenced throughout the chapter.

7.1 Fostering Collaboration

The LECs were asked to report observations of the ways in which collaboration is fostered within the Lead Entity. The emergent themes found in LEC responses were: (1) the role of the physical environment; (2) supplying food at meetings; (3) actions implemented by participants in the Lead Entity process, including actions and processes implemented by LECs personally.

7.11 Physical Environment

Three of the six LECs referred to the physical environment when discussing factors that foster collaboration. Two of the three LECs spoke out against stuffy rooms that lacked windows or comfortable seating. Instead, they advocated for spaces more conducive to personal comfort and participant engagement. One LEC made the following statement, "I am a firm believer that you get a really good meeting venue. None of this claustrophobic, room without windows, with crummy chairs for people to sit in". Another LEC was speaking to the lack of options for meeting spaces in their area and stated,

> I mean there's a few meeting spaces that we choose them if we don't have other options, you know, there's a couple that are just in the basement and there's not windows, and you know it just gets musty. You know you get a few people in a room for any period of time and it just starts to feel so closed in.

All three LECs talked about impacts of engaging participants outside of a normal meeting setting in order to elicit different responses from the group or as a solution to a potential source of conflict. The first LEC spoke about this phenomenon throughout their interview, in different contexts, but their examples of altering meeting settings are summarized here. The LEC talked about having meetings outside, incorporating a potluck into a meeting, or celebrating occasions

such as holidays or a participant's retirement. The LEC reported their intentions were to create opportunities for people to see and engage each other without their "meeting personas" and develop "respect" among the participants. Depending on the example, the LEC observed this approach effectively created pathways for allowing participants to celebrate and/or share appreciation for group accomplishments, show appreciation to individuals, or see beyond negative perceptions of opposing agencies or personalities. The LEC statements indicate they were striving to build relationships among the participants; thereby, fostering group cohesion, positive interactions, shared appreciation and commitment to the group, and positive perceptions of one's peers. The researcher's analysis claims such effects have an impact on group functioning and collaboration.

The second LEC who spoke about engaging participants outside of a normal meeting setting was referencing the personal consideration they give to planning meetings for "neutral" settings. This manifests in the form of holding meetings outside of the Lead Entity's fiscal agent's office or not holding the ranking meeting at the location of an organization currently seeking funding. With respect to neutrality, the LEC's reasoning was that the Lead Entity is physically housed at a location owned and operated by one Lead Entity participant, who also carries the right to one vote on the Lead Entity's CAC. The LEC elaborated on this situation,

> The fiscal agent can sometimes been seen as the elephant in the room because they have the employee for the consortium [the LEC], housed in their entity. So, structurally, that is not the easiest fit. It reminds me of you've got six kids and one still lives at home. So, we have to finesse that. Part of that is reminding people I am not there for the [*sic* fiscal agent]. I am there for the Lead Entity, and the [*sic* fiscal agent] is only one of six votes

> [*sic* on the CAC]. The [*sic* fiscal agent] has been very good about honoring that independence.

It is the researcher's impression that many Lead Entities' organizational structures create nuances in relationships among participants, and the LECs strive to manage for these nuances by giving special consideration to communication and planning efforts that mitigate the potential impacts of these nuances on collaboration.

The third LEC who spoke to the effects of getting participants outside of normal meeting settings reported a change in demeanor when groups conduct site visits simply because they are outside. The LEC talked about recent site visits to potential habitat projects and observed,

> We had great conversation, um, people were really engaged at the end of the day. People were patting on the back or shaking hands, saying thank you. We got to stop and have lunch at small wood park, and, yeah that's great…. I would say people's body language softens a bit, in general, maybe not every single person, but in general people's body language softens a bit. They smile a bit more. They laugh more. They are able to move their bodies more because sitting in the chair for three hours [for meetings] is uncomfortable. You know you get hunched from sitting there and you are trying to find a comfortable spot so you are moving around, but when you are outside you can kind of walk or sway, so people's whole, just, essence just kind of softens.

This LEC also described their observation that the majority of Lead Entity participants have a personal preference for being outdoors, and it is this intrinsic interest that has often driven participants' career choices. The LEC gave the following account,

> I think the majority of us got into this field because we love being outside. You know, if you didn't wanna be outside, then you weren't going to go into natural resources or

> restoration, so, but what ends up happening is that the further you get in this career, the more meetings you have to go to, the more reports you have to write, the more politically driven or bureaucratic stuff starts to weigh down on your workload and so it gets more difficult to get out in the field.

In combination, these examples indicate there are multiple effects of the physical environment on collaborative processes. All three of the LECs spoke to the importance of physical elements that enable individuals to be more physically comfortable and therefore engaged. One of the LECs pays considerable tribute to the importance of allowing individuals to meet outside their normal staging areas, and sometimes with the intention of varying the purpose of meetings to include celebratory or socializing elements, as a means to provide opportunity for individuals to build rapport and relationships. Varying meeting locations is also utilized to show equalization of power among the organization's participants. Still yet, the final LEC speaks to the effects of allowing these individuals, who are intrinsically driven by their enjoyment of the outdoors, to actually be outdoors. These observations indicate LECs give much consideration to the physical environment and perceive it to be a factor which can be leveraged to foster collaboration within the Lead Entity.

7.12 Supplying Food at Meetings

Three of the six LECs reported they supplied food at meetings as part of fostering collaboration. Furthermore, all three of these LECs either currently or historically supplied this food by their own personal means. Two of these LECs made statements expressing that participants devote a large amount of time and effort to the Lead Entity, and providing food at meetings is one means they use to express their personal appreciation. One of these two LECs

shared that they bring in homemade pies on special occasions and coins the action, "Management by Baking".

The third LEC who reported supplying food at meetings observed that having food available during meetings fosters opportunities for participants to engage each other, and it seems to relate to participants staying longer after meetings to talk. When asked what the benefits are of having food available, the LEC responded excitedly, "People are happier! And, they chat more." This LEC went on to share participants express appreciation for the food, and the LEC felt food was a source of comfort and distraction for participants if they are bored or want to temporarily disengage from the conversation.

These examples indicate food serves several functions that positively impact the group's functioning. Food appears to serve as a means to show appreciation and also prompts appreciation from it participants, and it is the researcher's claim that expressions of appreciation can serve to build relationships, personal investment, and group cohesion. The third LEC's example is also indicative of our cultural relationship with food, in which we utilize food as a catalyst to gather and communicate, seek refuge when uncomfortable, or occupy ourselves when bored.

7.13 Actions Implemented by Lead Entity Participants

With the exception of the regulatory trip to visit project sites, all of the observations related above are examples of LECs personally taking action to foster collaboration. Three of the six LECs reported additional actions implemented by LECs to foster collaboration, and one LEC reported an example of other Lead Entity participants fostering collaboration within the group.

In the case of the first LEC report, the interviewer was wrapping up the discussion of factors that foster collaboration and offered the LEC a final opportunity to share any further thoughts about "things that you do or the group does to foster collaboration or help things along". The LEC replied,

> I mean in this whole process, in a way, I'm facilitating all of the conversations [laughs] but I'm not. Yeah, I'm setting up the opportunities for the conversations I guess is the way I would put it. That's my role. Making sure that everybody's voice is heard … making sure the conversations are fostered appropriately. I think it is making sure that everybody's had the chance of being heard, so if somebody been quiet and not participating in a conversation, call on them specifically or go around and ask or, 'Ok, let's go around and make sure everybody's got an opportunity to comment on this.' Um, um [pause] Just trying to, you know, if somebody is dominating the conversation, 'Ok that's great we got the idea and let me rephrase what I hear you say so you can kind of give some airspace to someone else.' So those are some of the things that come to mind. Um [pause] Oh, and just frankly it's just making sure people know why they are getting together, having a good agenda, and you have explained, and they have the documents, and they have all the information they need to do the work you're asking them to do.

The other two LECs who reported actions implemented by LECs to foster collaboration gave examples of actions they personally implement to express gratitude and "honor" participants for their personal contributions to the group. Both LECs also stated the potential for participants to get "lost in the group" and indicated they look for ways to mitigate this by providing avenues for participants to engage and contribute their input or personal skills and expertise. The first LEC talked about countering this by calling participants to check in before or between meetings. The

LEC also reported they provide opportunities for participation with eye contact and verbal requests for individuals' input during meetings. The LEC indicated these actions are part of their efforts to make people feel "… they matter and that their time is valuable…. They have to feel like they are getting something out of it".

The second LEC stated they try to express gratitude to individuals, as well as extending invitations for participants to be involved in ways that fit their interests. This LEC also stated,

> I think I try to honor the work each individual is doing because most of them are involved in different processes [both inside and outside the Lead Entity], and maybe as a representative for us…. So, you know, trying to be 'Thank you for doing that.' Saying thank you, giving a shout out, whether it is by email or at a meeting. Having them talk about what it is that they are doing, I think is really important. I don't always write as many thank you notes as I should.

This same LEC finds it important to allot time at the beginning of every meeting for everyone to share and update the group on salmon related projects they are working on outside of the Lead Entity, and calls it the "Fish Report". The LEC shared this not only allows participants personal space to share other work that is important to them, but has also given birth to partnerships and problem-solving sessions that tangibly effect other salmon recovery efforts.

One LEC shared observations of the committee members and project sponsors working collaboratively in ranking meetings. Other LECs shared observations of collaboration during ranking and scoring meetings, but these examples are reported in the sections on conflict and relationship building, as that was the context for the LEC reference. The current LEC was talking about the inevitably that the Lead Entity is not able to fund all of the projects of high quality and imminent need in the local watershed. The LEC reported their Lead Entity group has

responded to these situations with collaborative and creative problem-solving discussions, in which suggestions are made to decrease one project's cost, where possible, in order to free up funding for another project. In one instance, a project sponsor offered to pull their request for funding that year and re-apply the next year. The LEC shared the sponsor was willing to do this because they saw another project was more imminent, and the organization needed the funding to remain viable and active in their local salmon recovery community. The LEC stated their immense pride in the participants and shared they were personally gratified to be a part of an organization and process based on these types of collaborative actions. When the LEC shared this experience at a regional funding meeting, representatives of the oversight agency were "distrustful" and voiced concerns that this could be evidence the Lead Entity was not submitting the "best projects" for funding. The LEC instead felt this was an example of the Lead Entity participants seeing a "bigger picture", in which the viability of organizations active in the local watershed (i.e., the pool of sponsors capable of implementing habitat projects) is integral to local recovery efforts and strategies. The LEC stated,

> Of course these groups are going to work together and knowing that there is [*sic*] limited funds and you want the other organization, the alternative is the other organization goes away and shuts its doors because it has, you can't fund it. Often times it is a restoration and a conservation project. Different organizations have different expertise and you have to have both to actually have salmon recovery move forward, so, if you are sucking all of the money and the other person can't get anything, what good have you done? And, they see that. They see the big picture. They see more, they definitely are true and conscientious of their organization's mission and goals, but they are also cognizant of that bigger picture. And how we all work collaboratively to make salmon recovery

happen. Which I am exceptionally proud of, I think it is a phenomenal thing to have them out there supporting one another.

These observations indicate LEC and participant actions implemented to foster collaboration, or actions implemented to foster working together towards a common goal, are often actions that play a fundamental role in building relationships among Lead Entity participants. The LECs also appear to be a key agent for fostering collaboration, and this is likely due to their pivotal role as leaders and facilitators in the Lead Entity's processes.

7.2 Barriers to Collaboration

The LECs were asked to report observations of practical barriers to collaboration. The emergent themes found in LEC responses were: (1) lack of time and capacity; (2) geographic dispersion.

7.21 Lack of Time & Capacity

Three of the six LECs pointed to the lack of time and capacity as a barrier to collaboration. Two of the LECs referenced this issue in terms of their personal struggle to fulfill the roles and responsibilities required for the LEC position, and both LECs attributed a portion of the source of this barrier to a lack of funding associated with the absence of ESA listed salmon species in the freshwater portions of the Lead Entities' watersheds. The first LEC reported consistent decreases in funding forced a reduction in their work schedule to three days a week, and stated this has affected their ability to "coordinate all of the efforts and … to track all the pieces". The LEC went on to state, "It has been super hard to keep everything going and keep all the pieces that need to be included".

The second LEC also reported experiencing a lack of time to perform their basic job responsibilities, as well as engaging with Lead Entity participants. The second LEC stated they lacked the time to do the little things "… so that people do feel like they matter … and it is not because I don't care. It is just because there are so many other things that get pulled on". The LEC went on to list a myriad of reports and deliverables that consume their time and said,

> Geez! When do I actually get to work? How much … time am I spending on the phone or on emails? To be honest, so much of my job is just talking. It is just talking. It is communicating, making people feel like, 'I am here. Things are taken care of.' And, then there is all that other stuff that I still have to do.

This LEC's statements indicated they spent much of their time in a crisis mode, as evidenced by the following quote, "Like having a moment to *stop* putting out fires, *stop* responding to the 800 emails that come over the weekend, and actually *do* the big things on the list".

Both of these LECs made reference in their interviews to a lack of time and capacity to advocate for salmon recovery in their local communities. They expressed their lack of funding and time contributed to an inability to perform public outreach, represent the Lead Entity as an organization, cultivate partnerships, and pursue sustainable funding. The LECs' reports indicate the lack of time to engage in outreach and messaging in the community is a significant issue and competes with their strained capacity to perform the tasks associated with facilitating processes within the Lead Entity.

The third LEC who referenced time as a barrier spoke more to the issues surrounding availability of the Lead Entity's participants. The LEC stated, "The major issue is competing interests for people's time. There is a limited amount of capability, or capacity let's say, better

word, for people to be engaged". This LEC voiced their peers' concerns that the LECs themselves are "pulled in so many directions", but they went on to state,

> It is not just the LECs obviously, but the sponsors, and our major partners, and the governments, and the down-sizing of governments, and the increasing of workloads on all these people. That is what I would say is the major limitation. You can only ask people for so much before they shut down. So, you really have to be strategic in what you ask them to do.

7.22 Geographic Dispersion

Three of the six Lead Entities encompass large geographical areas and do not have a location that is central or easily accessible to all Lead Entity participants. The San Juan Islands are an example of this barrier. Due to ferry schedules, participants are required to devote the majority of a business day to attend one meeting. All three of the LECs whose Lead Entities experience this issue observed this geographic dispersal impacts the frequency and types of interactions at meetings, and one LEC stated has actually limited who can serve on the Lead Entity's committees. Another Lead Entity conducts many of their meetings via telephone and internet video conferences. In addition, this Lead Entity does not meet on a monthly basis. Rather, the LEC stated the only mandatory meetings are the ranking meetings, although site visits are highly encouraged. The LEC went on to report this meeting structure inhibits the extent to which participants can engage in one-on-one communication and interaction.

Two of the three LECs also referred to the geographical dispersal as a source of tension and potential conflict within the Lead Entity. Both LECs observed this tension manifesting in the form of participant concern regarding fairness in distribution of habitat project implementation, as well as meeting locations. For context, recovery strategies and funding

availability can limit distribution of habitat projects within a Lead Entity's boundaries to geographic areas identified to have the highest impact on habitat recovery efforts, and this restriction can be exacerbated in Lead Entities that encompass large areas and/or many watersheds. Both LECs shared their Lead Entity's ranking processes attempt to counter the effects of this unavoidable issue by ensuring citizens and organizations from each geographical region within their boundaries receives equal representation. These two LECs also indicated the above-mentioned issue of participants having to travel long distances for meetings was a source of tension that the Lead Entities address by circulating the meeting locations to varying locations within their boundaries.

The examples of geographical dispersion reported by these three LECs appear to create barriers to collaboration which are similar to the concerns and impacts listed in the above section on lack of available time and capacity. Both of these barriers are indicative of impacts such as limiting communication and interaction among participants, inhibiting participant ability to fully engage with the Lead Entity, and even limiting some participants from carrying out their roles and responsibilities within the Lead Entity. As such, these LECs' observations of barriers to collaboration are indirectly barriers to relationship building and group functioning as well. The section on relationships, reported at the end of this chapter, proposes that time spent interacting is an emergent theme that fosters relationship building, and the examples shared by these LECs presents the other side of that equation. Lack of time and capacity, much like geographical barriers, negatively impacts the frequency and quality of interactions participants have with each other. Furthermore, these barriers appear to have significant effects on LECs. LEC statements indicate their capacity is often directed at continuously working to mitigate these barriers, and this appears to further limit the LEC's ability to communicate and engage Lead Entity

participants and the local community. In general, these barriers seem to limit LECs' ability to successfully carry out their key roles in salmon recovery. Furthermore, the researcher argues group functioning is indirectly impacted by these issues as well. The Lead Entities cannot function efficiently when facilitators are unable to consistently manage basic tasks and participants are unable to fully contribute their skills and knowledge. Communication, cohesion, preventing and managing conflict, decision-making, and collaboration as a whole, are all likely impacted when facilitators and participants lack the time, personal capacity, and a meeting forum to fully engage each other and the Lead Entity's processes.

7.3 Conflict & Pathways to Resolution

The topic of conflict appeared to be uncomfortable for LECs to discuss on several occasions, as evidenced by a general reluctance to engage the topic, elaborate on examples, and/or increased requests for confidentiality. With that said, LECs were asked to share their observations of the context and causes of conflict occurring within Lead Entities, as well as how they personally manage conflict within the group. This section begins with two examples of conflict that provide insight to all three of these topics and introduces the roles of relationship building and impacts of relationships on conflict and conflict resolution. The section then reports the emergent themes found when LECs shared observations of the context and causes of conflict within the group and concludes with emergent themes in LEC reports of methods utilized to personally manage conflict within the Lead Entity.

Relationship building and the impacts of relationships on group functioning continue to be emergent themes in the data analysis, and these themes appear to play a significant role in conflict management. As such, these themes are referenced throughout the sections on conflict and conflict resolution. The effects of conflict on group functioning and processes also emerge

from LEC observations and appear to be largely related to the processes and outcomes of relationship building. Therefore, the analysis connects and draws the reader's attention to the interplay between occurrences of conflict, how conflict effects the group's overall functioning and outcomes, and the role of building relationships to overcome the effects of conflict on group functioning and outcomes.

7.31 Extended Examples of Conflict

Two of the six LECs shared examples of conflict within their Lead Entities and compelling observations of the role of relationship building in working through divisive situations. The first LEC's example of conflict is based on the process of building relationships, respect, and trust between TAG and CAC members, in order to improve the Lead Entity's ability to function effectively and cooperatively. The LEC reported that when they were hired communication among and between committees was "contentious", "disparate", and "distrustful". The LEC position had experienced high turnover, and the group was generally lacking cohesion. The LEC observed the TAG "came out with their elbows up" during the scoring and ranking process because they did not feel their technical expertise was being heard and considered. Simultaneously, the CAC members were "skeptical and hesitant to take the technical folks insight" because they felt their concerns and questions had not been considered in the TAG's scoring process.

In attempts to create better communication and group outcomes, the two committees combined themselves and ranked the projects together. The LEC described the process as such: both groups scored each project on both the technical and socioeconomic criteria, and then the LEC would show them the ranked list they had created. Together, the group would "have anywhere from a one to five hour discussion about how that [list] feels". The LEC reported the

committees were able to discuss "the nuances" of projects that are lost when looking at the mathematical list; therefore, it was in this group discussion that "… the nuance comes back into it. And that is where we have really great discussions and we move projects around. 'Okay, this one is imminent. This one could function as a phase project, we could fund a part of it this." The LEC shared the group was able to effectively create the ranked list together, and this process changed communication patterns among Lead Entity participants. These observations indicate a portion of the original source of conflict, which the LEC referred to as not feeling heard or having one's input taken into consideration, was resolved by putting everyone together and creating a platform for individuals to share their input, questions, and concerns.

Giving the committees the opportunity to express their perspectives was only part of the LEC's approach to creating a collaborative environment amongst the committees. The LEC reported simultaneously implementing opportunities to build relationships and respect between individuals, by getting them outside of normal meeting scenarios and personas so they could see each other as more than adversaries, but instead as people. The group took a celebratory trip in the fall to see projects completed in the summer and shared food at a potluck afterwards. At the December meeting, the LEC incorporated a Christmas celebration and presented a slide show to remind the committee members of the vast amount of work they have done with extremely limited funding. The LEC shared that sometimes the group gets "mired down" and feels they are not accomplishing enough. The LEC's presentation was a tangible reminder that in the 14 years the Lead Entity had been in existence, "a lot of work and a lot of amazing things have happened. To put that into perspective for them, that they are part of something that is really big and really important, I think has been helpful".

The LEC shared their reflections of the impacts of these combined efforts in the following statements,

> Just by those little incremental pieces, it made it more and more difficult I think for folks to come in with elbows out because they saw the other people, as [pause] people, and started to see them as friends too, not just, you know, they didn't come in with their meeting persona on all the time. It seemed to me … You take people outside. You sit them around a picnic table. You eat together. You can't not see them as more. It is impossible to not see them as more than this adversary. Even if you don't like them, there still has to be some [*sic*]. My goal was to get some respect, even if you don't like this person, you have to see them for more than a different agency or idea

The LEC went on to report the "transformation has been phenomenal! The group is cohesive. It didn't take very long. It was remarkable".

The second LEC reported an example of conflict characterized by disagreement among the members of the CAC, which is made up of representatives from local governments. The context for the conflict is complex and does not point to one cause. Instead, the conflict appeared to arise from tensions surrounding land use and opposition between local political, economic, and salmon recovery interests. In simplistic terms, one of the CAC members, which represent a local government, did not agree with the Lead Entity's stance on a particular salmon recovery project that was taking place within that member's jurisdiction. The LEC expressed the Lead Entity's position by stating, "We always refer to, 'What does our plan say?' And that is why we have to go back, 'The plan says this and we agreed to this. And that is factual information [science]'."

However, the LEC displayed understanding of the nuances of conflict, and the CAC participant's position, by stating,

> Well, it is complicated.… You have a consortium of people coming together, that have their interests at the table and … we all work together for what needs to happen for fish recovery. Unfortunately in this particular case, the [*sic* participant] involved decided, because of business community pressures that it wanted to do something different, and we disagreed.

The short-term outcome was a lack of consensus and moving forward with plans some felt were "the antithesis of what is good for salmon". The LEC shared the conflict reached a "level of intensity" that had never been experienced by the group. The long-term outcomes appear much better. The LEC reported participants on both sides of this polarized issue are developing plans of action to bring them closer to the needs and interests from the other side of the table. Furthermore, the LEC reported all of the participants have remained at the table and continue collaborative work on this project and in other capacities. It is the researcher's impression, from analyzing all of the LEC interviews, that this act of "remaining at the table" and continuing to work together is indicative of a continued cohesion and investment in the Lead Entity, which plays an integral role in conflict resolution and re-building relationships among participants.

When the LEC spoke of relationships, they expressed not only that this experience negatively affected relationships among participants, and would require actions to "mend" those relationships, but the LEC also attributed relationships with being a factor that carried the group through conflict. The LEC stated, "Sometimes it [the outcome] is not going to be completely to the satisfaction of everybody, but because of the trust and the relationships, at least the thing [the organization and/or the process] didn't come crashing down".

This LEC's observation of the conflict resolution process indicates continued engagement in a collaborative process is pertinent to ensuring the group's continued functioning. The LEC captures this sentiment when speaking about "mending" the relationships negatively affected by conflict,

> Boy, you just got to keep working at it. Nobody has left the table, which is a good thing. But, you gotta continue to discuss … The process is really important versus the outcomes. So we had a bad outcome, but the process is strong enough to maintain itself and to grow within that and figure out a better way to do it next time. That is collaboration. I am not gonna say things didn't get really tense and I didn't lose sleep over it, because I did. But, I felt we did everything we could do and everybody's cards were put on the table, through the process. And, I think people have learned to work together enough that they realize, 'Okay, at least we had the opportunity to put our two cents out there'.

These two examples demonstrate what appears to be an iterative process of building relationships among Lead Entity participants and observing the potential for those relationships to serve as a foundation for group decision-making and creating pathways to conflict resolution.

The first example speaks to the integral role relationship building plays in fostering collaboration, group cohesion, and establishing processes created collectively by participants. The second example speaks to the commitment participants have to the Lead Entity's goals and processes and how that commitment is fostered by trust and relationships built over time. This analysis does not claim relationship building always creates these outcomes; relationships and group functioning are not predictable variables that uniformly progress in a linear pattern. However, these examples, and others throughout this chapter, indicate relationship building can

create opportunities to foster collaboration and create pathways to conflict resolution. Further investigations of factors that maximize this potential within Lead Entities are recommended and should include an effective framework to distribute the study's findings for utilization by Lead Entity participants.

7.32 Context & Causes of Conflict

The LECs were asked to share their observations of the context and causes of conflict occurring within Lead Entities. The emergent themes found in LEC responses were: (1) prevalence of conflict occurring at the individual participant level; (2) prevalence of conflict surrounding decision-making processes.

7.32a *Conflict with Individual Participants*

Three of the six LECs explicitly commented on the prevalence and challenges of conflict focused around one or two individuals. The first LEC stated, "There are difficulties that arise surrounding, not so much roles or organizational, um, politics, although that stuff definitely happens. I think that's easier to work through. The more difficult and nuanced issues are personality conflicts". This LEC also reported experiences in which disgruntled participants reacted by sending "tomes" of long, counterproductive emails.

The second LEC reported an example of conflict in which an individual disagreed with the outcome of a scoring and ranking process and acted out in extreme agrievance, by sending explosive emails to individuals and organizations across the salmon recovery community. The LEC went on to share they personally communicated with the individual one-on-one, but were not able to resolve the conflict. Eventually the LEC began to wonder, "At what point does an individual's participation in the group become detrimental?" The LEC shared their perspective

that not only did that individual negatively affect the group, by perpetuating a source of conflict that "saps a lot of time and energy", but the LEC perceived the individual's actions to be a potential threat to the Lead Entity and salmon recovery by spreading unfactual information.

The third LEC who reported on the context of conflict involving individuals spoke more about individual project sponsors, rather than members of the Lead Entity's committees. The LEC related an observation that there can be instances in which a project sponsor tries to push their project for funding too hard. The LEC went on to share their personal experience that,

> It generally happens with younger men that are new to salmon restoration. And, they feel like they have, they are sooo passionate about their project, which is a great thing, but they are sooo passionate about their project and they are willing to step on people in order to get their project funded, not realizing that you are new to this game, you are laying the groundwork for your professional career. Be *really* careful not to mess it [*sic*], the problem is that sort of persona follows you. I think people forget that or, you know, I have only had it two times now and it is not fun. It sucks, pretty much sucks but, you know…

The LEC reported individual participants also engage in conflict-inducing behaviors such as, waiting until the scoring meeting to ask or say negative things about other projects, which serves to "cast doubt" about that project, or speaking out of turn and dominating conversations. The LEC reported that they respond to this type of behavior by talking to individuals prior to meetings and reminding them of their role and expectations of their behavior in the meeting. The LEC also reported they ask individuals to leave the room when they become too adversarial or threaten the ability of others to share opinions, questions, or concerns regarding projects in a safe environment.

Interestingly, it is noted two of these three examples included retaliation with counterproductive emails, when individuals were at the center of conflict. Perhaps this is a sign of our current technological age and speaks to the importance of limiting responses to sensitive issues to in-person communication. In addition, two LECs reported in their interviews that part of addressing conflict with individuals meant sometimes acknowledging people are not going to change their approach; they just are who they are. These LEC examples indicate conflict surrounding individuals appear more challenging to manage, as evidenced by the one LEC who stated such. When there is a conflict surrounding the group as a whole, there appear to be protocols the group can rely upon to provide guidance for the appropriate, and agreed upon, course of action and work through that issue together. When it is one individual, the onus appears to fall largely on the LEC to seek out and work with that person to manage the conflict. Section 7.34 ("The Role of LECs in Conflict Resolution") will show examples of this conclusion as well.

7.32b *Decision-Making Processes*

Four of the six LECs shared observations of conflict as it relates to decision-making processes. The first LEC observation was reported in the extended example above. In the example of the two committees who were unable to work collaboratively to create a final habitat project list, improved group functioning and outcomes appeared to begin when the group started making decisions together, rather than separately; had the opportunity to directly provide individual input; and also engaged each other outside of spaces reserved for decision-making.

The second LEC reported it was important to have a facilitator, during decision-making processes, who could maintain neutrality and, "… not be seen as steering it one way or the other. That would be dangerous". This LEC went on to relate their observations of a situation in which

the facilitator was "probably too close and too thin-skinned" and the outcome was that "the meeting did not go well". The LEC generally observed that when individuals are not able to "handle conflict well … you can tell it changes them and then they can shut down". The researcher claims this "shutdown" is likely accompanied by a breakdown in communication among participants and limits the group's ability to reach collaborative goals and outcomes.

The third LEC made the general observation that the "time of year" when scoring occurs tends to be when they receive more calls and complaints from participants. This LEC also shared observations that it could be challenging to communicate with participants questioning the Conflict of Interest policy. The LEC reported conflicts of interests arise, and are dealt with, in every grant round but there is always some "grey area" around the decisions about who can and cannot score projects due to their personal connection with a project. The LEC stated this is hard "for the black and white, concrete, linear people" and requires communication and sometimes "awkward conversations" to convey the requirements and reasoning to participants.

The fourth LEC shared an example of their CAC not being able to reach consensus on a final project ranking, and reported the group dealt with the differences of opinion by putting every option out on the table and working through the logistics of each one of them. The group had to conduct several votes, and was not able to reach full consensus, but the LEC felt working through those options and allowing everyone to be heard was important to the process. The LEC reported that this provided the opportunity for individuals to express their perspectives and allowed the group to work through issues together. This indicates, as in the longer examples above, that continued efforts to work together in the face of conflict can foster group cohesion and contribute to the participants' commitment to the process. This example also re-emphasizes the importance of allowing all participants to provide input and feel that input is being

considered. This LEC also reported their observations of the reason decision-making processes creates potential for conflict with the following statements:

> Yeah, I think where the disagreement occurs is what we alluded to earlier, it's because what we do is every year we put together a work plan. We spend a whole day, you know figuring out what that's going to be. That's where usually the disagreements occur, 'What are we going to concentrate on? What are we not? What are we going to do? What are we not?' Different ideas get hashed out on the table and [*sic*] have to figure out which one [*sic*] are going to go forward. So I think what happens is once we already have those marching orders, everybody's already agreed to those, so then it's a matter of parceling out the work.

All four of these LECs' examples concern decision-making processes in the context of scoring and ranking projects. The researcher argues this provides a narrow and simplistic report of the connections between decision-making and conflict within Lead Entities. The last LEC quote indicates any situation that requires the group to reach consensus on the development of a plan or process creates opportunity for conflict. It appears the common goal is to get everyone at the table to feel comfortable with and support that plan or process, and that is not always possible. But, once the decision has been made, and participants have their assigned roles and responsibilities to guide them, the opportunity for conflict decreases. These examples indicate that allowing the group to discuss the decision and providing opportunities for individual participants to contribute their input may foster group cohesion and individual commitment to the process and outcome, which also provides a platform for building relationships among participants.

7.33 Decision-Making & Relationships

Three of the six LECs explicitly stated there are times when participants do not agree with the final habitat project list. For some participants in the Lead Entity, this may be because the project they perceive to be of highest priority does not receive funding. In other situations, a committee member may not agree with or understand the decision that they cannot score a specific project, due to a perceived or real conflict of interest. However, the LEC examples indicated relationships among Lead Entity participants, and their commitment to the decision-making process that all participants have been a part of creating, is a significant factor for seeing beyond the ephemeral causes of a conflict and motivating participants to continue working together collaboratively. One LEC captured this idea with the following statements, "Usually there is one person who feels like it should be ranked differently". However, the LEC went on to point out, "they have never walked out of that room feeling that they couldn't live with the way it ended up". When asked how they knew this, the LEC responded that they knew because they always asked, and the participants have always come back. The LEC went on to express the role relationships play in mitigating this type of conflict,

> The relationship is more important than that project per se. To some degree, they see the good in whatever the project is, they disagree about the way it has ranked out or what have you, but they still believe in the process. They believe in the relationships they have built with their fellow stakeholders, with me. In order to enact salmon recovery, I think they believe in the bigger picture. The relationship is more important to them than that one piece.

7.34 The Role of LECs in Conflict Resolution

The data shows LECs play an integral role in addressing conflict within the group, and their approach can generally be characterized as active and hands-on. The themes that arose to describe this active engagement were: (1) LECs' responsibility to manage conflict; (2) LECs' intrinsic personality characteristics; (3) engaging participants in one on one interactions/addressing conflict by allowing individuals to feel heard; (4) proactively addressing conflict before it occurs. Examples of these themes were shared throughout the section on conflict and conflict resolution, but these are the responses given directly to questions regarding how LECs personally address conflict within the Lead Entity. In addition, the themes are reported separately, but LEC responses reveal many of these factors and actions are utilized in combination with each other.

7.34a *LECs Responsible for Managing Conflict*

Only one of the interviews lacks any mention of the LEC personally engaging in the process of creating pathways for conflict resolution. This LEC expressed that conflict management is built into the organization's processes, rather than relying on the LEC. The LEC referred to the Lead Entity's development of policies that lay out the roles and responsibilities of participants, in addition to the implementation of ground rules, which explicitly state behavioral expectations for participants. This LEC is also one of two LECs who do not facilitate committee meetings; therefore, it is not their responsibility to ensure these policies are being enacted.

Two of the four remaining LECs who do facilitate their committees explicitly stated it is their responsibility to facilitate the processes within the Lead Entity, and this includes conflict management. The first LEC was a self-described "holder" and "unbiased protector of the process". The LEC shared, "It is my responsibility to make sure the process is one that is set and

safe because it is everybody else's job in that room to advocate for their ideas, their project, … or whatever it is". This LEC made statements on several occasions to indicate the importance they placed on their responsibility to ensure the collaborative working environment is "safe", so participants are able to fulfill their own roles and responsibilities and air concerns about projects without "fear of attack". The LEC stated that even though the group has ground rules, much of the LEC response to the group is "adaptive", as the LEC is continuously gauging and responding to the participants' interactions and body language. "And, if someone is making them [participants] feel not safe, and unable to express their views, then it is my job to mitigate for that. Either [I] try to turn that person down, or if they can't be turned down, then I need to take them out [of the room]".

The second LEC shared it was their job to help facilitate communication between individual participants who cannot find "common ground". The LEC indicated this was part of their responsibility as a facilitator of the Lead Entity's overarching functions; therefore, they would act as a communication conduit between conflicted individuals in order to enable the Lead Entity to continue or complete a project or move their salmon recovery strategy forward.

It is also noted two of the LECs shared that there are times when they try to remain hands-off in conflict. The first LEC shared they had a personal history, outside of the Lead Entity, of becoming too involved with conflict resolution. The LEC stated, "If I saw conflict, I would jump in and … figure it out and fix it for people". As a result, the LEC now intentionally looks to individuals to work out their own conflict.

The second LEC shared their observation that there were times when attempts at conflict resolution had gone on too long.

> You have to know when to cut some stuff loose because some people want to beat a dead horse forever and then you are in danger of losing other people who think they have already beaten that poor horse and it is time to put him to bed.

7.34b *LECs' Intrinsic Abilities to Manage Conflict*

Three of the six LECs reported intrinsic personality traits that contributed to their ability to perceive and mange conflict and discomfort within the group. The first LEC described their self as "perceptive" and willing to seek out individuals and intentionally open lines of communication, when they "suspect something is up". This Lead Entity also reported they utilized their perceptual acuity to consistently gauge and respond to participants throughout meetings and decision-making processes. When discussing a lack of funding for habitat projects, the interviewer asked the LEC if they observed a potential "top-down pressure" to compete for funding for the best habitat projects among Lead Entities. The LEC's demeanor appeared to be somewhat surprised and they responded,

> I guess I have never felt pressure. If I felt pressure, then I don't know that I've felt pressure, so I guess it is possible. I don't know. I mean I am not, I tend not to see that kind of thing to some degree too. I am not a person, I don't create divisiveness. I like to create collaboration and people working together.

The interviewer responded, "So, you don't look for it [divisiveness]?" and the LEC responded, "No, I don't. No, I don't". These statements indicate the LEC may be more personally driven by perceptions and aspirations towards collaboration, rather than conflict.

The second LEC is a self-described "vibes watcher" who has a "knack, [or] natural ability to pick up things". The LEC went on to elaborate,

> Part of the reason I didn't want my back to the room here [during the interview] is that I am constantly picking up emotions from every person in this room … and that's what I do in my job and in this group [the Lead Entity]. I work really hard to develop personal relationships, with each person that will build trust between me and that individual….
>
> The next thing I do is try to develop a conduit between, or act as a conduit between myself and another individual when I see a place, when they overlap or an interest that they have, I try to bring them together. And, this is not just my [*sic*], this is who I am as, I mean that's what I do in everything.

This same LEC went on to state,

> I started in this career as a scientist. That is what drew me to look at environmental science, natural resources. I wanted to do research and numbers and field work and math.
>
> Where I am now, I am a communications person, and I feel like a caseworker or a therapist. I have no training, but I have a natural intuition [for] feeling what's going on with people.

The third LEC reported one of their personal skills as a facilitator was the ability to listen to an individual's input and "translate" that information in a way it could be understood by others. The LEC reported they utilize this skill to manage conflict among participants in order

> To communicate the stance or the position, or however you want to call it, the perception frequently of you know both sides and being able to communicate and staying, I think the other thing is trying to stay as neutral as possible you know, I think that is extremely helpful, at least that's the way this role, I've been trying to make it that.

7.34c *One-on-One Communication to Resolve Conflict and The Importance of Feeling Heard*

Three of the six LECs talked about the importance of meeting or talking with individuals one-on-one to address conflict. Two of these LECs shared that allowing participants to be heard was a significant part of diffusing the individual's concerns, and this was a foundation for their approach to one-on-one interactions. The first LEC advocates for engaging individuals outside of the meeting environment and usually to share an alcoholic beverage. This LEC shared their observation that both of these factors make individuals "more approachable" and "less defensive". However, the LEC went on to report they usually do not bring up the issues of concern because,

> Often times that is not the goal. I am not there, especially in those situations, to reprimand. Often times, if I can make them feel heard, then all of that goes away. They feel like they are not being heard. If I can give them two hours of my time, in which they can proselytize to *me*, they feel better. That is all they wanted. They just wanted somebody to listen.

The LEC went on to re-emphasize the importance of allowing participants to be heard and then serving as a conduit to facilitate the individual's concerns to the group as a whole.

> They will bring up their frustrations or they will talk about [it]. A lot of times it is just rapport building with me. I really think, I *really* think that people need to feel heard. That is why I try to make a safe environment for them to be heard in the meeting, but if they are still fighting it. If they just need to be heard, and, if I can give them a couple hours of my time and they feel better, and they have a chance to vent whatever that frustration is, then when we come back to that meeting, *I* can in some way…I will represent it as my own or I will just say, 'Hey, here is an idea. What do you think about

> this?' to the whole group, or say 'What if we changed it in this manner? What do you guys think about that?'

This LEC's report is similar to the two LECs above, who reported utilizing their intrinsic ability to serve as a communication conduit between conflicting individuals. However, this LEC was able to channel the individual's concerns to the Lead Entity as a whole and create the opportunity for the group to discuss the issue without putting the individual on the spot. The next LEC's observation builds on the importance of this approach, when it is appropriate to the situation.

The second LEC talked about meeting one-on-one to build trust and relationships that serve as a foundation for collaboration, as well as conflict management. The LEC observed that a one-on-one meeting is the approach they start with because it can be "safer" for individuals. The LEC stated,

> In general, I think a lot of people feel safer when they are dealing with one person as opposed to ten other people. It gets a little chaotic when you get a lot of people, so if you are trying to build a little bit of trust, it's best to start in a safe environment.

The third LEC also observed the importance of providing opportunities to be heard, as a form of conflict management. The LEC said, "How do I deal with conflict? I think you have to listen to people. They have to have a chance to be heard. You try to do it in a respectful way". This LEC went on to say making space for individuals to share with the group, "is a good thing because otherwise it is the elephant in the living room".

7.34d *LEC's Proactively Managing for Conflict*

The term proactive is coined by the researcher, not the participants, and is being utilized to describe actions taken by the LEC to address potential causes of conflict before they arise. One LEC shared proactive actions such as striving to be "approachable" and "responsive" to

participants so they feel comfortable sharing their concerns with the LEC. The LEC goes a step beyond striving to exude approachability and explicitly invites participants to call, email, or otherwise contact the LEC if there is with any concerns, questions, or if there is "something bugging them". The LEC stated they also strive to make the time prior to ranking meetings to call all of the participants, check in with them, and see if they have any questions or concerns. From those conversations with participants, the LEC stated they strive to serve as conduit to address those questions and concerns with the group at large. The LEC also reported addressing conflict proactively by going over the process and expectations for ranking meetings immediately prior to ranking meetings,

> … and remind them of what their roles are. Remind them of what behavior I expect. Remind them of the consequences of not adhering to that behavior. Remind them of what the outcome needs to be. At the end of the day, our decision is final, it is set, you know, done. They all know this, but I spend the time reminding everybody of those things, right at that very meeting, so that it is fresh. They all know right then, because I don't want questions about that kind of stuff. There are gonna be questions about whatever wonky thing that I didn't anticipate. There always is. But, at least I can try to prep, get everybody in the right mindset of how it is going to work.

7.4 Conflict Conclusion

Conflict is a natural part of group functioning, and the data shows there are many contexts and situations which create opportunity for conflict, as well as many pathways to resolution. The data indicates communication between participants and commitment to the group's processes and goals are essential to avoid, approach, or recover from conflict.

Furthermore, the LECs appear to play an integral role in managing conflict. As facilitators, these individuals continuously assess and manage sources of conflict.

Several LECs referenced sources and examples of conflict within the larger salmon recovery community, and while these are outside the scope of this study's data analysis, the researcher's impression is the same as above. It is challenging to bring together diverse groups and individuals and find a common path forward, especially when the stakes are high and the outcomes are formative to larger processes and goals. However, it is key to make continued opportunities and platforms for individuals to interact and communicate. This appears to build the relationships, which foster the group's ability to create the necessary processes and propel themselves forward, towards their goals.

When conflict arises, participants must be willing to continue to come back to the table, and this motivation appears to be derived from a commitment to the group's process and outcomes. Therefore, it appears there is a natural cycle in the group's functioning in which relationships are built to foster commitment to the group's process and outcomes. When conflict occurs, as the researcher claims it naturally does, it is partially that commitment to the process and those relationships that keep participants invested and willing to come back to the table.

Conflict is observed to be a major factor influencing collaboration within Lead Entities; therefore, these groups would benefit from further investigation and understanding of how this naturally occurring phenomenon affects collaboration. Follow-up interviews with LECs should include discussion of the effects of conflict on group functioning and relationships among participants. The data analysis should focus on commonalities among LECs' observations in order to: (1) identify the nature and extent of negative effects of conflict on relationships; (2) direct and indirect effects on group functioning, and most importantly; (3) what LECs observed

to re-build relationships and/or maintain collaboration. Future studies should incorporate methods such as participant observation and interviews with multiple Lead Entity participants to better achieve an analysis of the ways in which conflict and conflict resolution influence collaboration within Lead Entities.

7.5 Relationships

The term 'relationship' is utilized in this data analysis to describe emergent interactions between and among Lead Entity participants. At a macro-level, LEC interviews reveal two themes for relationships: (1) observations of factors involved in relationship building; (2) observations of influences relationships have on collaboration. The following data analysis further reduces these themes down to sub-themes. The sub-themes that arose to describe relationship building were: (1) LECs personal efforts to foster relationship building; (2) quantity of time participants spent interacting. Sub-themes pertaining to the influences relationships have on collaboration include: (1) relationships creating bias in collaborative processes; (2) reciprocal interactions between relationships and collaboration.

Relationships is referred to as an emergent theme because this was not one of the topics included in the interview script. In other words, when asked to share observations regarding collaboration and conflict, the LECs volunteered responses that directly and indirectly referenced relationship building and the influences relationships have on collaboration. This also means many of the reports below are found in previous sections; however, this section reports LEC responses when prompted to elaborate on their voluntary statements regarding relationships. In addition, the LEC responses frequently make an organic connection between relationship building and its influences on collaboration. The result manifests in the following data analysis as examples within each section that contain references to both themes.

7.51 Relationship Building

7.51a *LEC Efforts to Foster Relationship Building*

Three of the six LECs shared actions and processes they have personally implemented to aid in the development of relationships with or among Lead Entity participants. The LECs' intentions in building relationships were always to positively affect group functioning; therefore, the two themes are reported in tandem in this section. The first LEC's actions are reported extensively in the sections on collaboration [7.13] and conflict [7.31]. This LEC shared the process and outcomes of bringing their committees together to score and rank habitat projects. The LEC also reported implementing opportunities for participants to interact outside the normal meeting setting and in celebration of their group accomplishments. The LEC reported these actions were integral to fostering the development of relationships among Lead Entity participants. The LEC went further to share their observation that these newly formed relationships played a significant role in improving the group's cohesion, communication, and outcomes of the group's collaborative work.

The second LEC's actions are also reported in the sections on conflict and conflict resolution [7.32; 7.34a; 7.34b]. This LEC reported acting as a communication conduit between participants to resolve conflict and that these efforts were pertinent to moving habitat projects and group processes forward. The LEC also reported in those statements that they try to serve as a conduit when they see a place where participants' interests may overlap, and the LEC strives to connect individuals based on those common interests. This LEC's efforts implicitly indicate their goal was to build relationships among participants by creating awareness of and connection between participant common interests.

The third LEC's actions are also reported in the section on fostering collaboration [7.13]. The LEC talked about the actions they implement to foster their personal relationships with participants. The LEC shared their feeling that it was important "to honor the work that each individual is doing". The LEC went on to elaborate they thought everyone in the organization tries to find where they fit in and their expertise can be most useful. The LEC reported acting as a conduit by informing participants of opportunities to be actively engaged in the Lead Entity or the larger salmon recovery community via avenues synergistic with their personal interests and expertise. From the LEC,

> It is not only trying to evolve the organization, but you also want individuals to feel engaged and to put their energies and whatever skills they have, if they have more of a technical background, they might be able to help in that way. If they can bring parties together, that is a good thing, that they can maybe get some folks engaged.

When participants are active in these capacities, the LEC shared they further honor their participation by showing gratitude, saying or sending a thank you card, and making space to acknowledge those efforts to the group at large.

7.51b *Time Spent Working Together*

Five of the six LECs reported examples of the influence of "time spent working together" on building relationships. The LECs reported time working together influenced individual participants' level of engagement, interactions between participants, the commitment participants exhibited towards group processes and outcomes, and the effects these interactions and engagement have on collaboration within the Lead Entity. These references vary in the context of conversation topic. When these topics arose, some LECs were talking about term lengths of committee members, conflict and conflict resolution, or long-term interactions fostering group

cohesion and improvement upon collaborative outcomes. The common thread is the LEC observation that time spent working together was integral to building relationships and forming a platform on which to carry out collaborative processes within the Lead Entity.

The first LEC observed that "caring and nurturing" of relationships was a part of building "mutual understanding and respect across the table … for the value that all of those stakeholders bring". When asked to elaborate on how relationships were nurtured the LEC responded, "I think time at the table. It is the whole 'Many cups of coffee'. I think that shared time of working together and working through issues is really good. I think that is huge". These statements indicate relationships contribute to participants being able to understand and respect the contributions of other participants. Furthermore, the LEC indicates these relationships are built by working together through the group's processes, as well as through conflict. The data analysis concludes this example is indicative of the potential for relationships to foster respect, trust, and cohesion among participants.

The same LEC talked about the Lead Entity's evolution over time and stated, "I think a lot of the kinks have gotten worked out and people feel more comfortable. Even just with the folks who are on our committees, by working year-in and year-out, there is trust. It takes awhile to build those relationships and have that comfort". Finally, this LEC also talked about a process they personally implemented to build relationships within the group, the "Fish Report", which was mentioned in the fostering collaboration section [7.13]. The "Fish Report" is a time held at the beginning of every meeting, when anyone can share about projects they are working on. The LEC reported a lot of time can be spent in these interactions and can have far-reaching effects on creating solutions and partnerships for projects. The LEC stated, "That [the Fish Report] is one of those things where the benefits cannot be understated. On its face, it doesn't sound all that

important, but [we are] creating that forum, where there is trust and there is relationship buildup and sharing".

The second LEC made general statements about their organization's structure and purpose and said,

> …our process is about relationships…. Building and maintaining relationships. Every day I build relationships with people…. You partner and you work together, and if you don't, you are not going to get to salmon recovery, and so the relationship building and maintenance is huge!

When asked to elaborate on how those relationships are built the LEC responded,

> People are given a formal role, and the conversations occur, and we work towards consensus…. To build relationships, we are working with people and their staff on a regular basis and helping them write grants, implement those grants, advising them on the next step forward, how to make the project better. All of that is relationship building.

The LEC went on to share that when interests are polarized among participants, or entities in the community, relationship building requires, "reaching out to people" and continuously communicating with all of the individuals and entities the Lead Entity works with. This LEC's statements describing relationship building alludes to processes and actions which are ongoing over time. In the words of the LEC, "My job is like herding cats across the barn floor. You constantly have to be working with people. If you don't, you are not going to get anywhere".

The remaining three LECs reported that time spent working together allowed participants to develop a certain degree of trust or respect for their peers' contributions. The first LEC talked about participants getting to know each other's "strengths and weaknesses and where you can trust them or take their word for it, or follow their lead". The second LEC talked about the

interactions between the Lead Entity, as a whole, and a sub-committee who annually updates the Lead Entity's project evaluation criteria. The LEC stated the larger group trusted that sub-committee and, while they reviewed the updated criteria, rarely made changes to the recommendations. When asked what fosters that trust, the LEC responded, "It is because the group in general has worked with each other enough … they've been around each other enough … and they understand how individuals work … [and] what skill sets are at the table and who is good at doing different pieces". The interviewer asked the LEC if the TAG exhibited the same amount of trust and respect for each other and the LEC responded,

> Yes absolutely, and I think it's because we have those conversations. Now that I think about [*sic*], they know the person sitting across from them and they're like, 'Oh yeah, this person has, you know, this kind of knowledge, expertise, or this person I trust that they know what they are talking about, or I trust their opinion about points'.

The third LEC talked about conflict amongst their committees and shared that time spent working together, rather than separately allowed participants to start developing respect for the questions being asked and the individuals asking those questions. The LEC explained these observations by stating, "If you know a person, if you have been working with an individual, you kind of, 'Okay, this person is going to ask good questions or is going to bring about a point I had not considered". The LEC went on to share that because participants meet and interact every month, "you develop a rapport".

These LECs' observations are indicative of inherent opportunities the collaborative process creates for bringing together diverse individuals and entities, building personal and professional relationships among participants, and allowing that framework to foster the

placement and capitalization of individual skills and knowledge for the benefit of the overall group outcome, as well as the participants.

These LEC reports indicate time spent working together fostered the creation of attributes such as trust, respect, communication, commitment/investment, and group cohesion, and it is these attributes which this study claims contribute to relationship building. Furthermore, these attributes are being developed at multiple levels, such as the individual level, among participants, among the group as a whole, and towards the group's collaborative goals.

The next section continues to build on these conclusions, as the case is made to identify relationships as a foundation for collaboration. As such, the attributes that emerge and appear formative to relationship building, are also formative to the individual and group's ability to collaboratively create and implement processes that facilitate the achievement of collaborative outcomes.

7.52 Relationships Influencing Collaboration

7.52a *Relationships Creating Bias in Collaborative Processes*

Three of the six LECs shared that there are concerns about the extent to which relationships among Lead Entity participants may inappropriately influence the process of developing habitat project lists. To varying extents, all three examples appear to be driven by external perceptions of relationships among Lead Entity participants. The first two LEC examples appear to be influenced, to some extent, by their organizational structures.

The first two LECs gave examples relating to the implementation of term limits for committee members. For context, none of the seven Lead Entities implements term limits for TAG members, and six of the seven Lead Entities do not currently implement term limits for CAC members. However, one of the six Lead Entities' CAC received a mandate to enforce term

limits this year (2013), and one of the six Lead Entities is discussing the development of term limits for a portion of their CAC members.

The first Lead Entity's CAC is an organization which operates separately from the Lead Entity and is an active participant in local watershed-based resource conservation and protection. The local municipal government recently imposed term limits on government advisory committees, which will effectively lead to the loss of over half this CAC's long-term committee members all at once. The LEC shared there is a common, yet sensitive, perception the term limits are targeting the organization serving as the Lead Entity's CAC because their general stance on natural resource issues has often ran counter to local political and economic interests. On several occasions in the interview, the LEC shared their personal concern for the impacts this action will have on the Lead Entity's structure and function, as well as local resource conservation and salmon recovery efforts in general. The LEC reported losing over half of the long-term members in such a short amount of time will greatly impact the institutional knowledge and general functioning of the Lead Entity. The LEC indicated the group was currently cohesive and highly functioning and the LEC had concerns about the extent to which their personal capacity would be drained by addressing the unknowns of re-building relationships, processes, and institutional knowledge within the group.

The second Lead Entity is structured such that a committee of local government representatives oversees the operations of the larger organization that houses the Lead Entity. While these representatives have no term limits themselves, they are discussing imposing term limits on the *citizens* appointed to the CAC. They are not currently considering term limits for the project sponsors represented on this CAC.

This LEC was asked how long participants work on the committees together and they responded,

> It has become [a] very important question recently because most people believe we know folks' strengths and weaknesses and where you can trust them or take their word for it or follow their lead or what have you. If you know somebody, you have worked with them for many years. But, the other side of that coin is that if you are not a part of that system and you are external to that system, but you are trusting that is happening … there can be perceived questions that relationships are driving decisions more than facts and salmon. So there is a balance there.

The LEC went on to share the concern within their Lead Entity has been largely instigated by one individual who is new on the board of directors. Again, the LEC statements displayed understanding of the new participant's perspective by stating,

> They are coming new into a process and they do not necessarily trust it or understand it. So they are saying, 'Well, those are all the same people. Is that a good ole boy network? Can you get rid of some of that perceived relationship thing? It's all about relationships. It's not about Salmon. Well, let's talk about term limits'.

The LEC goes on to comment on the nuances of bringing on new participants and how the discussion of term limits is part of the constant organizational evolution and relationship building process. The LEC stated,

> It turns out this is all a constant set of relationship building … where you have an elected board, who are from very different political and value sets, across a very wide geographic region, who are constantly being termed out or voted out and replaced and new people coming in. It is constantly about bringing people back up to speed and getting them

> comfortable and making tweaks to the process where you need to, to make sure it is comfortable.

Interestingly, these last two quotes indicate relationships can be perceived as functioning to inappropriately influence the process, but the process of building relationships is also a pathway to address those concerns. The LEC also observed the board's recognition of the importance of institutional memory. To minimize potential negative impacts caused by removing long standing members of the CAC ideas are being exchanged, such as staggered term limits, so a large group of individuals are not lost at one time, creating a mentoring program to bring new members into the CAC before others are termed out, or designating term limits which require members sit out one term limit, rather than be excluded indefinitely.

Only in the first example did the LEC state they, and their CAC counterparts, felt term limits were imposed to limit the ability of the group to advocate for natural resource conservation or protection. However, both of these LECs directly acknowledged committee member turn over and evolution of organizational structures and processes serves a positive function in the group. The first LEC stated, with respect to their TAG members,

> You know we have had some newer people join, which I think is good. Just having a set group forever is not a good thing. There are some core people who have been here almost from the beginning, if not from the beginning, and then…. Someone came to me just this year and said, 'I would be really interested in participating in that effort', and I was like, 'That is great!' because … now would be a good time to try to bring someone new in without totally disrupting the group.

The second LEC spoke to the positive function of undergoing organizational evolution in general by relating,

> You can get pretty comfortable in something and stop learning, and evolving, and addressing, and being proactive about issues. You do that at your own risk, so I think it is always good to have a fundamental review of what you are doing, to let the pressure out before it becomes a time bomb. A ticking bomb so to speak.

Considering these multiple perspectives, it appears term limits could serve a positive role, by providing external assurance that the Lead Entity's processes are driven by the best decisions for salmon recovery, rather than relationships or comfortable and familiar processes. However, when processes and committee membership does evolve, it appears those actions should remain balanced with the need to maintain group stability, by leaving a core group of relationships intact, and retaining institutional knowledge and memory within the organization.

The third LEC who reported concerns regarding the potential for relationships to introduce bias into the Lead Entity processes spoke directly to the potential influence of relationships on the process of scoring projects. The LEC acknowledged that some Lead Entities may see the mathematical scores as an initial place from which to begin discussing the nuances of projects and the logic individual participants used in their scoring; however, the LEC expressed a preference for maintaining the anonymity of individual's scores and allowing the outcome of the mathematical scoring to determine the project ranking recommended to the CAC. The LEC's shared several reasons for this preference. First and foremost, the Lead Entity as a whole, not just the LEC, developed this process because they felt it was more "transparent" and "defensible" if viewed or questioned by someone outside of the Lead Entity's process. The LEC statements indicated they felt more comfortable knowing the "State", "auditors", or individuals

not familiar with the field of restoration science would be able to clearly see the Lead Entity's process and could not misinterpret the outcomes of the scored project list as a function of the Lead Entity participants appearing "too cozy". The LEC stated, "It depends on perception. It depends on who is looking at it, from what seat do you sit". The LEC went on to share the observation that power dynamics within the communities that make up Lead Entities can influence the discussion portions of scoring processes. Finally, the LEC shared their perspective that there is a potential for unfairness if projects are being discussed and/or moved on the ranked list and "you do not have everybody at the table".

7.52b *Reciprocal Interactions Between Relationships & Collaboration*

The data analysis performed throughout this chapter found that relationships among Lead Entity participants play an integral role in collaboration. Therefore, the analysis focused on identifying and reporting the attributes that build relationships and how these attributes appear to influence collaboration. From this analysis, a pattern appears that indicates relationships and collaboration are reciprocally bound to each other. Furthermore, both depend on and reinforce the attributes that emerged and were prescribed as functioning to build relationships.

For context and recall, these attributes consist of: trust in participant contributions [7.51b] and group processes [7.31; 7.33; 7.51a]; respect for the value participants contribute [7.13; 7.31; 7.51b]; productive and open communication between and among participants [7.11; 7.13; 7.21; 7.22; 7.31; 7.32a], which implies participants interact one-on-one [7.21, 7.22], in a "safe" environment [7.11; 7.34a; 7.51b] , and feel they are being "heard" and their contributions matter [7.31; 7.32a; 7.32b; 7.34c; 7.51b]; investment in collaborative processes and relationships, which keeps participants "at the table" and contributing to the common goal, not

only in the circumstance of conflict [7.31; 7.32b; 7.33; 7.51b] but also when participants are stretched in their capacity and ability to engage [7.21; 7.22].

It is this analysis' over-arching claim that the data indicates a reciprocal interaction, or feedback loop, is occurring between relationships and collaboration, and this interaction depends on these attributes for a platform. For example, as participants develop respect for each other's input, relationship building is occurring (emergent interactions between participants). That relationship then fosters collaboration (working together towards a common goal) between the participants. The act of working together then reinforces their relationship and the respect participants exhibit towards each other. This is a simplified example that is not meant to be representative of all the factors and attributes that are present in complex relationships and collaborative processes. It is merely an example to express the data's finding that: as relationships are built on the platform of these attributes, collaboration is fostered. That collaboration reinforces the attributes that in turn continue to build relationships. Those relationships in turn reinforce the attributes that continue to foster collaboration.

This reciprocal interaction between relationships and collaboration is further evidenced by LEC observations that, among the general factors observed to influence collaboration, factors that facilitate relationship building are the same factors observed to facilitate collaboration and group processes [7.11; 7.13; 7.31; 7.32a; 7.33; 7.34c; 7.51b]. Factors that inhibit or damage relationships are the same factors observed to limit collaboration and carrying out group processes [7.21; 7.22; 7.31; 7.32a].

This reciprocal interaction is significant because it is indicative of the broad range of effects relationship building and relationships have on collaboration within the Lead Entity. This finding reveals that relationships are both formative to collaborative processes and are outcomes

of collaborative processes within the Lead Entity. Therefore, to better understand how Lead Entities can foster collaboration, manage conflict, and create effective decision-making processes, this analysis argues that the relationships among Lead Entity participants should be the starting point for investigation and the focal point of efforts to implement change.

When considered through this lens, relationships emerge as a theme that links, solidifies, and forms a context for previous themes found within the collaboration, conflict, and conflict resolution analyses. The extensive observations LECs reported about relationships, combined with its ability to encompass the topical factors in the data shows relationships is an emergent and dynamic theme in this study.

7.6 Conclusion

The data from LEC interviews indicates there are a broad range of themes found among the topical factors (fostering collaboration, barriers to collaboration, conflict, and conflict resolution) LECs observed as influencing collaboration within Lead Entities. Some of these themes were observed to influence only a portion of the Lead Entities; however, the data indicates the majority are common among Lead Entities, and they all appear to effect group functioning in similar ways. This chapter conclusion reports the variations and similarities found among themes in LEC responses, and it focuses on the similar themes that, when considered together, create emergent and dynamic themes that appear to play key roles in fostering or inhibiting collaboration within Lead Entities.

7.61 Sources & Examples of Variation in Themes

As stated above, the data indicates some factors are observed to influence collaboration for only a portion of the Lead Entities. The variation is likely due to differences among the

physical and social landscapes Lead Entities exist within and relates back to conclusions drawn in Chapters 5 and 6 ("Lead Entity Descriptions" and "Collaboration in Practice"). In the 15 years since their establishment, Lead Entities have organized themselves structurally and functionally according to the needs and interests of salmon recovery efforts and communities at the watershed level. As these watersheds vary, so do the organizational structures and collaborative processes among Lead Entities, and this appears to manifest once again variations amongst the themes identified in LEC observations of factors which influence collaboration.

Both of the themes found within observed barriers to collaboration are indicative of this connection between Lead Entities and features unique to their local watersheds [7.21; 7.22]. Two of the three LECs who reported lack of time and capacity as a practical barrier for collaboration were referencing their own lack of time and capacity to fully engage the roles and responsibilities of the LEC position. Both of these LECs are employed part-time and both indicated the lack of available funding for full-time employment was directly related to the absence of ESA listed salmon populations in the freshwater systems within their watersheds. Due to this absence of listed species, these Lead Entities receive less funding for both the LEC position and salmon habitat projects. The effects manifest in the LEC reports that they, in turn, lack the time and capacity to perform mandatory tasks in addition to the roles and responsibilities they have observed to be crucial to effectively facilitating the Lead Entity.

Three of the six LECs reported their Lead Entities were geographically dispersed over large watersheds without easily accessible or central locations. The LECs reported this barrier had a direct influence on the make-up of their committees, limited the frequency of committees meeting in person and interacting one-on-one, and two of the LECs reported this barrier has been a source of tension between local citizens and the Lead Entity.

The data analysis deliberately avoids connecting details of local physical and social landscapes with most of the observations of context and causes for conflict to maintain confidentiality. However, it is likely there are occasions when opposing political and cultural interests at the community level influence processes within the Lead Entity and contribute to opportunities for conflict. One of the extended examples of conflict [7.31] provided an illustration of the potential for local political and economic interests to oppose salmon habitat recovery interests. The LEC reported the context for this conflict was tension surrounding land use, and it seems this could be a common issue for Lead Entities throughout the rapidly developing Puget Sound region. And, it is likely the contexts for conflict within Lead Entities will differ according to the land use patterns and tensions found within their watershed(s).

7.62 Sources & Examples of Commonality in Themes

The data indicates the majority of themes found among factors LECs observe influencing collaboration are common among Lead Entities and effect group functioning in similar ways. This similarity is likely driven by the common organizational structure, purpose, and functions that define Lead Entities and relates back to conclusions drawn in Chapter 4 ("Lead Entities Defined"). Lead Entities, at a fundamental level, are structured and operate according to a common framework, which is provided by the Salmon Recovery Act (HB 2496) and the SRFB grant round. The similarity found in the data analysis is also implicit to the subject of study, collaboration. Collaboration is working together towards a common goal and Lead Entities share the same over-arching goal: to create and implement processes that will effectively lead to the development and implementation of a robust habitat project list. The study also acknowledges the data collected from within the Lead Entity is from the singular perspective of the LEC. While other participants may report additional factors that influence collaboration, the viewpoint

utilized to capture this data is unique to the individuals who facilitate the Lead Entity through their group processes and toward their collaborative goals. As such, the LECs themselves are an emergent commonality among Lead Entity reports of factors observed to influence collaboration.

7.62a *LECs As a Factor Observed to Influence Collaboration*

The data shows Lead Entity Coordinators hold a key position in fostering collaboration among participants, mitigating barriers to collaboration, managing conflict within the group, as well as building and maintaining relationships among Lead Entity participants. Even though the collaborative environment Lead Entities appear to be characterized by is based on equalization of power and contributions among participants, there is still need for a leader capable of building bridges for communication and collaboration among participants and between committees. The LECs appear to fill this role, as evidenced by the consistency and extent to which their purpose and actions serve to facilitate the basic and over-arching functions and collaborative processes within Lead Entities.

Conflict management and relationship building appear to be two processes key to collaboration and general Lead Entity functioning. Both are challenging and both appear to rely heavily on LECs for facilitation. The data indicates conflict within Lead Entities is almost entirely managed by LECs [7.31-7.4]. There appear to be instances where protocols and policies are in place to provide guidance and promote self-regulation for the group. However, the LECs are often responsible for communicating and/or enforcing these policies. Furthermore, the LECs report far more instances of conflict that are nuanced and require one individual who is designated as responsible and/or is intrinsically capable of actively addressing conflict within the group. It is in the section on conflict resolution that the intrinsic traits common among LECs is most obvious. These individuals appear to be effective communicators, display perceptual

acuity, and are able to maintain neutrality in situations where emotion or ideologies are obstructing communication and consensus.

The LECs also appear to play a significant role in relationship building among Lead Entity participants, as well as between themselves and participants. The LECs' reports indicate many of their actions and intentions are aimed at building trust and respect, facilitating communication, creating opportunities for positive interactions, and mitigating factors that inhibit relationships and collaboration. Furthermore, the LECs appear to perform these functions consciously and sometimes through the investment of a significant amount of planning and effort.

The LECs appear to foster collaboration at its most basic level with seemingly innocuous efforts such as planning for comfortable meeting spaces, baking pies, taking a hostile participant out for beers and a chat, reminding participants of their accomplishments, and sending out the occasional thank you card. In addition to these fundamental activities, LECs are managing the vital, over-arching processes that facilitate the Lead Entity's functions. The LECs facilitate the meetings, manage the administrative side of the Lead Entity, and work with the regional and state level salmon recovery communities. Again, even though the whole group is participating and contributing, it is the LEC who creates and manages many of the collaborative linkages among participants and between the Lead Entity and the salmon recovery community at large.

Every participant at the Lead Entity table has their own role, responsibilities, and a set of expectations attached to those functions. Even though it is not a formalized role, the LECs appear to be assigned to the position of facilitator of collaboration, and everything described here falls within their responsibilities and expectations. Hence, the data analysis concludes LECs are their own emergent theme in this study of factors that influence collaboration.

7.62b *Time & Relationships Influencing Collaboration in Tandem*

The LEC observations indicated the time participants spend working together contributes to the creation of a range of individual and group effects, which in turn lead to building relationships and facilitating collaboration within the Lead Entity [7.51b]. This is evidenced by the LEC reports throughout this chapter that provide examples of how time spent working together facilitated the creation of trust, respect, commitment/investment, and group cohesion. Furthermore, these attributes are developed at multiple levels, such as among individuals, among the group as a whole, and towards the group's collaborative goals. As these actions and variables are established within the group, relationships are built and collaborative processes are carried out on these fundamental foundations. Conversely, when LECs reported observations of barriers to collaboration, these centered largely on factors which created a lack of time, capacity, and ability to work together in person.

Time spent working together and relationships also appear to be connected within the concerns about relationships inappropriately biasing group processes and outcomes. Two of the three LECs who reported observations of this concern indicated there were external (outside of the Lead Entity) perceptions that relationships among participants may inappropriately influence the decision-making processes utilized to choose habitat projects, rather than relying solely on project merit. In one of these Lead Entities, the individual who expressed those concerns was new to the Lead Entity processes, and the LEC's statements indicated it was the lack of time working with the Lead Entity that led to a lack of trust for the process. Furthermore, the LEC indicated the solution for this issue lies in the time required for the new participant to build relationships within and familiarity with the Lead Entity, as well as time for the Lead Entity to

make necessary adjustments so that participant can build trust and comfort with Lead Entity's decision-making processes.

This connection between time spent working together and relationship building is significant because they appear to work in tandem to create a platform for collaboration. The LECs' observations indicate it takes "time at the table" and "many cups of coffee" to build relationships. Evidence from the LEC interviews, combined with the data analysis conclusions [7.33; 7.51b; 7.52b] indicate those relationships are formative and give rise to collaboration within the Lead Entity, and collaboration in turn reinforces relationships. Therefore, it appears that time spent working together, relationships, and collaboration are all working in tandem to reinforce each other. In other words, it appears that if you remove any one of these factors, the others do not come to fruition. Conversely, it appears if you replace positive attributes with negative attributes (lack of time, trust, respect, communication, cohesion, investment, or collaboration), the positive outcomes associated with time spent working together, relationships, and collaboration become limited or inhibited.

The data analysis of the LECs' interviews concludes there is a broad range of emergent themes acting in conjunction with each other to influence collaboration within Lead Entities. Any one of the basic topical factors or themes provides insight into group functioning and collaboration, but it is in the patterns and themes that emerge to link and bring higher meaning to all of these components where the most can be learned about collaboration within Lead Entities. This analysis concludes those patterns lie in the continued connection between organizational functions and local landscapes, key roles played by the Lead Entities' facilitators, and the fundamental relationships among Lead Entity participants. These appear to be the hinge pins

that link the other factors together. When studying collaboration within Lead Entities, or working to build collaboration within a Leady Entity, these are the places to start.

Chapter 8: Conclusions

As we enter the 21st century and endeavor to manage for the cadre of complex problems effecting ecological and social systems, it becomes increasingly evident that we need to continue building our capacity to develop and implement collaborative NRM approaches. Lead Entities provide an example of the potential collaborative NRM has to bring together a variation of participants at the local level, to develop and implement locally relevant resource management plans, while linking those efforts to a larger, coordinated framework. The current case study explored how these organizations fit into that larger framework, how they are organized in reflection of the local ecological and social systems, and what the collaborative process looks like within a small group of collaborative NRM practitioners. The following is a synopsis of key conclusions that can contribute to the progression of collaborative NRM, the larger Pacific salmon recovery effort, and the evolution of collaboration within Lead Entities.

8.1 Organizational Evolution

Lead Entities, along with other collaboratively functioning organizations and larger inter-organizational collaborative NRM frameworks, must be capable of adaptation and organizational evolution. The Lead Entities demonstrated this organizational evolution in response to several external and internal influences. Externally, the ecological systems Lead Entities work within are constantly changing, and the organizations have to adapt their strategies to choose where and how to implement management decisions to maximize restoration benefits. Externally, the social frameworks are also constantly changing and effecting policy, funding, and inter-organizational linkages. Lead Entities depend on the ability of their participants to make collaborative

decisions that determine how the organization will respond and adapt to the effects of these changes.

Internally, Lead Entities are proactively undergoing self-evaluations that result in organizational evolution. Several LECs reported the Lead Entity formally convenes on an annual basis to ask what is working and what is not working in the group's structure and processes. From there, participants have to make collaborative decisions on what to change, and how to change it, in order to remain effective and viable organizations. Lead Entities also appear to have the opportunity to evolve as new participants join the organization. These participants bring new value in terms of their perspectives, skill sets, or forms of expertise, and the collaborative process can adjust to make space to incorporate these added resources. Conversely, one LEC talked about the Lead Entity having to undergo an organizational evolution to accommodate the lack of trust or comfort new participants have for current collaborative processes.

As the source from the Governor's Salmon Recovery Office shared in Chapter 4 ("Lead Entities Defined"), Lead Entities, and the salmon recovery community as a whole, are consistently becoming more "sophisticated" in their processes and functioning. This means that as Lead Entities operate over time, they have the opportunity to iteratively build on the experiences and knowledge held within the group to inform their decisions on how to act or react to situations that call for organizational evolution.

8.2 Building a Platform for Collaboration

There is not a simple and straightforward formula for building and maintaining collaboration within Lead Entities. What can be said is that multitudes of factors are constantly interacting to influence larger processes such as decision-making and relationship building.

When individual participants, and the group as a whole, are engaging in these larger, more conceptual processes, they are working together collaboratively.

Relationships among participants appear to be a *key* component of collaborative group functioning within Lead Entities. These organizations have been in existence for 14 years, the mean term of employment for the six LECs in this study is 10.5 years, and many LECs reported, there are participants who have served on their committees since the organization's establishment. The value of the time these individuals have spent working together cannot be overstated. They have built mutual trust and respect for each other and the processes they have developed together. There is an astounding amount of institutional memory that enables the participants to speak a common language, share a common history, and appreciate the long-term goals the group has achieved. This contributes to participants being invested in the group, in the process, and the outcomes. This is evidenced by LECs who talked about participants not always reaching consensus, agreeing with a project ranking list, or supporting the collective decision. However, the LECs reported that the individuals "stayed at the table" and "saw the bigger picture". The LECs reported that in spite of differences of opinion or disagreement with outcomes, the participants' actions showed that the processes they had been a part of developing and the relationships they had built with fellow participants, were more important than the ephemeral conflict or difference of opinion.

The researcher would also like to respond to claims that relationships can introduce bias into decision-making processes. These claims were reported in previous sections [6.43; 7.52], and related to concerns about relationships among participants driving decision-making processes, rather than decisions grounded in scientific data. While the points raised in these LEC reports are based on legitimate concerns and merit further research, this study shows that

relationships form the bridge to be able to communicate the information needed to make decisions that are scientifically sound and relevant to the needs of local ecological and social systems. Furthermore, this conclusion shows that investing in relationships is an integral component of engaging in collaborative natural resource management.

8.3 Case Study Limitations & Recommendations

By choosing a target population and a formal methodology, all studies are bound in the data that can be collected and the conclusions that can be drawn about a given topic. A more in-depth exploration and understanding of collaboration, as it is occurring both within Lead Entities and the over-arching Puget Sound salmon recovery effort, would benefit from continued research that augments the current participant population and methodologies utilized.

Future studies would benefit from interviewing other participants within the Lead Entities to gather multiple perspectives of the factors that influence collaboration. This would likely shed more light on the roles that other participants play in areas that this study found to be dominated by LEC actions (i.e., fostering collaboration and addressing conflict). In addition, "participant observations", in which the researcher formally observes the group's functioning, are recommended to achieve a more accurate analysis of the ways in which conflict, conflict resolution, and decision-making processes influence collaboration with Lead Entities.

The current study could be built upon by conducting much needed follow-up interviews with LECs. This is referred to as "in-depth qualitative interviewing". This methodology allows the researcher to delve deeper into the data collected by conducting a second round of interviews that focus on exploring the emergent themes in the data, as well as topics identified as needing further clarification. Follow-up interviews for this study would focus on decision-making processes, conflict and conflict resolution, and relationships.

8.31 Decision-Making

The interview discussions on decision-making largely focused on the process of scoring and ranking habitat projects. To build a more robust understanding of decision-making processes, and the effects of various decision-making methods on collaborative outcomes, follow-up interviews would inquire to other processes that rely on group decision-making to create a collaborative outcome.

The LEC interviews indicated both dialogue and numerical scoring are utilized to make decisions about habitat project lists. However, the interviews contained virtually no discussion of the processes the CACs engage in when they decide on the final ranking list. Furthermore, a deeper examination is needed to ascertain how dialogue-based decision-making methods proceed, the content of these discussions, and observed effects of this approach on group functioning. A deeper investigation of the *concerns* surrounding dialogue-based methods is needed as well. The researcher also suggests examining why and how the Lead Entity developed processes to utilize dialogue-based and/or numerical scoring methods to shape and inform decisions.

8.32 Conflict

Conflict is not only observed by LECs to be a major factor influencing collaboration, but it is also widely referenced in current literature on collaborative NRM. To understand how we can effectively build our capacity to develop and implement collaborative processes among NRM stakeholders, we must build our knowledge and capacity to manage conflict. Follow-up interviews with LECs should include discussion of the effects of conflict on group functioning and the relationships among participants. An analysis of this data should focus on commonalities among LECs' observations in order to: (1) identify the nature and extent of

negative effects of conflict on relationships; (2) identify direct and indirect effects of conflict on group functioning; (3) identify what LECs observed to re-build relationships and/or maintain collaboration in the wake of conflict.

8.33 Relationships

As the key theme that arose to account for the ability to build and maintain collaboration within Lead Entities, relationships would be a major point of focus in follow-up interviews. Further inquiry into decision-making and conflict topics would focus on determining the effects these processes have on relationships, as already indicated. In addition, LECs would be directly asked: (1) what factors they observe to enable relationship building; (2) what roles relationships among participants play in specific group processes, such as decision-making, conflict, and conflict resolution; (3) if and how relationships negatively affect processes or group functioning. The interviews would also include a discussion of the emergent attributes the data analysis identified as fostering relationship building and collaboration (i.e., trust, respect, communication, participant commitment & investment) and focus on finding out how LECs think these attributes are developed and what role they play in collaboration.

8.4 Taking It to the Next Level

Throughout the course of this study, individuals throughout the Puget Sound salmon recovery community have expressed great interest, curiosity, and willingness to further investigations of "collaboration". It is the researcher's impression participants in the salmon recovery community know they are practicing collaborative NRM, but this terminology is not widely known or utilized. Rather, what participants do know, at a fundamental level, is that the

processes utilized to develop and implement strategies for salmon recovery are dependent on the ability to work together collaboratively.

Like other practitioners in this field, the coordinated, collaborative framework developed to address salmon recovery in the Puget Sound was largely built through the ingenuity and best efforts of the local participants. It is a place-based and case-specific attempt to break down old paradigms and build new collaborative pathways capable of achieving salmon recovery. Therefore, there is not always a clear direction on how to proactively evolve and identify the actions needed to address gaps in the current collaborative framework. To be fair, as the literature review and data analysis indicates, collaborative NRM requires a substantial investment of funding and capacity, and the salmon recovery effort is currently struggling to garner enough of those resources to achieve the implementation of salmon recovery strategies and the PSSRP in general. However, the findings of this study argue that by building collaborative capacity participants are better equipped to develop solutions to sustainable funding issues.

To address these issues, and others that form gaps in the current collaborative framework, the following initiatives are strongly recommended as actions that are needed to build our capacity to function collaboratively. It is also recommended they are implemented on a regional and/or statewide scale.

(1) Continue to conduct social science research, such as the current study, to assess the basic functions and effects of collaboration within and among organizations. Where there are collaborative successes, such as the Nisqually Delta Restoration, determine how and why they occurred. Where there are collaborative gaps, such as between the management of Habitat, Harvest, & Hatchery management approaches, take the collaborative leap and

address the issues proactively, with the findings supplied by continued research and the principles that are fundamental to the field of collaborative NRM.

(2) Provide high-quality training to participants in key collaborative positions. The LEC interviews, and informal interactions with participants in the salmon recovery community, indicate there are not trainings opportunities available. One LEC named four types of training they felt they would benefit from immensely:

> Trainings that would be really helpful for me are: [counted them off] 1) non-violent communication. I think is important for everybody that's dealing with this because there are so many contentious issues that come up, so that's number one, 2) facilitation training is really important 3) I think team building training would be really, really useful. And, then maybe a consensus training as well. So, those are four that I can pull right out of my head, right now.

These LEC recommendations speak to the challenges all collaborative NRM practitioners are faced with and show that more value should be placed in, and resources contributed to, building our capacity to effectively facilitate collaborative processes within and among organizations.

(3) Create an accessible forum for individuals in leadership roles to engage each other and share the collaborative challenges and successes they are experiencing in the organizations and communities. One option for structuring this forum is to mimic the Lead Entity that engages in "fish reports". The LEC who implements this strategy within their Lead Entity reported a wealth of benefits for group functioning, shared learning, cultivating partnerships and opportunities for problem-solving discussions.

The LECs can be very isolated in the collaborative NRM community. Three of the six LECs have no additional staff to reflect or collaborate with, and two of the LECs shared that when LECs do come together there is not time or a formal arena to simply share, "what is working and what is not working" and the "nitty, gritty stuff because we are always working on the big stuff". To support LECs in their vital roles, we must formally recognize that creating opportunities to build collaborative capacity *is* the "big stuff" behind the success of salmon recovery, at the local and state-level.

These recommendations speak directly to the need for a paradigm shift that recognizes the vital role collaborative relationships play in NRM and salmon recovery. We need to recognize, and respond to, the reality that effective NRM outcomes are not only defined by natural and physical sciences but our ability to work together collaboratively.

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Appendix A

2013 Lead Entity Committee Members
(As of April 2013)

Hood Canal Coordinating Council Lead Entity

Citizen's Advisory Committee

Vern Rutter, chair
Mason County Citizen

Phil Best
Kitsap County Citizen

Allen Davis
Clallam County Citizen

Margo Devries
Jefferson County Citizen

Rebecca Mars
Kitsap County Citizen

Steve Rankin
Clallam County Citizen

Tom Springer
Mason County Citizen

Richard Wojt
Jefferson County Citizen

Technical Advisory Group

Evan Bauder
Mason Conservation District

Richard Brocksmith
Hood Canal Coordinating Council

Luke Cherney
Hood Canal Coordinating Council

Technical Advisory Group (cont.)

Alex Gouley
Skokomish Tribe

Mendy Harlow
Hood Canal Salmon Enhancement Group

Randy Johnson
Jamestown S'Klallam Tribe

Pat McCullough
ESA, Inc.

Marc McHenry
U.S. Forest Service

Jed Moore
Long Live The Kings

Doris Small
Washington Department
of Fish and Wildlife

Carrie Cook-Tabor
U.S. Fish and Wildlife Service

Micah Wait
Wild Fish Conservancy

Joy Waltermire
Long Live The Kings

Jody Walters
National Marine Fisheries Service

Nisqually River Salmon Recovery Lead Entity

Citizen's Advisory Committee (Nisqually River Council)

Ron Averill
Lewis County

Bryan Bowden
Mount Rainier National Park

Bob Burkle
Washington Department
of Fish and Wildlife

Roger Bush
Pierce County

Dennis Carlson
Washington Department
of Natural Resources

Mark Clark
Washington Conservation
Commission

Steve Craig
Washington Department
of Ecology

Greg Ettl
University of Washington

Pat Fetterly
Cities of Eatonville, Roy, and Yelm

David Hymel
Citizen

Cynthia Iyall
Nisqually Indian Tribe

Deborah Johnston
Fort Lewis

Citizen's Advisory Committee (cont.)

Eric Lewis
Washington State Parks
and Recreation Commission

Diane Oberquell
Thurston County

Steve Pruit
Citizen

Robert Smith
Citizen

Jean Takekawa
Nisqually National Wildlife Refuge

Karen Thomson
Gifford Pinchot National Forest

Debbie Young
City of Tacoma

Technical Advisory Group

Kim Bredensteiner
Nisqually Land Trust

Rich Carlson
U.S. Fish and Wildlife Service

Brian Combs
South Puget Sound
Salmon Enhancement Group

Nicole Hill
Nisqually Land Trust

Sayre Hodgson
Nisqually Indian Tribe

Nisqually River Salmon Recovery Lead Entity (cont.)

Technical Advisory Group (cont.)

Tom Kantz
Pierce County

Renee Mitchell
Pierce Conservation District

Adam Sant
South Puget Sound
Salmon Enhancement Group

Doris Small
Washington Department
of Fish and Wildlife

Mark Swartout
Thurston County

Kathy Whalen
Thurston Conservation District

North Olympic Peninsula Lead Entity for Salmon

Citizen's Advisory Committee

Andy Brastad
Clallam County

Scott Chitwood
Jamestown S'Klallam Tribe

Phil DeCillis
Citizen

Scott Johns
City of Port Angeles

Stephanie Martin
Makah Tribe

Steve Rankin
Citizen

Tom Riepe
Citizen

Larry Ward
Elwha Klallam Tribe

Technical Advisory Group

Rebecca Benjamin
North Olympic Salmon Coalition

Michael Blanton
Washington Department
of Fish and Wildlife

Chris Byrnes
Washington Department
of Fish and Wildlife

Technical Advisory Group (cont.)

John Cambalik
Strait Ecosystem Recovery Network

Kim Clark
Makah Tribe

Pat Crain
Olympic National Park

Duane Fagergren
Puget Sound Partnership

Michele d'Hemecourt
North Olympic Land Trust

Ken Hobson
Citizen

Joe Holtrop
Clallam Conservation District

Randy Johnson
Jamestown S'Klallam Tribe

Cathy Lear
Clallam County

Tracey Martin
Citizen

Mike McHenry
Elwha Klallam Tribe

Ray Moses
Elwha Klallam Tribe

San Juan County Community Development Lead Entity

Citizen's Advisory Committee (Marine Resources Committee)

Laura Arnold
Citizen

John Aschoff
Citizen

Rene Beliveau
San Juan County

Barbara Bentley
Citizen

Gregg Dietzman
Citizen
Owner of White Point Systems

Michael Durland
Owner of Boatworks

Johannes Krieger
Town of Friday Harbor
Owner of Crystal Seas Kayaking

David Lloyd
Citizen

Barabara Marrett
Port of Friday Harbor

Kit Rawson
Tulalip Tribes

Steve Revella
Puget Sound Anglers

Ken Sebens
University of Washington's
Friday Harbor Labs

Citizen's Advisory Committee (cont.)

Jim Slocomb
Live-Aboard Boater

Jonathan White
Boater
Owner of White Construction

Tina Whitman
Friends of the San Juans

Technical Advisory Group

Alan Chapman
Lummi Tribe

Ray Glaze
Northwest Marine Technology

Gene Helfman
Professor Emeritus

Robert Naiman
University Professor

Judy Meyer
University Research Professor

Kit Rawson
Tulalip Tribe

Chuck Schietinger
Teacher

Kimbal Sundberg
Retired Habitat Biologist

Robert Warinner
Washington Department
of Fish and Wildlife

Green, Duwamish, and Central Puget Sound Watershed (WRIA 9) Lead Entity

Citizen's Advisory Committee (Watershed Ecosystem Forum)

Marlla Mhoon, * co-chair
City of Covington

Bill Peloza, * co-chair
City of Auburn

Chris Anderson
City of Auburn

Al Barrie
Mid Sound Fisheries Enhancement Group

Clark Brant*
City of Normandy Park

Ruth Clark*
City of Burien

Richard Conlin*
City of Seattle

Dow Constantine*
King County

Jay Covington
City of Renton

Tom Dean
Vashon/Maury Island Community Council

Rick Forschler*
City of SeaTac

Dave Garland
Washington Department of Ecology

Noel Gilbrough
Mid Sound Fisheries Enhancement Group

Citizen's Advisory Committee (cont.)

Mikhaila Gonzales
Save Habitat & Diversity of Wetlands

Tom Gut
City of SeaTac

Garrett Huffman
Master Builders Association

Linda Johnson*
City of Maple Valley

Scott Jones
City of Algona

Charles Keller
The Boeing Company

Bill Knutsen
King Conservation District

Kirk Lakey
Washington Department
of Fish and Wildlife

Mike Mactutis
City of Kent

Joe McDermott*
King County

Joan McGilton*
City of Burien

Chris McMeen
City of Tacoma

Paul Meyer
Port of Seattle

Green, Duwamish, and Central Puget Sound Watershed (WRIA 9) Lead Entity (cont.)

Citizen's Advisory Committee (cont.)

Ken Miller
City of Federal Way

Aaron Nix
City of Black Diamond

Joan Nolan
Washington Department of Ecology

Jamie Perry*
City of Kent

Max Prinsen
Save Habitat & Diversity of Wetlands

James Rasmussen
Green/Duwamish Watershed Alliance

Cindy Rathbone
Washington Department
of Natural Resources

Dennis Robertson*
City of Tukwila

Jessica Saavedra
King Conservation District

Susan Crowley Saffery
City of Seattle

Ron Straka
City of Renton

Gordon Thomson
U.S. Army Corps of Engineers

Derrick Toba
Washington Department
of Natural Resources

Citizen's Advisory Committee (cont.)

Greg Volkhardt
City of Tacoma

Marion Yoshino*
City of Normandy Park

* Denotes Elected Officials

Technical Advisory Group

Kirk Lakey
Washington Department
of Fish and Wildlife

Joan Nolan
Washington Department of Ecology

Tyler Patterson
City of Tacoma

WRIA 13 Salmon Habitat Recovery Committee Lead Entity

Citizen's Advisory Committee

Paul Allen
Thurston County

Michael Burnham
Thurston Regional Planning Council

Rich Carlson
U.S. Fish and Wildlife Service

Diane Cooper
Taylor Shellfish

Warren Dawes
Citizen

Caitlin Guthrie
Capitol Land Trust

Rick Hirschberg
Citizen

Erin Keith
City of Lacey

Jeanne Kinney
Thurston County

Chris Maun
Thurston County Stream Team

Steven Morrison
Citizen

Allison Osterberg
Thurston County

Sue Patnude
Deschutes Estuary Restoration Team

Patricia Pyle
Olympia Stream Team

Citizen's Advisory Committee (cont.)

Joe Roush
City of Olympia

Bob Simmons
Washington State University
Mason County Extension

Alex Smith
Port of Olympia

Debbie Smith
City of Tumwater

Veena Tabbutt
Thurston Regional Planning Council

Lydia Wagner
Washington Department of Ecology

Ann Welz
Trust for Public Land

Barb Wood
Thurston County

Michele Zukerberg
Washington Department
of Natural Resources

Technical Advisory Group

Margie Bigelow
Washington Department
of Fish and Wildlife

Andy Fritz
Clover Park Technical College

Jamie Glasgow
Wild Fish Conservancy

WRIA 13 Salmon Habitat Recovery Committee Lead Entity (cont.)

Technical Advisory Group (cont.)

Leonard Machut
Washington Department
of Fish and Wildlife

Larry Phillips
Washington Department
of Fish and Wildlife

Laurence Reeves
Capitol Land Trust

Adam Sant
South Puget Sound
Salmon Enhancement Group

Doris Small
Washington Department
of Fish and Wildlife

Scott Steltzner
Squaxin Island Tribe

Michelle Stevie
City of Olympia
Olympia Stream Team

Charles Toal
Washington Department of Ecology

Cindy Wilson
Thurston County

WRIA 14 Salmon Habitat Recovery Committee Lead Entity

Citizen's Advisory Committee

Bill Burrows
Mason Conservation District

Rich Carlson
U.S. Fish and Wildlife Service

Diane Cooper
Taylor Shellfish

Jason Dose
City of Shelton

Jeremy Graham
Mason County

Caitlin Guthrie
Capitol Land Trust

Jim Irving
Citizen

Jeanne Kinney
Thurston County

Gerry Ring-Erickson
Citizen

Bob Simmons
Washington State University
Mason County Extension

Lydia Wagner
Washington Department of Ecology

Ann Welz
Trust for Public Land

Bill Worth
Citizen

Michele Zukerberg
Washington Department
of Natural Resources

Technical Advisory Group

Evan Bauder
Mason Conservation District

Margie Bigelow
Washington Department
of Fish and Wildlife

Brian Combs
South Puget Sound
Salmon Enhancement Group

Jamie Glasgow
Wild Fish Conservancy

Laurence Reeves
Capitol Land Trust

Gloria Rogers
Washington Department
of Fish and Wildlife

Doris Small
Washington Department
of Fish and Wildlife

Scott Steltzner
Squaxin Island Tribe

Charles Toal
Washington Department of Ecology

Sarah Zaniewski
Squaxin Island Tribe

Appendix B

WRIA 13's 2013 Habitat Project Scoresheet

Applicant	Project Title
Reviewer	Date

Category	**Criteria for Evaluating Project's Benefit**	**Score**
Action and Areas	Is the project identified on the three-year-work program? For saltwater projects, are they located within a high priority area for either protection or restoration, according to the project selection tool? (Points 1-10)	
Scientific	Is there a direct and tangible benefit to salmon? (Points 1-10)	
Feasibility	Can the project as it is outlined, accomplish the stated objectives? Does the sponsor have the necessary expertise in this area to accomplish the project objectives? (Points 1-10)	
Species	Does project have a multi-species approach, with emphasis on protecting healthy stocks, i.e. chum, and restoring declining stocks, i.e. Coho? Is there documented fish use in the project area? (Points 1-10)	
Life History	Does the project address an important life history stage or habitat type that limits the productivity of the salmonid species in the area and/or the project addresses multiple life history requirements? (Points 1-5)	
Cost	In your experience, is the project cost relatively low when compared to the predicted gains? Is this project a good investment of grant dollars? (Points 1-5)	
	BENEFIT TOTAL:	

Category	Criteria for Evaluating Project's Certainty	Score
Scope	Is the scope of work appropriate to meet the projects goals and objectives? (Points 1-5)	
Approach	Is the proposed method of implementation consistent with proven scientific methods? If the project is implementing a new approach, does it have an adaptive management plan? Will it be an effective demonstration project? (Points 1-5)	
Sequence	Does the project address habitat features in the appropriate order? (i.e. Is there a blocking culvert downstream of the proposed culvert removal?) (Points 1-5)	
Threat	Is habitat threatened if project does not proceed, either from development in the case of acquisition or from sedimentation in the case of bank stabilization or culvert removal, for example? (Points 1-5)	
Stewardship	What will happen once the project is completed? Who is responsible for watering the plantings, determining if the culvert is still passable or ensuring the property remains intact, for example? (Points 1-5)	
Landowner	Are the landowners aware and willing to have work performed on their property? (Points 1-5)	
Implementation	Does the sponsor have a track record of implementing beneficial project's? If funded, will project proceed to implementation with few or no known constraints? (Points 1-5)	
	CERTAINTY TOTAL:	

Category	Criteria for Evaluating Community Involvement	Score
Partnerships	Does the project combine expertise from other groups and/or agencies? Do these partnerships pave the way for future projects? Does the proposal engage community groups, businesses and/or landowners as project partners? (Points 1-5)	
Location	Does the project take place in a difficult to reach area (landowners traditionally unwilling to perform projects) or with a partner that is under-represented in habitat efforts? (Points 1-5)	
Expertise	Is the project sponsor able to implement the intent of the project? (Points 1-5)	
Education	Does the project allow for education of the public regarding salmon issues? Will the sponsor highlight the results of the project with the surrounding community? (Points 1-5)	
	COMMUNITY TOTAL:	

PROJECT TOTAL SCORE:	/105