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UMI
RE-MAPPING TRANSBORDER ENVIRONMENTAL GOVERNANCE:
SOVEREIGN TERRITORY AND
THE PACIFIC SALMON FISHERY

Jackson Tyler Zimmerman

A Dissertation Submitted in Partial Fulfillment of the Requirements for the degree of

Doctor of Philosophy

University of Washington

2001

Department of Geography
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ABSTRACT

Re-mapping Transborder Environmental Governance:
Sovereign Territory
and the Pacific Salmon Fishery

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Increasingly common conflicts over transboundary natural resources in a world characterized by growing interdependency raise important questions about the sovereignty of states and governance based on territoriality. The so-called “Salmon Wars” provide an ideal laboratory for the study of these geopolitical organizing principles. The “Salmon Wars” are comprised of a complex set of disputes among stakeholders in the U.S. states of Alaska, Washington, and Oregon and the Canadian province of British Columbia over the conservation and equitable distribution of diminishing wild Pacific salmon stocks. The environmental geography of the salmon has been deeply divided and fragmented by artificial territorial boundaries, resulting in a ‘spatial mismatch’ between the mobile, transborder resource and the agencies and institutions charged with managing that resource. This study first documents and then interprets the theoretical implications of transborder initiatives undertaken by nongovernmental organizations in response to the continued decline of salmon populations caused, in part, by the spatial mismatch. Special attention is paid to the activities of previously marginalized groups who have either been excluded from, or
underrepresented in, policy-making processes, including indigenous peoples, small-scale family and community fishing interests and environmentalists.

This research suggests that transborder efforts to improve the management and conservation of salmon are significantly limited by the political framework of territorial sovereignty that shapes the landscape of world governance. It thus supports the scholarship that suggests that sovereign territorial states, and the borders that define and encapsulate them, remain relevant in the geopolitics of the environment. Nevertheless, concrete action and a respatialized geographical imagination of resource management are beginning to pose a challenge to the traditional notions of sovereignty and territorially-based control of resources as new mappings, initiatives and networks that transcend borders encourage the transference of authority to entities other than the state. Territoriality is still a cornerstone of geopolitical authority, but it is becoming more multifaceted and complex.
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There are two final people whom I wish to acknowledge here. You know who you are, pretty much. I love you both, today and always.
DEDICATION

This dissertation is dedicated to my Dad. I am proud and lucky to be your son. And to Lo, for making our family complete.
CHAPTER 1: SALMON, POLITICS AND GEOGRAPHY

Introduction

On July 19th, 1997 near Prince Rupert B.C., a flotilla of 130 Canadian fishing boats blockaded the U.S. ferry Malaspina on its way to Ketchikan Alaska and prevented it from departing for 3 days. The protest involved up to 300 vessels at its height and stemmed from the frustration felt by the fishermen over the three-year impasse in negotiations regarding the Pacific Salmon Treaty between the U.S. and Canada. (The News Tribune, Sunday July 20, 1997). The action was specifically aimed at forcing the Canadian and American governments to respond to claims that U.S. fishermen from Alaska were being permitted to catch too many sockeye heading for Canada's Fraser River to spawn. Bob Rezansoff, then President of the British Columbia Fishing Vessel Owners Association, called it “fish piracy on the high seas” (The Columbian, July 22, 1997). The Canadian fishermen believed that it was their right, based on the precepts of territorially-based sovereignty that govern access to and control over resources, to harvest the majority of the salmon who had begun their lives in the main stem and tributaries of the Fraser.

This was but one of many events in the series of conflicts in what has come to be called the “Salmon Wars.” The so-called ‘Wars’ have been comprised of a complex set of disputes among stakeholders in the U.S. states of Alaska, Washington, Oregon (and to a much lesser extent, California and Idaho) and the Canadian province of British Columbia, both Native and non-Native, over the conservation and equitable distribution of shared and rapidly diminishing salmon stocks. This definition, however, belies the complexity and the critical nature of the issue.

The Salmon Wars, one among many problems of transboundary natural resource management found around the world, derive a considerable amount of their intransigence from the mismatch between the border-crossing spatiality of the resource and the geographically bounded spatiality of the agencies and institutions charged with managing that resource. This ‘spatial mismatch,’ as I have chosen to call it, develops as a result of
the international system of states that divides the globe into mutually exclusive, sovereign territories. States have exclusive rights of access to and control of resources within territorial borders, but this system of sovereignty breaks down when those resources fail to respect arbitrary political borders. This often results in the spatialized mismanagement of the resource, which contributes to its degradation and/or depletion. In this way, the discourse of territorial sovereignty, inscribed on the landscape in the form of territorial borders, threatens important resources such as the Pacific Salmon and as such, demands the attention of researchers and scholars.

The contributions that I make with this research effort are both empirical and theoretical. Empirically, my project is a contextualized and historicized interrogation of how state sovereignty has been inscribed on the landscape through processes of territorialization and the results of that inscription. More specifically, I describe the complex historical geography of the development of the salmon problem. I then introduce and analyze the transborder work of nongovernmental organizations attempting to address the problem during the last decade and explain both its recent expansion, the limits to its growth and its political impact. This empirical work is useful to nongovernmental organizations looking for strategies by which to achieve their international or regional goals. It may allow marginalized groups to identify areas of slippage in state control of natural resources, thus provided a roadmap to obtaining a greater voice in environmental politics.

The empirical contribution, however, is secondary and largely a means to an end, as it is the theoretical applications that are of the most interest to me. Examining the nature and extent of cross-border initiatives related to salmon management and conservation is aimed at building a better understanding of the ways that these activities may be destabilizing, transgressing or otherwise reconfiguring sovereign political space and also seeks to uncover the limits to this move. The purpose of addressing these issues is to advance the related theories in geography, international relations and similar fields
that speak to the contemporary character of states, borders, and the concept of sovereign territory more generally.

This study is an extension of the debates concerning the contemporary political power and relevance of the nation-state. I follow Agnew (1994) in my unwillingness to simply join in this debate as it seems apparent that the state will continue to play a central role in world politics into the foreseeable future (see Chapter 2). Rather, I wish to advance beyond the simplistic question of whether states will remain viable political entities in light of increasing glocalization (Swyngedouw 1997), interdependency, time-space compression (Harvey 1990) and other trends. I believe, along with geographers such as O'Tuathail, Taylor and Paasi, that the key question to ask now is not whether the sovereign state is growing stronger or inevitably losing relevance. It is much more important to focus on the ways and the extent to which the state, borders and sovereign territory are changing and the implications of those changes for social power, governance and geopolitics. Geographers have suggested the need for this focus in relationship to many topics including economics, technology and security, and some empirical work has been done in these areas. But as several scholars have pointed out (Newman and Paasi 1998; O'Tuathail 1998), the environment is one area of analysis that has been particularly underrepresented in the literature. There are precious few political geography studies that deal with questions of this type in relationship to the environment, especially studies with a strong empirical basis by which to test the theoretical concepts. Since there are many transborder natural resource conflicts (and their numbers are growing as is the intensity of the conflicts in many cases), it is both empirically and theoretically crucial to fill this gap. Perhaps the most important contribution of this work, then, comes from my engagement with theories of territorial sovereignty and the state by way of a concrete transborder environmental conflict.

I argue throughout this dissertation that to the extent to which nongovernmental organizations confronting transborder natural resource problems are able to surpass the authority of the state, their work has the potential to affect the relevance of sovereign
borders and territoriality as a political organizing principle. I also argue that that power is definitely limited by the continued strength of the sovereign state. This leads to an assessment of the possibility for expanded cross-border environmental governance in the 21st century and some conclusions regarding the notion of the sovereign territorial state.

**Outline of the Dissertation**

I begin in this chapter with an introduction to the context of the salmon problem and a more detailed outline of the research questions. In Chapter 2, the theory and academic literature which informs my research is detailed and Chapter 3 provides information on my methodological approach and research methods. Chapters 4 and 5 are primarily focused on describing and explaining the processes that led to the development of the spatial mismatch and the consequences thereof. In these chapters, I use the notion of overlapping moments of de/reterritorialization as an analytical tool to examine the spatial aspects of how the salmon problem came to be. The purpose of this work is to provide context for the empirical work presented in Chapters 6 and 7, but also to demonstrate the potential for change in the relationship between the political geography of the region and the salmon resource. Chapter 6 outlines the cooperative transborder activities related to the salmon of 22 Canadian and U.S.-based organizations and also considers at length those factors that are permitting or encouraging this type of work. The activism of these primarily environmental and indigenous groups is explored with an eye towards understanding how it may represent a move towards a transterritorial form of environmental governance, i.e. one that reconfigures or evades sovereign political space. Chapter 7 analyzes the impediments to effective cross-border work that these organizations encounter and discusses what these limitations may indicate about the continuing role of states and territoriality in ecopolitical governance. Chapter 8 considers the evidence presented in the research and interrogates the meanings and indications that emerge relative to the existing literature and theory on the world system of sovereign territorial states and environmental governance.
The Salmon Problem

INTRODUCTION

The international Salmon Wars stem from the larger assemblage of concerns, questions and issues that have led to what natural scientists call the ‘salmon problem,’ or as in more critical accounts, the ‘salmon crisis’ (c.f. Lichatowich 1999; Taylor 1999). The salmon problem refers to the fact that the salmon are disappearing from much of their ancestral territory along the Pacific coast of North America (hereafter referred to as the Northwest Coast). The historic range of the salmon is depicted in a map created by Ecotrust—one of the environmental groups featured in this research—and reproduced in Figure 1 with the generous permission of that organization.

Salmon are now extinct in nearly 40% of the rivers in the U.S. Pacific Northwest (usually thought of as Oregon and Washington, but sometimes including the northern portion of California and western Idaho) in which they once spawned. The salmon populations in at least 44% of the remaining streams are at risk. Wild salmon, which once numbered approximately 11-16 million returning adults in the Columbia river basin alone (Taylor 1999:23), have declined to less than one-tenth that number up and down the entire coast of the U.S. Pacific Northwest (PNW) (National Research Council 1996). Since 1900, the natural productivity of salmon in the PNW has been reduced by 80 percent with the destruction of riverine and coastal habitats (Lichatowich 1999:8). As of January 2001, “at least 232 genetically unique groups of Pacific Salmon . . . are known to have disappeared entirely” (Lichatowich and Zuckerman 1999:18). The map in Figure 2, also reprinted with the permission of Ecotrust, illustrates the decimation of salmon populations throughout the Northwest Coast. The data indicate that the trend towards extinction worsens as one proceeds in a southerly direction within the salmons’ range (MacDonald, Wood and Genn 1999:6). This mirrors the spatial pattern of the extent of habitat disruption. In 1996, 10 percent of stocks in southeast Alaska were at risk of extinction, 20 percent of B.C. stocks were at risk, and over 50 percent of stocks are already extinct in the Columbia basin (MacDonald, Wood and Genn 1999:6).
Figure 1: The Lands and Waters of Salmon Nation
Figure 2: Salmon Extinctions
ECONOMICS OF THE RESOURCE

Even in their threatened state, salmon remain critical to some local economies, supporting whole towns as the primary industry, and contributing significantly to the regional economy. (The ‘region,’ for the purposes of this research, will be defined as the Northwest Coast and inland river basins between southwestern Alaska in the north and central California in the south). The salmon fishery accounts for more than sixty thousand jobs and a billion dollars a year in the U.S. alone. In a variety of sectors including subsistence, retail and wholesale fish markets, taxation and licensing, manufacturing, recreation and sport revenue, as well as through marketing of salmon in tourism and the arts, salmon make a significant contribution to the economic well being of the region. According to Ernie Niemi and Matthew Martin, economists at ECONorthwest, an economics consulting firm operating out of both Seattle and Eugene, Oregon:

“Salmon are not a luxury but an integral part of the region’s economy. Lose them and the region loses much of the spiritual and cultural core of what it means to live in the Pacific Northwest. The region also loses countless recreational and commercial fishing jobs directly associated with salmon and, more important, jobs that materialize because salmon help create a quality of life that makes the Pacific Northwest especially attractive to workers, families, business managers and investors.

In short, lose the salmon and the Pacific Northwest loses much of the fuel for long-run economic growth, damages one of the economy’s most powerful engines, and finds itself headed toward an economic future not nearly as prosperous as one that includes both healthy salmon and a healthy economy” (Niemi and Martin, The Seattle Times, March 2, 2001).

SALMONID ECOLOGY 101: THE PROBLEMS OF A COMPLICATED LIFECYCLE

There are 5 species of Pacific salmon (pink, coho, chum, chinook, and king) and 2 species of trout (cutthroat and steelhead) that are of concern, though the trout species are only significant to the sportfishery and also have somewhat different lifecycle patterns, so they do not enter into the international debates in the same way as the other species. Salmonids have an anadromous life cycle, meaning they are born in the fresh water tributaries of the Columbia, Fraser, Skeena, Copper, Snake and other major rivers of the
region and migrate to the ocean for a period of one to five years before returning to the stream where they hatched to spawn and die. This migratory path takes them through numerous oceanic and inland ecosystems, dozens of jurisdictions in the U.S. and Canada, and the traditional fishing areas of dozens of Native American and Canadian First Nations tribes. It also subjects them to innumerable dangers—predators, pollution, hydroelectric turbines, changing ocean conditions—that reduce their chances for survival.

This complex ecological lifecycle creates conflicts between individuals, agencies, businesses and organizations located throughout the extent of the wild salmon's range. They include: those who make their living from the fish such as aquaculturalists, Native subsistence fishers and commercial fishermen (both Native and non-native); environmentalists; those charged with regulating fisheries in the public interest including government officials, resource managers and scientists; sport anglers; dam and utilities operators; land developers; agriculturists that rely on irrigation water; forest products companies and loggers; and taxpayers. Everyone who shares the landscape with wild salmon is involved in some way with the salmon problem.

**Salmon and the Environment**

The salmon are important to the region for economic and political reasons, but they play other, more ecological roles as well, which have political and economic implications in their own right. Firstly, and perhaps most critically of all, the wild salmon are what conservation biologists refer to as a "keystone" or "indicator" species. In other words, they are so integral to the functioning of Pacific coastal and inland ecosystems that their decline signals danger for those ecosystems as a whole. In the historian William Cronon's words, they are "organisms so central to the functioning of an ecosystem, so tied to a multitude of other creatures, that their removal can have far-reaching, even devastating consequences" (quoted in Taylor 1999:ix).

The wild salmon's status as a keystone species and indicator of environmental conditions derives from several qualities. Salmon are an important food source, providing nourishment for over 150 other native species (Interview with Joe Scott,
October 13, 2000). The salmon are also known to be adaptable. This fact accounts for the tremendous extent and diversity of their range, facilitated by the evolution of hundreds of individual stocks, suited to meet the specific conditions in which they are found. Thus, their decline indicates ecological disruption beyond the salmon’s historically proven capacity to adapt. While they are adaptable, wild salmon are also sensitive to their particular micro-environment, requiring, for example, a somewhat narrow range of streambed and slope conditions, as well as specific conditions of water temperature, purity and oxygen content. So, if the salmon are in decline, it is an indication that other environmental factors affecting their habitat are experiencing disruption.

**Native Culture and Spirituality**

“The Pacific Northwest salmon is an amazing fish whose existence has been considered a precious gift by our people for thousands of years” (Northwest Indian Fisheries Commission News 1993).

Salmon were a mainstay of Native economies and were fundamental to the establishment of social and spatial patterns before the arrival of European colonists. The historical abundance of salmon is the stuff of legend. It has been reported that the “fish once ran so plentifully that they are said to have spooked horses with the noise they made splashing upstream” (Lichatowich and Zuckerman 1999:17). This abundance and the consequent centrality of salmon to Native economies before European colonization was no doubt instrumental in elevating them to a central role in indigenous cultural assemblages and spiritual beliefs. The esteem granted the salmon and expressed through ritual, art and story-telling cannot be overstated. Salmon were (and are) respected as wise and generous creatures that cannot be taken for granted. Ceremonies honoring the salmon, and other social events and customs related to salmon fishing, curing, and consumption remain a vital part of many Native social systems and are important markers on the yearly calendar. In this way, salmon are a continuing source of cultural identification and social cohesion for the indigenous peoples of the region.
SENSE OF PLACE IN THE NORTHWEST

“There’s more than simply biology at stake here. This is also about heritage, regional identity, livelihood . . .” (Interview with Ted Wolf, October 30, 2000).

“The story of salmon has been entangled with that of human beings for so long in this region that it is almost impossible to imagine the two in isolation from each other. The salmon is not just a keystone species but a cultural icon of the first order, a powerful symbol of all that the Pacific Northwest is and has been” (Cronon in Taylor 1999:x).

For millions of regional inhabitants, both Native and non-native, the salmon are symbolic of a much-loved way of life and strongly contribute to their sense of place. This is reflected in the quotes above as well as in the words of Tukwila, Washington Mayor Steve Mullet and Seattle City Councilman Richard Conlin when they wrote in a Seattle Times opinion piece: “Our natural surroundings are a constant source of pleasure and amazement. Salmon, in particular, embody the deep connection we all feel with this beautifully rugged land” (The Seattle Times, May 16, 2001). As part of an emotional article about wild salmon published in the Chicago Review, poet and author Tom Jay wrote, “[t]he salmon is the crown of the northwest forest biome, the soul of our ecosystem. It is, with cedar, the paradigmatic expression of this place” (1991:32 italics in original). That the salmon is a symbol of the Northwest coast biome cannot be denied.4 This is evidenced in art and poetry produced by local inhabitants from grade school children to professional artisans and writers, as well as in advertising and marketing as a walk through any regional tourist gift shop or a perusal of the brochures for area travel opportunities will confirm. Parks and public sculptures, barbecues and festivals (see Figure 3), fundraising events and forums, and the comments of public officials and private residents all announce the importance of salmon as an icon of the regions beauty and abundance and a symbol of the (supposed) environmentally-conscious and tenacious character of the people who make their home here.
Figure 3: Salmon as an Icon of Northwest Culture
Washington Attorney General Christine Gregoire, in a speech in Vancouver, B.C. stated, “The salmon is key to our way of life. The salmon symbolize the natural heritage, culture and beauty of the Pacific Northwest” (November 8, 1998). Her comments are particularly interesting in this context given that she addressed these words to a British Columbian audience, which highlights salmon as a point of cultural connection up and down the Pacific coast.

Wild salmon are not only viewed as emblematic of the values and spirit of the region. Indeed these remarkable fish are one of the keys to identifying the area as a region.5 Referring specifically to the U.S. Pacific Northwest (i.e. not including B.C.), author Tim Egan (1991) defined the region as “any place salmon can get to.” Salmon biologist and author Jim Lichatowich says, “When I look at a salmon, I don’t just see a silver fish, I see the Northwest” (1999:23). This phrase echoes the sentiments of many regional inhabitants, as well as people who live outside the area, who think of salmon (and rain!) when they think of the PNW. William W. Stelle, Jr., former Director of the Northwest Regional office of the National Marine Fisheries Service, reflected that “[s]almon are part of the heart and soul of the Pacific Northwest. They have defined its history, and its culture and hopefully its future” (Corvallis Gazette-Times, February 5, 1995). Similarly, John Kitzhaber, Governor of Oregon expressed the association of salmon with the Northwest “region” when he said:

“To be in the Northwest is in some visceral way to be connected to the salmon. Whether your family has been here 10,000 years or just 10 days, I believe Northerners identify salmon as a symbol of a healthy environment and a symbol of our abundance as a region” (Speech to the City Club of Portland, Oregon, October 3, 1997).

At least at the level of rhetoric, the feelings associated with the salmon transcend political boundaries and bind the region together into a specified whole just as the geography of the salmon lifecycle links the region ecologically.6 Joe Scott of the Northwest Ecosystem Alliance, one of the organizations included in this study, articulated this idea clearly when he said that “The salmon, more or less, is one of the connective tissues between the U.S. and Canada” (Interview, October 13, 2000).
People on both sides of the international border share this fondness for the salmon. This claim is not meant to indicate that everyone feels the same way about the salmon or that their iconographic importance readily translates into policies and actions that support their continued existence and well-being. On the contrary, putting salmon before other interests—economic, politics, development—has been the exception to the rule as the decline in their numbers attests. This is so for reasons which include the (often false) pitting of environmental and economic interests in opposition to one another, lack of scientific knowledge, the power of special interests to influence salmon policy and the cause of key interest here—the influence of borders, sovereignty discourses and territorialization on salmon management.

**Geography: Part of the Problem and Part of the Solution?**

"In most respects, the salmon problem is a problem of how to match scales of management, governance, fishing, research, and understanding with scales of biology, hydrology, and environmental change in space and time. The salmon traverse a great variety of environments throughout their life cycle, including thousands of miles at sea and up to 1,500 km in rivers. Salmon cross international and state boundaries, and they are important components of several ocean and inland aquatic ecosystems. Salmon catches are governed by local, state, federal, tribal, and international treaties, conventions, agreements, organizations, commissions, and agencies..." (National Research Council 1996:358-9).

In their assessment of the salmon problem excerpted above, the distinguished panel of scientists at the National Research Council (commissioned in 1992 by the federal government to investigate the situation as The Committee on Protection and Management of Pacific Northwest Anadromous Salmon) highlight several geographic elements that are causative factors in the decline of wild stocks. These include the mobile nature of the resource and the attendant complexities in terms of habitat interaction, the great number and diversity of stakeholders involved, and so on. The overriding problem, though, is one of *human* geography or more specifically, the discrepancy between salmon geographies and the political geography of the region relative to salmon management—what I have termed the spatial mismatch. It is not a foregone conclusion that the salmon’s geography necessarily has to be in conflict with
the socioeconomic or political geographies of the region (as the discussion of pre-Colonial geographies in Chapter 3 demonstrates). Nonetheless, the contemporary borders that define sovereign states and delineate jurisdictions, with their corresponding geographically-specific management institutions and regimes, severely complicate region-wide conservation efforts and attempts to ensure the sustainable use of the resource. The National Research Council scientists acknowledge this fact: “The social structures and institutions that have been operating in the Pacific Northwest have proved to be incapable of ensuring a long-term future for salmon, in large part because they do not operate at the right time and space scales” (National Research Council 1996:4).

Examining the issue of the proper “space scales,” i.e. the spatial mismatch, is one of the main concerns of my research. Addressing the spatial mismatch is also a concern for many of the resource users and nongovernmental organizations involved with the salmon. For example, Michael Grayum of the Northwest Indian Fisheries Commission stated very simply “Salmon need to be managed on a level large enough to encompass the areas that they reside in” (Interview, September 18, 2000). Daniel Burns, President of the Steelhead Society of B.C. echoed this idea: “I think it’s obvious that it can’t just be [addressed] locally. A globalized strategy is absolutely essential” (Interview, November 6, 2000). It is obvious to many who deal directly with the salmon in one capacity or another that any plan for reversing the decline in the resource must incorporate ways to address the underlying geographic components of the problem. The divisive geography of management, as illustrated in Figure 4 (reprinted with permission of the Pacific Salmon Commission), needs to be reconsidered or newly integrated with other scales of management and conservation. In some cases, the work of organizations included in this study is attempting to do just that. There is also movement at the governmental level to transcend some of the jurisdictional rigidity historically associated with resource management (see Chapter 5).
Figure 4: The Complex Geography of Salmon Management
It is not only at the level of day-to-day "space scales" of management that the geography of the salmon problem must be addressed. The spatial mismatch between salmon geographies and human political geographies needs to be unpacked at the level of the fundamental precepts and ideas—foundational geopolitical concepts such as state sovereignty, territorialization, and the solidity of borders—that shape the political landscape and guide management. In the pages that follow, I analyze policy and management structures as productions of the discourse of state territorial sovereignty because I believe that it is at least in part at this scale of understanding where the potential remedies to the salmon problem reside.

Research Questions and Objectives

My research project has three primary, closely linked objectives. The first is empirically to examine transboundary efforts aimed at facilitating the more successful management and conservation of wild salmon and their habitats being made by selected, primarily non-governmental organizations (NGOs) in Canada and the U.S. The factors that encourage or limit transborder cooperation of this type are key points of interest, particularly the extent to which, and in what ways, the political and material manifestations of the sovereign state, (especially the international border and associated management structures) act as an impediment to cross-border cooperation. Put another way, to understand the concrete effects of the spatial mismatch, I ask the question: "How do political boundaries drawn on the landscape limit attempts by concerned groups to address transboundary environmental issues, in this case the management and conservation of Pacific Salmon?" How are concrete geopolitical structures limiting or otherwise influencing the potential for new forms of environmental governance to emerge?

In asking these questions, I am interested in the on-the-ground material effects of the border (and the sovereign territorial arrangements and institutions it reflects and reinforces), but I also place significant weight on the ways in which the border and the world structure of state territorial sovereignty effect perceptions. For example,
misperceptions of the opinions and goals of stakeholders across the border are of as much value to me in developing an understanding of the effects of sovereignty discourse as more tangible impediments to cross-border action such as the disparate legal frameworks found in each country.

My research thus maps out the specific problems caused by trying to manage and protect a border-crossing resource within the confines of the spatial mismatch. It indicates areas of slippage in the sovereignty of the state and opens the space for governance not founded on territoriality to emerge. It speaks to the solidity or fictitiousness of the international border and it points out those trends, processes or activities, which may facilitate further ecopolitical disruption of the sovereign state.

While it is becoming somewhat more common, there is a marked shortage of academic scholarship focused on conflict and cooperation in the environmental politics of transborder resources (Newman and Paasi 1998). Given the proliferation of these urgent, contentious and increasingly high profile issues around the globe this lack is somewhat surprising. This research helps to fill this gap in the literature.

The second objective is to analyze how and to what extent the initiatives and efforts studied affect domestic and transnational governance structures and processes in order to address the question: "What do transboundary efforts to protect and more effectively manage border-crossing resources such as the Pacific Salmon imply about the possibility for new forms of environmental governance to emerge?" The goal here is to outline and analyze the ways in which stakeholder organizations are taking on new governance roles and influencing natural resource policies and management either through transborder activities that supercede regular channels of governance or through cooperation with state agencies and authorities. It is hypothesized that new roles or influence of this type may indicate changes in the sovereignty of states.

The activities of previously marginalized groups who have either been excluded from, or underrepresented in, management and policy-making processes, including Native peoples and environmental nongovernmental organizations, are of the most
interest in this regard. The exclusion of these groups is a product of sovereignty discourses, therefore, if they are exerting greater influence, it may mean that those discourses are losing some of their potency. Additionally, it is widely agreed that meaningful public participation is critical to the successful development of fair and effective natural resource management regimes and environmental public policy. Therefore, the efforts of disenfranchised segments of the public, working domestically and across international borders to make a place for themselves at the governance table, require further exploration and analysis. By examining promising initiatives and spotlighting key roadblocks to success in nongovernmental cross-border ecopolitical action, this research is beneficial to environmental policy-making and management and advances our understanding of increasingly common transnational political movements to protect the environment. As such movements proliferate in number and expand in scope, it will be important for activists to have data available which analyzes the obstacles that they may confront in working across borders.

The third objective is fundamentally linked to the first two goals of this research and indeed represents the central focus and primary contribution of this work. This final, more theoretical objective is to interpret the ways in which transboundary projects represent the renegotiation and reconfiguration of the nested spatial “dogmas and creeds and practices” (Udall 1976) that undergird the salmon problem. Addressing this objective involves linking the empirical evidence with the geopolitical context in which it occurs. The basic question concerns the relationship between continuing transborder environmental degradation and conflict, the transborder work of NGOs to address these problems, and traditional notions of territoriality, sovereignty and the (supposedly) fixed boundaries that define sovereign nation-states. Put simply, I ask the question, “In what ways and to what extent are cross-border initiatives related to salmon management and conservation destabilizing, exceeding, or otherwise reconfiguring sovereign space and what are the limits to this move?” What are the broader implications for notions of sovereignty, geopolitics and environmental governance? The first two research questions
provide the basis for addressing this theme and indeed are largely intended to tease out the tension between sovereign territorial space and transborder environmental action. As researchers such as Gregory (1994) argue, it is absolutely vital to question the assumptions of space at work in any society and how they function, especially the way they shape and reproduce oppression and marginalization in discourses of politics, social organization and, I would add, the environment and resource control.

Part of the goal in taking up this issue is to render the multi-dimensional, complex and changing character of territorial sovereignty more "theoretically visible" (Paasi 1999b:22). Paasi's use of language is instructive. An acclaimed geographer who has written extensively on the topics of borders and territory, especially as they pertain to the Finnish-Russian borderlands, Paasi's choice of words emphasizes the "hidden" and (until recently) unchallenged concepts of territory, territoriality and state sovereignty. The ubiquitous and paradigmatic nature of these concepts has been such that they have been able to shape the space of the political by determining the location of legitimate authority in the state and mediating interaction in and across space. The force of this discourse has made it difficult for most people to think 'outside the box' of the global political system—to envision a world that is not carved up into mutually-exclusive territories or which utilizes anything other than the sovereign state as the basic geopolitical entity. This problem, dubbed the "territorial trap" by Agnew (1994), is demonstrated in this project to be a basic causative feature of the Salmon Wars and the salmon problem more generally. The territorial trap is also analyzed for its current potency as a theoretical notion. Is the territorial trap still a significant force with which to contend?

The global system of states is being increasingly challenged in the material world and the geopolitical theory is changing apace. As a result, "new conceptualizations" of geopolitical relationships are becoming possible and the character of the linked notions of territory, sovereignty and the nation-state are slowly becoming more "theoretically visible." This research contributes to this growing visibility. It allows a better understanding of how the very basic geopolitical notions that guide and enframe
transboundary environmental interactions cause or promote conflict and prevent the development of cooperative strategies to resolve cross-border resource problems. Addressing these topics thus represents the broadest application of this research and its most significant addition to critical geopolitical thought.

Thus far, the vast majority of research that falls within this purview has been completely theoretical. My project grounds this important theoretical work with concrete, cross-border empirical research that critically examines how sovereignty, territory, and borders are being challenged and renegotiated by stakeholders confronting the implications of diminishing natural resources. Although there are a few examples of such empirical work, it is currently insufficient given the scope and urgency of ecopolitical issues.
Notes to Chapter 1

1 This was not the first instance of such a blockade. In 1995, Canadian fishermen briefly detained the Alaskan ferry Taku in Prince Rupert to protest what they considered to be unfair fishing practices by U.S. fishermen related to king salmon. Passengers on the ferry reported that the fishermen taking part in the blockade threw beer cans and eggs at the ferry (Williams and Gillmore, The Seattle Times, July 22, 1997).

2 The term ‘spatial mismatch’ has been chosen in this dissertation to describe the spatial disparity between management frames and resource geography because I believe that it points most clearly to the questions of territorial inscription and transgression with which I am concerned. While it would be valid to use the language of scale (c.f. Swyngedouw 1997) to move the analysis of the salmon problem forward (focusing on encouraging a multiscalar approach to salmon management and conservation), and indeed, I use scale terminology throughout the dissertation, spatial mismatch seems to encompass the issue of scale while simultaneously emphasizing the problematic of territorialization as a key component in the creation and perpetuation of the salmon problem. Therefore, I feel that it more completely encapsulates the linked points of focus in my work.

3 The term 'discourse' has a wide range of possible meanings. This research will employ a definition of discourse wherein it is characterized as "statements which are enacted within a social context, which are determined by that social context and which contribute to the way that social context continues its existence" (Mills 1997:11).

4 Case in point: When the University of Washington Husky college football team went to the Rosebowl in 2001, Washington Governor Gary Locke made a wager with the Governor from of the home state of the opposition Purdue Boilermakers. If the Huskies won, Locke would receive a basket of popcorn from the corn-growing state of Indiana. If the Boilermakers won, Locke promised to send the Indiana governor a salmon. The Huskies won.

5 The notion of region clearly originated with people of European descent. “Before the arrival of Europeans, many Indians in the area regarded salmon as integral to their cultures, but they did not associate them with anything like a region, of course, because there was no notion of a Pacific Northwest until non-Indians arrived and began to incorporate the territory into Euro-American geographies" (Findlay 1996:4).

6 It should also be noted that while salmon have long been "repositories of meaning," the content has not been consistent. The various social and ethnic groups of the region have had feelings ranging from disdain to reverence for the salmon (see Findlay 1996).

7 The precipitous decline in wild salmon populations is not only a matter of geography, of course. It derives from several factors of which destruction of habitat, overharvesting, unsustainable environmental ethics, and misguided or poorly conceived scientifically-based management policies are key.

8 The key trends challenging this global system include expanding world-wide economic integration, the increasing speed and volume of transfers of people, capital, information, ideas, and pollution across boundaries and sovereign territories, the rise of sub-state nationalism and, of particular interest to this study, the intensification of environmental interdependencies and ecopolitical alliances that defy territorial borders.
**CHAPTER 2: INTERROGATING THEORIES OF THE SOVEREIGN TERRITORIAL STATE: TOWARDS TRANSTERRITORIALITY IN ENVIRONMENTAL GOVERNANCE?**

**Introduction**

This chapter is dedicated to examining the current scholarship on territory, borders, sovereignty and the state—not just as sets of ideas, but as concepts that have material consequences—particularly in relationship to transborder ecopolitical conflicts and concerns. My goals in this chapter are to: 1) introduce the most relevant academic literatures and theories addressing notions of territory, sovereignty and state borders and how they relate to one another; 2) critically examine the ways in which these concepts have shaped the politics and management of cross-border resources and the consequences thereof; 3) discuss the ways that contemporary trends are inspiring new theoretical directions and approaches to these concepts; and 4) establish a theoretical foundation for my interpretation of territorialization processes that appear in the chapters that follow. In addition, I briefly introduce the existing literature that is concerned with salmon and geography. It is this latter set of literatures that I turn to first.

**Literature on the Geography of the Salmon Problem**

Literature on the geography of the salmon problem is limited. Most of the geographic treatment of the topic is secondary material encapsulated within works on other aspects of the problem. For example, The National Research Council’s *Upstream: Salmon and Society in the Pacific Northwest*, which is quoted in the previous chapter, provides interesting discussion of some of the geographic issues involved in the salmon problem. The book offers a long list of recommendations for restoring salmon and providing for the sustainable use of the resource. Among these are spatially-based remedies, such as the suggestion that the management of the fishery be re-scaled towards the watershed level—an idea with which I agree. However, many questions related to the geography of the salmon problem and the spatial mismatch in particular remain unanswered, in large measure due to the fact that this book focuses almost exclusively on
the PNW region rather than considering the international aspects of the problem to any great extent.

The work of both Joseph Taylor (1999) and Jim Lichatowich (1999) includes examining some of the ways in which geography plays a role in the formation and perpetuation of the destruction of the resource and conflicts over the fishery, though neither author focuses his analysis specifically on spatial issues. Taylor, a historian who has conducted a study of the environmental history of the Columbia basin salmon fishery, raises several geographic questions in his work but is more concerned with historical processes. Lichatowich concentrates on management, especially the failings of the hatchery system. Scholarship by both of these authors have provided excellent background material for this study and has pointed to some of the geographic aspects of the salmon problem, which I take up here.

Thus far, there are no studies which attempt to analyze the most basic spatial principles, discourses and institutions underlying the spatial mismatch problem—the assumptions of the territorial system of sovereign states upon which salmon management and policy have hitherto been based.\(^1\) Indeed, there are precious few political geography studies concerned with questions of this type which even address environmental issues although the need for such studies has been clearly identified (Newman and Paasi 1998).\(^2\)

**Supporting and Alternative Literatures**

There are, of course, bodies of literature that are primarily concerned with environmental management, cooperation and conflict that have a decidedly spatial element and which could be or have been used to understand some of the questions posed in this dissertation. Of these, the literature on common property resource (CPRs) and work in the field of political ecology are the most relevant. These literatures, while they inform particular aspects of my work, are not central to my analysis. This is because I have chosen to approach the salmon problem from the perspective of political geography debates regarding territorialization, spatial mismatch and related concepts and to focus on
the larger implications for transborder governance and geopolitical theory rather than searching specifically for answers to policy and management questions.

Nonetheless, there are some studies within these areas of inquiry that are more relevant to my work than others. For example, Evelyn Pinkerton (1987), a highly respected investigator in the field of common property resources (especially fisheries), conducted a study of British Columbia’s salmon fishery in which she concludes that the authority of the *state* (rather than the users of the commons) creates conflict and resource degradation through its policies. This supports geography literature that has reached a similar conclusion (Murphy 1996).

In general, though, I follow Joseph Taylor in doubting whether the salmon fishery can actually be termed a CPR thus limiting the applicability of most of this literature. Taylor recommends that, rather than using inappropriate models such as the CPR framework to understand the salmon problem, “[t]he geographer’s concept of space may be a more fruitful way to analyze the historical development of salmon management” because “spatial arrangements have been as critical to the realization of social power as any other category of analysis” (1999:11). That is, a spatialized approach has significant potential to contribute to our understanding of the trajectory of transborder environmental governance related to the salmon fishery.

Political ecology literatures have provided some theoretical and methodological guidance for this study in that they make effective use of discursive approaches to confront and shed light on resource problems. Obviously, aspects of the salmon problem (especially at the local level), would lend themselves well to research from the perspective of political ecology. The detailed analyses of interactions between resource users, managers and their environment, and the interrogations of social relations of production and exchange common in political ecology work would have valuable applications in this case. However, the focus in political ecology is not usually on geographic meta-concepts and structures but rather on smaller-scale, management
regimes and practices within the context of larger-scale processes and practices. As a result, political ecology is not a driving theoretical force in my work.

Political Geography: Theories of State, Sovereignty and Territoriality in a Changing Global Landscape

**INTRODUCTION**

The discussion presented in the rest of this chapter lays the theoretical groundwork for the historical and empirical material that is contained within chapters 4-7. I begin by outlining and considering the effects of the traditional understanding of sovereignty that has dominated global political discourse. From there, I move into a discussion of the newer thinking regarding the nature of sovereignty and related concepts (borders, territoriality and the nation-state) that is opening the space for alternative notions to emerge. I continue by examining the material trends that are breaking down state sovereignty. The chapter concludes with an introduction to the linked notions of de/reterritorialization and transterritorial governance. I suggest in this section that the language of de/reterritorialization and transterritoriality may be useful for understanding the changes in political space occurring as a result of new networks and processes developing across borders in response to environmental challenges.

**Conflated Concepts**

Territoriality, borders and sovereignty involve sets of concepts and practices that have been closely linked since the worldwide system of states was established as a result of the Treaty of Westphalia in 17th century Europe (Murphy 1996; Walker 1995b; Hirst and Thompson 1999). The extent to which territorial sovereignty and the state are conflated would be difficult to exaggerate. As Newman and Paasi point out, "the discussion of the role of boundaries has been closely connected with the ideas of territory, territoriality, and sovereignty" (1998:188). Moreover, boundaries are the "expressions or manifestations of the territoriality of states" (Newman and Paasi 1998:188) and states have been for the past several centuries, and remain today, the primary seat of sovereignty. Thus, it would be an exercise in futility to attempt to
consider these dynamic geopolitical concepts in isolation from one another but more importantly, it would lead to an incomplete analysis of the questions at hand.

Academic explorations of the theoretical constitution and practical application of the sovereign territorial state are abundant and offer a wide range of analyses, predictions, and understandings (see Hashmi 1997). Arguments range from claims that the state system is growing increasingly stronger to the assertion that the sovereign state has already slid into obsolescence in the post-industrial digital age. Borders around sovereign territories are alternately said to be more rigid than ever or they are a hopeless bow to a spatial absolutism that can never again exist, if ever it did. In this dissertation, I have chosen not to emphasize arguing this point one way or the other. Rather, the goal here is to examine the ways in which the sovereign territorial state is or is not changing in relationship to transboundary ecopolitical efforts. In this, I follow John Agnew’s lead in avoiding a debate that “has been overwhelmingly in terms of the presence or absence of the territorial state” and choose instead to focus on “its significance and meaning as an actor” (Agnew 1994:55). In this I take up the job outlined by O’Tuathail:

“Our task is to theorize critically the polymorphous territorialities produced by the social economic, political and technological machines of our postmodern condition rather than refuse this complexity and reduce it to singular dramas of resistant territorialization or unstoppable deterritorialization” (O’Tuathail 1998:90).

The dynamic and complex set of ideas, institutions, discourses, practices, and processes which together work to make and re-make the sovereign territorial state must be unbundled in order to make sense of the geography of transboundary resource problems.

Sovereignty

Sovereignty has typically been understood as “the state’s exclusive authority within its territorial boundaries” (Litfin 1998:1). There are four key traits associated with the “principle, institution and practice” (Walker 1995:317) of sovereignty—population, authority (internal sovereignty), recognition (external authority) and territory
The population of a sovereign entity is theoretically comprised of a more or less cohesive nation. Obviously, this is not always the case and may in fact be the exception to a more pluralistic rule. Nevertheless, sovereignty implies the "nation" in "nation-state." It further implies that under conditions of true democracy, the government speaks for the people it represents in international affairs.

Internal sovereignty is understood as the state's power, authority and ability to control the population and resources within its borders to the exclusion of other domestic actors. The state's autonomy within its borders is supreme. This authoritative supremacy includes the sanctioned use of force within state boundaries or a monopoly on coercive activity, including the right to police state borders (c.f. Weber 1968: 56). Internal sovereignty also suggests the principle of nonintervention by other states or entities outside the state territory—a legal right that may be enjoyed by a state, even if that state does not have much in the way of operational or effective sovereignty over it's territory and the population and resources contained therein. This theoretically prevents other states (and institutions, organizations and firms) from interfering in the domestic affairs of other sovereign states, including in regards to environmental and natural resource concerns. This aspect of state sovereignty can be a particularly sticky issue when conflicts arise over transborder resources or environmental problems (such as species depletion or the destruction of the ozone layer) that defy territorial borders.

The main thrust of external sovereignty refers to a state's right and responsibility to play a role in international affairs. This form of sovereignty entails a process of recognition and legitimation whereby certain standards must be met in order to be granted admittance into the club of sovereign states. Sovereign statehood confers many economic and political benefits on "club members." These benefits are the engine that drives the quest for statehood and recognition seen among former soviet states, would-be island countries, and sub-state nationalist groups including the Kurds, the Quebecois, the Palestinians and dozens of others.
One of the abiding conditions of such recognition is territorialization. Within the modern state system, territory is a necessary element for sovereign equality. Under the Westphalian system of sovereign state rights and responsibilities, the world is divided into mutually exclusive entities whose authority, control and autonomy within their borders is supreme thus making possession of territory a must to achieve sovereign status. Sovereignty in this system is an "absolute concept: an entity either has it or does not have it" (Litfin 1998:5) and the only entities that have it, in any tangible and legally recognized fashion, are states. Sovereignty creates the conditions by which some voices get heard and others are marginalized or silenced. This is particularly true in the arena of international politics, including cross-border resource issues such as the salmon problem.

**Territory and Territoriality**

Sack's in-depth and seminal consideration of human territoriality offers the following definition: "Territoriality in humans is best understood as a spatial strategy to affect, influence, or control resources and people, by controlling area" (1986:1). Sack further asserts that territoriality "is the key geographical component in understanding how society and space are interconnected" (1986:3) given that it "is a primary geographical expression of social power" (1986:5). Smith closely follows Sack in his definition of territoriality as: "The attempt by an individual or group to influence or establish control over a clearly demarcated territory which is made distinctive and considered at least partially exclusive by its inhabitants or those who define its bounds" (1986:482). The emphasis in both cases is on the importance of power and the ways in which the practice of territoriality is an exercise of that power. Foucault concurs: "Territory is no doubt a geographical notion, but it's first of all a juridico-political one: the area controlled by a certain kind of power" (Quoted in Shapiro 1994:479). The sovereign system of territorially exclusive states, Taylor's "blight of territorial absolutism" (1996), is a strategic tool for enforcing a geographically-based distinction between those with authority, rights and privileges and those without (see Walker 1993; Johnston 1995:223). It is an instrument of power, of inclusion and exclusion, in that it is
used “to establish different degrees of access to people, things, and relationships” (Sack 1986:20). The implication is that territorial borders are quite literally able to ‘bound’ cultures, ecological and economic processes, people, and movements. As later sections of this chapter demonstrate, however, this claim has only limited veracity.

**Traditional Thinking and the Territorial Trap**

The connection between territoriality, borders and the sovereign state has gone essentially uncontested in academic literature until recently.⁴ According to R.B.J. Walker, a scholar of political science and author of several books and articles on the topic of sovereignty, state sovereignty has been “notable for the silence that [has] surrounded it as an object of critical analysis” (Walker 1995:318). This was in fact the case, at least until the mid-1980s, a mere 15 years ago.⁵ Given the importance of territoriality as an instrument of power and control, as a source of legitimacy for the sovereign state and a ticket of entry into the game of geopolitical maneuvering, one has no choice but to agree with Ruggie when he states that:

“It is truly astonishing that the concept of territoriality has been so little studied by students of international politics (among others); its neglect is akin to never looking at the ground that one is walking on” (Ruggie 1993:174).

My research is an attempt to redress, in some small measure, that neglect. Before taking a look at the new directions in the theory of the sovereign state, first we must critically scrutinize the ground on which we have been walking.

**Normalization and Naturalization**

“[T]he link between the state, territoriality and sovereignty—all symbolized by the idea of the existence of exclusive boundaries—has so dominated the geographical imagination” (Paasi 1999b:10) that it is difficult to conceive of a world in which states are not the ultimate “power containers” (c.f. Taylor 1994; Giddens 1987) dividing the political map into bounded, mutually exclusive, sovereign spatial entities. The vast majority of the traditional theoretical literature discusses the sovereign territorial state as a fixed, static entity that is so natural as to be taken for granted. It very nearly becomes part of the physical landscape, much in the way that viewing political maps of the world
from childhood may lead us to believe that the boundary lines of states are something more than an abstraction or geographic imaginary. This is not to imply that notions of a more “multilayered character of territorial systems” as well as “interpretations (of sovereignty) which have varied and changed significantly since the Middle Ages” (Paasi 1999b:10) have not been discussed in the academic literature (c.f. Murphy 1996), but rather that they have clearly been in the minority.

**The Sovereign State**

Sovereignty is not only normalized and naturalized, but it is consistently located in the state. According to Kuehls, an academic known for his work on sovereignty and environmental concerns, scholars of international politics, spanning the ideological spectrum from realist to idealist, locate the sovereign space of the territorial state as the anchor for their theories (1996:26). The state is so privileged as a unit of analysis that we tend to frame our political, economic, and even environmental issues in terms of the state.

Defining the space of the political as occurring between sovereign states and through particular institutions sets boundaries that exclude other communities, conceptualizations of sovereignty, types of analyses, and approaches from political discourse (Doty 1996; Inayatullah 1996; Strang 1996; Walker 1993). By insisting that sovereignty must adhere in the territorial state, non-state actors with a stake in international affairs are relegated to the sidelines.

The set of affects of the traditional and still prevalent discourse that connects sovereignty, territory and the nation-state was coined the ‘territorial trap’ by John Agnew in 1994. Agnew claimed that this discourse is so powerful that other non-territorial conceptions of power, governance, and control have been unimaginable. Indeed, the strength and pervasiveness of sovereignty discourse is such that it is able to shape patterns of interaction and issues in ways that promote the continuance of this particular spatial ontology (Murphy 1996:90) and marginalize alternatives to this system. The assumptions of the sovereign territorial state have, until recently, made it exceptionally difficult for academics, policy-makers and theorists to recognize the size and nature of
flows across territorial boundaries, overlapping and complicated forms of coexistent territorialities, and the truly porous quality of sovereign space. The social processes by which the concepts of concrete, static territorial boundaries have been perpetuated have remained largely unarticulated.

Recognizing and destabilizing the territorial trap is a critical step in reframing and successfully addressing the salmon problem and other transboundary resource problems because the territorial trap establishes and perpetuates a political landscape marked by spatial mismatch. It implies that the world political framework wherein sovereignty based on the exclusive division of territory into states is an unchanging and largely unchangeable condition. Thus, the concept of the static and thoroughly natural sovereign territorial state restricts the possibility of sovereignty being held or exercised by non-territorial or extra-territorial entities. This marginalization has had serious implications and consequences, as this research demonstrates, for forming community and taking action across borders. Limits, both real and perceived, have been placed on the possibility for imagining and creating alternative maps and models, and have prevented the emergence of solutions to problems that are bounded by the rules of sovereignty and territory. Innovation in (eco)politics and management of transboundary natural resources has been curtailed.

Consequences of the Territorial Trap

There are dramatic material consequences for communities and environments, which can be directly tied to the territorial trap created by the discursive practices associated with state sovereignty, territory and borders. Political marginalization and environmental degradation are the effects of greatest interest here. The world political system has created separation, prohibited cooperation, and limited the potential to work for solutions at the scale most appropriate to a given problem.

Political Marginalization

The current territorial order, is a “framework that can ultimately only recognize winners and losers within sovereign territories” (Taylor 1996:2). Sovereign recognition
determines who is a legitimate actor with a right to have a voice in transnational affairs. Those who are granted a voice under this system are sovereign states that control a unit of territory and some international institutions granted authority by the states. Sovereignty in transborder politics is withheld from all others.

In the salmon conflicts, this has meant that (state) governments, and those actors with influence in government, have shaped the international negotiations over salmon management and control. First Nations in Canada, non-Treaty tribes in the U.S., environmentalists represented by NGOs, sportfishing and small-scale commercial fishing businesses and even local communities have been denied the opportunity to participate fully in political processes that have a tremendous effect on their lives. They have been prevented from participating in more meaningful ways because they lack sovereign authority as determined by the international system of states.

**Natural Resources and the Environment**

As we have seen, spatial mismatch, caused and perpetuated for the most part by the global system of sovereign territorial states, refers to the spatialized or scalar incompatibility between environmental governance structures and transboundary resources. Political boundaries on the landscape often impose a divisive framework on natural systems, migration patterns, forests, and watersheds that ignores their spatiality. This divisive geopolitical framework runs in opposition to ecological theory and empirical observation, both of which speak to the unity and interdependence of environmental systems (Mishe 1989). Problems of species extinction, oil spills, acid rain and so on "rarely correspond with state boundaries, prompting many to point to the political fragmentation of the planet as one of the primary obstacles to an effective response" to transboundary environmental issues (Murphy 1996:108). While territorial boundaries are intended to clarify rights and responsibilities relative to a specific geographical area and the resources located within that area, in practice, territorial claims to sovereign rights not only complicate the resolution of environmental conflicts, but are in fact deeply implicated in their creation by imposing a spatial mismatch (Dalby 1992a;
Schreurs 1997; Wapner 1995). Taylor explains how this works in his discussion of territorial absolutism and bounded development at the scale of the nation-state:

"States are widely viewed as the prime unit of development and are assessed in terms of their success in generating economic growth. Such bounded developments produce pockets of selfish consumers with little or no concern for others and with economic incentives to externalize resource and waste problems. The result of such competition is increasing global polarization and the headlong rush into an environmental nightmare" (1996:6).

Claims to territorial state sovereignty, therefore, are a foundational element in the occurrence of transboundary conflicts over access to resources (Chadwick 1995; Dalby 1992b; see also McCay 1994). As such, the links between the discourse of territorial sovereignty and environmental degradation demand further critical analysis.

**New Directions in Theory at the Millennium**

It is only recently that scholars and researchers have begun to challenge the territorial trap—the naturalistic and ahistorical notions related to sovereignty, territory and borders and to question the static, solid images with which they are associated. Over the last 15 years, the academic literature has begun to reflect "an emerging intellectual renaissance, or awakening to be more accurate, that is focusing attention on the conceptual underpinnings and metapractices associated with sovereignty" (Litfin 1998:3) (c.f. Camilleri and Falk 1992; Chadwick 1995; Dalby 1992b; Kuehls 1996; Litfin 1998; Luke 1996; Murphy 1994; 1996; Rosenau 1993; Schreurs 1997; Thomson 1995; Walker 1990; 1995; 1995b; Walker and Mendlovitz 1990). The new direction in thinking related to sovereignty is in many ways mirrored in the work on the related themes of borders, states and territoriality. This should come as no surprise given that these ideas and practices are historically mutually constituted, each operating to maintain and reinforce the others (Amin and Thrift 1997; Newman and Paasi 1998; Paasi 1999a; Taylor 1996).

**Social Construction**

The key development of relevance to international ecopolitical disputes in the theoretical debates associated with territoriality and sovereignty is a new focus on social constructivism, based largely on processes of discourse analysis. Social constructivism
attempts to unpack or unbundle the ideas that constitute territorial sovereignty. Utilization of this literature and the techniques upon which it relies has allowed me to map out the fundamental political concepts that enframe the conflicts over salmon.

Recently, theorists have begun to view territorial sovereignty as a socially constructed, historically specific concept and practice whose constitutive principles, structures and modes of operation are formed and reformed as part of a dynamic process.6 “These debates are expressions of a will to challenge traditional, totalizing forms of understanding that reflect modernity and static links between territories, states, (sovereignty) and boundaries” (Paasi 1999b:19). Evidence of this new “will to challenge” the territorial trap can be found in O’Tuathail’s work when he observed:

“Territory and territoriality are not discrete ontologies but social constructions entwined with technological capabilities, transportation machines, military logistics, social institutions, political authorities and economic networks. Human society produces, reworks and, creatively and otherwise, destroys territory and territoriality” (O’Tuathail 1998:90).

In the introduction to State Sovereignty as Social Construct, Biersteker and Weber concur when they state that “[s]overeignty . . . is an inherently social concept” (1996:2). Authors’ works collected under this title recognize that "the social construction of sovereignty is always in process" (Doty 1996:143). It is therefore vital to examine each of the components of sovereignty "and the practices that constitute, delineate, and organize each of these components individually and collectively" (Weber and Biersteker 1996:285) (especially linked notions of territoriality, borders and states) in order to understand why and to what effect traditional sovereignty is so privileged in international relations.

Unpacking and unbundling sovereignty has relied in large measure on examining the mutually constitutive discourses that naturalize and reinforce the territorial order. As Newman and Paasi instruct, “The study of . . . discourse is central to an understanding of all types of boundaries, particularly state boundaries. . . . It is particularly important to deconstruct these texts and narratives within conflict situations” (1998:201). I would argue that it is equally important to analyze discursive constructions when examining
questions of state sovereignty and territorialization in situations of conflict for, as we have seen, 'bounding' and territorially-based sovereignty are inextricably linked in their use as tools of social and political organization, inclusion and exclusion. They are "part of the 'discursive landscape' of social power, which is decisive in social control and the maintenance of social order" (Paasi 1999a:84; see also Newman and Paasi 1998:196). This landscape is produced and reproduced in society through a variety of social, political and cultural practices marked by the inherent tendency of institutions to work to ensure their continued existence. One such institution is the territorial state.

"States are in a decisive role in the production and reproduction of these manifestations of territoriality, particularly through spatial socialization and territorialization of meaning, which occur in many ways through education, politics, administration and governance..." (Paasi 1999a:69).

The territorial socialization to which Paasi refers (see Duchacek 1970) begins early in life. It is reflected in geography books, history texts and atlases, providing justification for claims to territorial control and sovereignty (Burghardt 1973; Murphy 1990). As Taylor noted, we are socialized into 'interterritoriality' from an early age as we observe the political map of the world, neatly divided into discreet units of sovereign territory, and often, to quote Jackson, we "end up regarding states in the same light as physical features such as rivers or mountain ranges" (1990:7).

Discourse analysis by social constructivist researchers has shown that territorial sovereignty is anything but a neutral and natural framework for the spatialization of control. Rather, contemporary research and theory suggests that "forms of power are generated, sustained and reproduced by historically and geographically specific social practices, rather than given for all time in one mode of spatial organization: that of state territoriality" (Agnew quoted in Paasi 1999a:82). Biersteker and Weber agree, explaining that "[t]he modern state system is not based on some timeless principle of sovereignty, but on the production of a normative conception that links authority, territory, populations (society, nation), and recognition in a unique way and in a particular place
(the state)” (1996:3). Referring to borders more specifically, Newman and Paasi note that, like sovereignty,

“state boundaries are equally social, political, and discursive constructs, not just static naturalized categories located between states. Boundaries and their meanings are historically contingent, and they are part of the production and institutionalization of territories and territoriality” (1998:188).

Thus, there is nothing fixed about state sovereignty and its basis in territoriality, hence, the location of legitimate authority to govern need not reside solely (or even predominantly) in the state. “Systems of rule need not be territorially fixed” (Ruggie 1993:149) but can exhibit a certain spatial fluidity. These conclusions have obvious implications for critical geopolitics. Destabilizing the normative discourse of the sovereign territorial state is a prerequisite to forming new conceptions which are not enframed or limited by the static, impervious territorial state. Historicizing and unbundling the sovereign state system opens the space for alternative modes of governance to be suggested, thus representing a potential avenue for attacking the geopolitical roots of the salmon problem. The key questions then become: How is the dominance of this discourse being resisted or opposed and by whom? How are alternative scriptings of sovereignty expressed in and across space and what limits or barriers do they face? My research project examines these questions.

**Grounded Challenges to Territorial Sovereignty**

The sovereign space of the territorial state is formidable, but it is not impenetrable. Challenges to the dominant spatial paradigm of territorial sovereignty are coming from many quarters, both theoretical and material. Theory has taken on new dimensions and alternatives to the sovereign state are being sought out in historical and contemporary processes and practices. Some of these grounded, material challenges to territorial sovereignty—examples of nonterritorial or modified territorial systems of rule, the activities of NGOs, and localization processes—are introduced below.
NON TERRITORIAL AND MODIFIED TERRITORIAL SYSTEMS OF RULE

Examples of systems of rule that do not rely on traditional notions of the static state and bounded territory complicate and challenge the idea of the once and forever powerful sovereign state (c.f. Owen Lattimore 1940; 1962). For example, Litfin introduces the idea of sovereignty among many indigenous groups:

"The social construction of territory among indigenous peoples, for instance, is strikingly different from its construction by the state. Territory in sovereign states is equated with natural resources available for economic or geopolitical exploitation. The instrumental dimension, however, is only part of the meaning of territory for indigenous peoples, and it is typically overlaid with a complex web of cultural and religious practices, which underscore their enduring understanding of it as sacred. Territory, therefore, should not be understood simply as an empty container for state sovereignty, but as intersubjectively constructed and potentially negotiable" (Litfin 1998:12).

In my interviews, I encountered notions of sovereignty held by representatives of indigenous groups that closely mirror Litfin's description. Sovereignty for those individuals highlighted the idea of stewardship as opposed to focusing on control. That the current system is "potentially negotiable" is also an important point in this passage because finding a point of slippage in dominant paradigms can encourage and empower marginalized stakeholders engaged in political conflict.

Ruggie has demonstrated that governance need not be territorial at all. In other words, "the basis on which the human species is socially individuated and individuals, in turn, are bound together into collectivities can take (and historically has taken) forms other than territoriality" (Ruggie 1993:149). Some of the best examples of this were the kinship-based systems such as those seen among many pre-colonial Native American and Canadian First Nations peoples (see Chapter 4). In these systems "territory was occupied . . . but it did not define" the systems as such (149). Therefore, it is fair to argue that since "entities other than the state have been and may be considered sovereign in the future, territory need not be associated with sovereignty" (Litfin 1998:9).

Finally, even where systems of rule are territorial and even where territoriality is relatively fixed, the prevailing concept of territory need not entail mutual exclusion. The
archetype of nonexclusive territorial rule is medieval Europe with its “patchwork of overlapping and incomplete rights of government which were inextricably superimposed and tangled and in which different juridical instances were geographically interwoven and stratified, and plural allegiances, asymmetrical suzerainties and anomalous enclaves abounded” (Ruggie 1993:149-150).

The rediscovery of such non-territorially based systems of sovereignty and rule has been an important element of the renaissance in theory on territory, sovereignty, boundaries and the state.

**Nongovernmental Organizations**

Increasing attention is being paid to the activities of what Rosenau (1993) has termed 'sovereignty-free' actors such as transnational businesses and international NGOs (see also Raustiala 1989; Wapner 1996; Princen and Finger 1994). Scholars including Biersteker and Weber (1996), Luke (1996), Murphy (1996), Strang (1996), Taylor (1997) and Wapner (1995) have studied and analyzed the political, cultural and economic power of "anti-statals, transnational, and extraterritorial social forces" (Luke 1996:491) in the global arena. These studies re-center traditional analyses of transboundary natural resources by focusing attention on interactions and networks between states/global systems and local communities instead of concentrating on one or the other. It is not surprising that research concentrating on the transboundary activities of environmental NGOs is expanding given that:

“growing international and grassroots pressures are producing changes in environmental values, institutions, and policy [through] the formation of new networks linking [for example] indigenous peoples and international nongovernmental organizations [which have] broadened the scope of political debate beyond the confines of state borders. ... As a result of the activities of these networks of actors, new environmental norms are being established in economic, social, and political institutions” (Schreurs 1997:185).

As organizations operating across state borders and at the interface of formal government structures and governance at the level of civil society, transnational environmental NGOs illustrate many of the ways that territorial sovereignty is being
reworked, transgressed, or, in some cases, reaffirmed (see Keohane 1993) in the arena of international environmental politics. Their practices and techniques stretch and transcend the territorial trap by imagining and testing alternative conceptualizations of sovereign rights not strictly based in territoriality. "Sovereignty as it pertains to natural resources is being challenged by a more global perspective on the environment" (Schreurs 1997:190) and NGOs are at the forefront of this challenge. While states have in some cases taken steps to curb the influence and power of ENGOs and other non-state actors regarding domestic or international environmental concerns,¹⁰ these organizations continue to find new ways to circumvent resistant governments including the use of public information campaigns and consumer/demand-side pressure tactics. By lending support to grassroots organizations, bringing considerable experience, resources, momentum and expertise to ecopolitical movements, and bridging both geographical distance and political scales, NGOs may become an even greater force to reckon with in the arena of global environmental debates and governance.

**Glocalization**

Globalization is a familiar buzzword signifying many different problematics including what Harvey calls time-space compression (1990) (c.f. O’Tuathail 1998:85). Globalization usually¹¹ refers to the greater level of economic, political and cultural interconnectivity worldwide, facilitated and necessitated by global telecommunications networks and the increased speed of flows of all kinds (goods, people, information, money), and generated in part by the perceived need to address transboundary problems (geopolitical, military, medical, environmental) at the suprastate level.¹² The 'space of flows,' in the words of Castells (1989), are rising in prominence relative to the 'space of places.' At the same time, sub-state nationalism, localism and fragmentation of the geopolitical map are increasing. An argument can also be made for the continued importance of locality and proximity (Amin and Thrift 1997:154).

These two opposing forces, globalization and localism, are really inseparable at their root, spurring Swyngedouw to coin the term ‘glocalization’ to describe the mixture
of centripetal and centrifugal forces propelling the world into the 21st century (Swyngedouw 1997:170). Glocalization, while originally conceived as a way to think about issues of capital and material reproduction, can be expanded to refer to the rescaling or transference of political power and authority upwards to global or supranational scales and downwards to the substate, regional, or local scales.

Much of the debate regarding globalization, the impact of expanding, concrete cross-border cooperation (c.f. Sparke 2000) and, to a lesser extent, localism concerns the effects of these trends on the nation-state and on sovereignty. The literature in this area of inquiry is vast (Camilleri and Falk 1992; Held 1991; Hirst and Thompson 1999; Luke 1996; Misce 1989; O'Brien 1992; O'Tuathail 1998; 1998b; Rosenau and Czempiel 1992; Walker 1995; Walker and Mendlovitz 1990). One common argument within this literature holds that processes of globalization and world-wide capitalism are creating all manner of links across boundaries—informational, cultural, political and so on—and that the proliferation of such links will give rise to new global geographies, reducing the importance of state boundaries and sovereignty, and eventually leading to the dismantling of the territorial system. “Globalization problematizes the very geopolitical structure of international politics as sovereignty becomes increasingly fictive, territoriality is displaced by speed, and states diffuse governance upwards, sideways or abdicate it altogether” (O'Tuathail 1998:85). Researchers supporting the “erosion-of-state-sovereignty” thesis argue that states, boundaries and sovereignty are either quickly becoming (Shapiro and Alker 1996; Kuehls 1996; Sassen 1996) or already are, obsolete (Ohmae 1995; Reich 1992) in light of economic, cultural or environmental interdependencies.13

Other scholars argue for the continued prominence and relevance of the territorial state in our daily lives (or in a few instances, the actual strengthening of state power).14 “Whereas authors like Ohmae are ready to declare the death of the nation-state and of boundaries, pointing mainly to economic practices, boundaries still make a difference in the spheres of governance (including the governance of economic flows), culture, and
spatial identities. . .” (Paasi 1999a:86). That is, “despite the effects of globalization, changing power relations and the meanings of sovereignty, environmental problems and the post-nationality arguments of postmodern theoreticians, the state will apparently continue to be the ideal form of organization for most nations at the turn of the millennium” (Paasi 1999a:84). This line of reasoning holds that the sovereign nation-state appears as firmly rooted as ever.15 This is not because states are all-powerful within their boundaries. Rather, it is because “territorial borders are patrolled in the name of the state, which continues to represent the citizens within those borders (Murphy 1996) and because “tax collectors stop at the border, immigrants are stopped at the same border and transnational linkages can still be snapped off by independent state power” (Anderson 1995:67).

The reality, however, is less straightforward than an either/or conclusion. As Murphy argues, “To conclude . . . that we are indefinitely imprisoned within the current political-territorial order . . . is as dubious as to assume that territory and politics are about to be entirely uncoupled” (1996:110). Even though it is clear that “the state’s capacities for governance have changed and in many respects . . . have weakened considerably, it remains a pivotal institution, especially in terms of creating the conditions for effective international governance” (Hirst and Thompson 1999:256). Arguments to the contrary notwithstanding, state sovereignty based on territoriality will undoubtedly continue to be a prominent player on the global political stage into the foreseeable future, but the nature and form of that role is changing.

The position taken up in this dissertation, then, following Litfin, Agnew, Paasi, O’Tuathail, Murphy and others, is not that nation-state boundaries, sovereignty and territoriality are disappearing as glocalization proceeds apace, nor are they uniformly becoming more embedded and powerful. Rather the argument proffered here is that state territorial sovereignty is being destabilized and reconfigured by political, economic, cultural, and most importantly, environmental pressures, conflicts and developments. “The key question,” according to Swyngedouw, “is not whether the state is globalizing or
localizing, but rather what kind of struggles are waged by whom and how the rescaling of the state towards the ‘glocal,’ “produces and reflects shifts in relative socio-spatial power geometries” (1997:172). As Latour has so simple stated, “The two extremes, local and global, are much less interesting than the intermediary arrangements that we are calling networks” (quoted in Swyngedouw 1997:167). In the case of Pacific salmon conflicts, NGOs are the among the most prominent “intermediary networks” working across scales and borders.

**Territorialization Processes**

Deterritorialization and reterritorialization are increasingly popular concepts being used to understand the dynamic unfolding of the post-modern political landscape. The terms were first used by poststructuralists Deleuze and Guattari, relating to the territorialization of desire and the ego in orthodox psychoanalysis (1988). Harvey (1990) later used the notion of deterritorialization to mean the creative destruction of the capitalist landscape. In recent literature, the terms have been developed and applied to various forms of spatial, social and cultural change. The terms “point to a process in which social structures, practices and meanings are changing, i.e. de-territorializing, and being shaped in new ways, i.e. becoming re-territorialized” (Paasi 1999b:16). “The problematic of deterritorialization is also the problematic of reterritorialization” (O’Tuathail 1998:82). In other words, the two processes can not be considered in isolation from one another. Deterritorialization refers to the breaking down or destabilizing of territorial meanings, structures and frameworks, as a result of their disruption or transgression. Reterritorialization, then is the reconfiguration of these meanings, structures and frameworks to accommodate and reflect the altered spatial reality. Taken together, they indicate a change in the spatiality of political, social, or economic processes. More to the point, “traditional territoriality is increasingly turning into territorialities, i.e. more vague, overlapping spaces of dependencies and constellations of power” (Paasi 1999:86) due to glocalizing forces. As a result, I believe after Hirst and Thompson (1999), that “states will come to function less as ‘sovereign’
entities and more as the components of an international ‘quasi-polity’; the central functions of the nation-state will become those of providing legitimacy for and ensuring the accountability of supranational and subnational governance mechanisms” (1999:257). My research interrogates the ways in which environmental NGOs and indigenous groups (primarily) are or are not advancing the emergence of this new “quasi-polity.” Are their activities transterritorial? Are they creating transnational governance structures that wed different levels of management and interaction together in unique assemblages that challenge territorial boundaries and the sovereign entities that they supposedly contain? “It is not the presence or absence of state territoriality but its changing status, power and meaning” (O’Tuathail 1998:82) relative cross-border environmental problems that interests me most.

Environmental Governance and Transterritoriality

"Since no set of discrete territorial units—no matter how configured—can accommodate existing social, political, and economic arrangements, we need to consider the possibility of a multilayered and not strictly hierarchical approach to governance in which the territorial notions that undergird decision-making more closely reflect the different spatial structures in which issues and problems arise" (Murphy 1996:84).

In addition to the linked processes of de/reterritorialization, instances of extraterritoriality—what Falk (1992) has termed ‘evasions of sovereignty’—such as embassies, examples of nonterritoriality prescribed by spaces of flows such as cyber space, and nonterritorial regions such as global economic space—have always existed alongside of, within, or layered on top of the modern world territorial system (Ruggie 1993; see also Taylor 1995; 1996; Morely and Robins 1995; Amin and Thrift 1997). These “important practices that bypass the state” are increasing in number, scope and form and also represent a challenge to the sovereign state (Taylor 1995:13). Political power can no longer be described (indeed, it was never truly accurate to do so) as residing solely or neatly in sovereign states—territorial landscapes of control and authority bounded by crisp lines of inclusion and exclusion."
"... [T]he word 'governance'... enables a dialogue about new and old forms of political-economic authority without boxing in or limiting our understanding of these powers as a top-down, state-centric from of sovereign-like control... Governance can thus be read here as describing the net effects of systems of political-economic authority in a way that does not simultaneously present the resulting form of authority as either singular, spatially contained, or reducible to a discrete level or territory of government” (Sparke 2000: 3).

Governance, eloquently described above by political geographer and transborder region specialist Matthew Sparke, is a term that can encompass the messy, contingent and dynamic interplay of scales, geographies, and power constellations that characterize contemporary politics. The notion of governance frees the concept of political authority from the territorial trap, the “blight of territorial absolutism” (a la Taylor), and top-down models of control, but does not necessarily indicate the direction this de-spatialized, unbounded form of power may take. Non-state governance can occur without significantly destabilizing hegemonic structures of government and control. In some cases, links between non-state and state governance may strengthen dominant forms of power.

This is where the notion and the language of transterritoriality, or more specifically, transterritorial governance, become useful. Borrowing the term from Taylor (1995), transterritoriality or transterritorial governance can best be described as those forms of cooperation, networking, and community-building across boundaries that actively reconfigure, shift, or influence the territorial/spatial basis of authority. These changes to territorially-based sovereignty can be intentional or may occur as unanticipated by-products of transboundary cooperation, but in either case, the effect is one of creative destruction. The governance practices of NGOs and other groups that are of a transterritorial nature are of central concern to me in this research.

Conclusion

In the pages that follow the theories and ideas I have presented and interpreted in this chapter will be used to unpack the spatiality of the salmon problem. The Salmon Wars offer an ideal laboratory for the study of the ways that the cross-border work of
NGOs and other non-state actors is affecting or being limited by dominant ecopolitical structures and management regimes. It illuminates the ways in which the actions of these groups may be transterritorial in nature and therefore may be working to un-make the spatial mismatch in salmon management and conservation and re-scale political geographies to better suit the resource. My dissertation thus provides an empirical examination of organizations confronting the territorial trap and the sovereign state system and a critical interrogation of the theoretical literature concerned with these concepts.
Notes to Chapter 2

1 There are, however, studies that have touched on these issues in relationship to environmental problems at the level of theory such as work by Kuehls (1996) and Lieffin (1998).
2 Works by Chaturvedi (1996), Rumley, et. al. 1996, and O'Tuathail et. al. (1998) are among the few examples of political geography scholarship focusing on sovereignty and territoriality that give any measurable attention to environmental issues.
3 Access to the salmon fishery is not open to anyone, nor has it been for thousands of years. Many barriers to entry exist based on race, gender, ethnicity, class and territorial ties such as nationality, i.e. on which side of the border you happen to live. In Taylor’s words, “[b]ecause the salmon fisheries were neither perfectly open nor closed, we need a better way to discuss their environmental history than the perpetuation of inapt metaphors and impotent debates” (1999:11).
4 There are certainly examples of older texts that challenge state sovereignty in fundamental ways, thereby opening a very different geographic imagination of politics and territoriality. One could arguably list such works as the Wollstonecraft’s Rights of Women (1992) and the Communist Manifesto (1992) as examples that did not fit within the established norms and modes of thinking about political space. These works, however, are the exception that prove the rule.
5 The dramatic shifts in the geopolitical map since the fall of the Berlin Wall in 1989 and various processes of globalization have led to a large-scale economic, social, and political reordering and reconfiguring of the world, and as a result, sovereignty and its relationship to the territorially-bounded state are coming under closer scrutiny.
7 Researchers, including geographers, historians and political scientists, can certainly be found guilty of participating in this territorialization of the world through the production of knowledge and data in a state-based framework.
8 “Education in geography and history in particular,” says Paasi, “typically produces and reproduces the *iconography of boundaries*; that is, the symbols that essentially construct the history and meanings of a territory,” thus maps must often be seen as “the results of deeply institutionalized practices of power and representation” (1999a:76).
9 The idea of the construction of territory among many indigenous peoples as a multilayered and complex set of practices and meanings helps to explain the development of the contemporary salmon problem. It highlights the lack of a common spatial/political reference system between local native groups and European colonials which led to treaties and agreements that continue to be sources of conflict (see Chapter 4).
10 Efforts by governments to stem the activities of international environmental action groups often backfire, producing increased environmental militancy domestically and generating significant negative attention and political/economic pressure from outside the state.
11 However, some use the term differently. Rolan Robertson (Featherstone, Lash and Robertson 1995), for example, uses it to talk about niche marketing to local audiences.
12 For a useful definition see Amin and Thrift 1997:149.
13 Kuehls, for example, suggests that discourses of territorial state sovereignty do not adequately describe political space given “the inability of the space of sovereignty to contain the flows of political, economic and ecological activity, and the extent to which both the territory and the population of sovereign states are constructed through practices that exceed the apparatus of state sovereignty” (1996:ix). The power of capital, people, and pollution (to name just a few border-transgressing entities) to "exist within the lines of territorial sovereignty while exceeding these lines in multiple directions [demonstrates] the limits of sovereignty to fix, code, regulate, and control its territory" (1996:41). Rosenau similarly finds that
contemporary conditions have already effectively eroded the concept of territorial state sovereignty as it is traditionally understood (1993).

14 Amin and Thrift, for example "propose that the new global forces and global interconnections might, paradoxically, imply a heightened influence for national systems of development and governance" (1997:149).

15 This is largely due to the fact that as the possessor of a territory that has the ability to regulate its population, the democratic state has "a definite and unique legitimacy internationally in that it can speak for that population" (Hirst and Thompson 1999:257).

16 Murphy acknowledges elsewhere in this work the similar border-transcendent nature of environmental concerns.

17 Indeed, political geographers such as Peter Taylor and scholars from related fields have come to recognize that "territorial sovereignty has never been as absolute in practice as its theory implies" (1996:6).
CHAPTER 3: METHODOLOGY AND RESEARCH METHODS

Methodology

In Melissa Gilbert's addition to "Women in the Field: Feminist Methodologies and Theoretical Perspectives" (a special section on methods and techniques in the Professional Geographer, 1994), she offers the following definitions: "[a] research method is a technique for gathering evidence, a methodology is a theory or analysis of how research should proceed, and epistemology is a theory of knowledge" (Gilbert 1994:91). Of these, she argues (after Harding 1987) that "it is methodology and epistemology that distinguishes feminist research from nonfeminist research" (1994:91). The topic of my project is clearly not a 'women's issue' or even a topic of special concern to women, nor is it aimed at exposing circuits and forms of patriarchal power. Nevertheless, my research methodology and epistemology define this project as a feminist geography endeavor because "it is the critiques of universality and objectivity, and the emancipatory purpose that differentiates feminist research from nonfeminist research" (Gilbert 1994:91), not the subject matter.

I identify my research as being both feminist and also poststructuralist for several principal, interlinked reasons. Firstly, in constructing this project, one of my first tasks was an exercise in reflexivity—an exercise that I revisited often during the project. I believe, after Nast, that "[t]here needs to be critical and reflexive questioning of what the research/researcher hopes to accomplish, why a particular area was chosen, and for whom we are working" (1994:58). I took a close look at myself as an individual, a researcher, and an activist concerned with salmon and environmental issues more generally to try to understand what I was bringing to the table. I had to consider how my privilege and position as a white male and an American (among other axes of identification) might affect my work with a diverse group of research participants (see England 1994). As a result of this self-examination, I almost chose a different topic rather than confront some of the difficult methodological and theoretical challenges it posed, especially those related to including marginalized indigenous people in the study.
In addition to biographical distinctions that I had to consider, my position as an academic researcher raised numerous methodological questions (see Nast 1994:59). There could be no doubt that, as McLafferty (1995:437) makes clear, “the researcher holds a ‘privileged’ position—by deciding what questions to ask, directing the flow of discourse, interpreting interview and observational material, and deciding where and in what form it should be presented.” With this in mind, reducing the impact of this position of privilege has been an important goal (see below).

While I have tried to be “self-critical and self-consciously analytical” (Moss 1995:445), I make no claims to achieving a ‘transparent reflexivity’ that affords comprehensive knowledge of either myself, the study participants or the context within which the research takes place (see Rose 1997). Instead, I understand my knowledge as partial and situated, as is the knowledge of my research participants, which brings me to my next points regarding epistemology and representation.

“Central to feminist praxis is exposing the social construction of knowledge within the academy and in the field. . . . [T]his involves critically examining the relationships between the researcher and the researched, questions asked and not asked, interpretations of data . . . .” (Staeheli and Lawson 1994:100).

Knowledge, for the purpose of this research, is understood to be diverse, socially constructed, situated and powerful, and identifiable through various forms of discourse (see Mills 1997). Following Haraway (1991), I maintain as a methodological premise that the positionality or situatedness of knowledge results in an inability to claim the universality of that knowledge. “[C]ritical knowledges,” according to Rose, “work from their situatedness to produce partial perspectives on the world. They see the world from specific locations, embodied and particular, and never innocent” (1997:308). I acknowledge the particularities of my own knowledge and that of my diverse research participants. I strive, as much as possible, to avoid universalizing claims and I have attempted to avoid the representational pitfalls of trying to speak for marginalized ‘others’ by making my “position and perspective known, visible and clear” (1997:308). This was accomplished in part by identifying myself and exposing my research goals and
my stance on salmon issues and other pertinent political questions at the outset of my interaction with research participants (see England 1994).

Even though it is crucial to avoid overgeneralization, it remains the work of critical geographers to link the local and the everyday to larger scale processes and structures of power. Thus, I try to appropriately apply knowledge accessed in my particular research context to broader questions of environmental management and policy, globalization and geopolitics, borders and territorialization, all the while recognizing that “[t]ranslations from local knowledges to academic knowledges are deeply regulated by power relations” (Rose 1997:315).

Affirming the situatedness of academic knowledge allows critical research to avoid overgeneralizing and to learn from other kinds of knowledges. The space of knowledge is fragmented, fraught with power and uncertainty, risks and opportunities (see Rose 1997:317). Recognizing this should, rather than generating inertia or preventing research (as was almost my experience), lead one to realize “that the space of betweeness is a site in which we can uncover the experiences and politics of marginalized groups” (Staeheli and Lawson 1994:99).

Uncovering those experiences and politics raises issues of representation. I was confronted with those issues in that I chose to undertake research that necessarily included Canadians and Americans, Natives and non-Natives, and representatives of a host of other diverse social identifications, many of whom experience varying levels of marginalization as a daily condition or at least in regards to the topics of this research. I was deeply concerned about the threat of “colonizing, appropriating, and fetishizing the ‘voices’ of marginalized others” (Nast 1994:58). I believe that it is true that “[w]e always objectify the words of our respondents in our academic stories. Our academic editorship is inevitably present in our writing and representations of the people we research. Nor should we pretend otherwise” (Staeheli and Lawson 1994:99). Instead, I have tried to devise ways “to incorporate difference and acknowledge the partiality and situatedness of our knowledges in ways that do not elide the political implications of these positions”
(Staeheli and Lawson 1994:99). I attempted to accomplish this primarily through self-identification, democratization of the research process, the principle of reciprocity and clearly identified research goals that include the dedication to political change.

Democratization in this project involved using research methods “that promote mutual respect and identification of commonalities and differences between researcher and researched in non-authoritative ways” in order to allow “the ‘other’ to be heard and empowered” (Nast 1994:58). Interview subjects were given the option of editorial power over the information they shared with me (see Staeheli and Lawson 1994:100). They were also given the choice of remaining anonymous or having their name included in the text. Most participants chose to be named, but only to review the work if it were published in a form other than the dissertation. I, along with some other feminists, “...recognize the limitations of this particular form of democratization,” and so I have sought “...other avenues to make the products of research more accessible and useful” (Staeheli and Lawson 1994:101). Toward this end, I am creating a website based on this research that is being designed and generated with the guidance of research participants. It will include contact information for groups involved in salmon issues and a description of each group’s activities, information from the empirical and historical sections of my work research deemed valuable by the participant groups, and provide links to other pertinent sites.

The website not only makes the research more accessible and useful, but it also helps me to meet my goal of achieving at least a minimal level of reciprocity in this project. Satisfying the principle of reciprocity, a common aim in feminist work, dictates that the research process not be a one-way street. Nevertheless “...even ‘feminist’ research too easily tends to reproduce the very inequalities and hierarchies it seeks to reveal and transform. The researcher departs with the data, and the researched stay behind, no better off than before” (Patai quoted in Gilbert 1994:95). I am attempting to evade this shortcoming by trying to further the political and environmental goals of my subjects whenever feasible. I completed each interview with an offer of assistance.
These offers were usually generalized, for example, I would volunteer to “be of help in any way I could” and made myself available to be contacted for this purpose. Three participants have so far taken advantage of that offer by requesting information or asking me to use my position at the University of Washington to obtain information, contact individuals, or provide other forms of assistance.

“I believe that I cannot achieve any purpose by constructing a research project that is primarily intended either as a means to advance my own career or as a patronizing gesture of aid toward a group with a ‘problem.’ . . . Feminist methods that stress mutual respect and involvement, shared responsibility, valuing difference and nonhierarchical ways of achieving ends are not simple or shallow gestures of accommodation, nor are they just an alternative methodology. Such methods define an approach to political change” (Kobayashi 1994:76).

Reciprocity and democratization are two elements of my research methodology that are directly linked to the underlying and motivating goal of the research—political change and empowerment. I chose this project out of a personal concern for wild salmon and the environmental quality of the region, and out of a sense of common purpose with salmon conservationists (including environmentalists, many Native people, and even many sport and small-scale commercial fishermen). I believe the damage being done to the environment of the region violates the rights of the salmon and of all the other species who share it. I am sadly certain that if the salmon problem is not addressed immediately with innovative strategies and a willingness to make real, perhaps uncomfortable changes to protect wild salmon, there will be few if any left in 50 years. I further believe that environmentalists, Native peoples, and other concerned groups can play a leading role in devising and implementing such strategies if given the opportunity to do so. It was my hope from the beginning that my work might enhance their chances of success, even if only by the smallest of margins. While it is “. . . difficult to move unheralded into just any field situation and become an effective part of its struggle for change just because we believe in its political ends,” (Kobayashi 1994:78) it is not impossible. This is especially true, I think, when the researcher and the researched share in the struggle, i.e. when the researcher is not coming from outside the field or context. This is the case for my work
in that I am a resident of the region and I have been personally involved in environmental causes, including local salmon restoration efforts.

In contrast to the claims of objectivist and positivist social science, to serve the greatest social value, scholarly endeavors need to be redefined and undertaken not only as “a means of interpreting, but also of effecting, social change” (Kobayashi 1994:73). I am “working to connect academic research to political activism and social transformation” at sites of praxis which “include the classroom, publications, the university, the communities with which [I] identify, and those with whom [I] conduct research” (Staeheli and Lawson 1994:101). I am doing this through my website, by continuing to work with research participants and by other means. For example, my students had the option to work for a salmon restoration organization (Save Our Wild Salmon) as part of a service learning requirement for a course entitled Problems in Resource Management that I taught in the Fall of 1998.

Research Methods

The research goals of this project are to uncover the underlying geography of the salmon problem, especially the transborder ‘Salmon Wars,’ and the implications of that geography for theories of sovereignty and the territorial state. To accomplish these goals, I began with an in-depth exploration of the historical, political and ecological contexts in which the salmon problem is occurring in concert with extensive reviews of relevant bodies of scholarly literature. This work was undertaken mainly during the first of two overlapping phases of research and is described in the next section. The balance of the research involved more specific archival work relating directly to organizations engaged in transboundary salmon protection and management efforts and, most significantly, interviews with representatives of these organizations. Guidance regarding research methods came from several sources among which the edited collection *Methods in Human Geography* (Flowerdew and Martin 1997) and Rubin and Rubin’s *Qualitative Interviewing: The Art of Hearing Data* (1995) were key. *The Craft of Research* by Booth, Colomb and Williams (1995) was also a useful reference. Other sources of
instruction, especially regarding interview strategy, include Katz (1992) and Ribbens (1989).

**Phase One**

Archival research was the primary task of Phase One. Research began in the end of 1996 as part of a Research Assistantship position working with Professor Matthew Sparke in the University of Washington Department of Geography. The project involved an investigation of the Cascadian transborder region, which provided me with a solid introduction to the salmon problem and other cross-border concerns.

Early in Phase One, books and research papers on sovereignty, borders, transborder environmental politics, environmental policy, Canadian-American environmental relations, research methods, discourse and other appropriate literature were surveyed. These works came predominantly from the fields of geography, international relations, and political economy, but the discipline of political ecology, history, anthropology, Native American studies and others were also represented.

In addition to the theoretical literature that was reviewed, several other sources of archival information were accessed and surveyed. The key ideas and topics that I searched for in conducting this survey were: 1) references to geographical themes in relation to the salmon, including discussions of the role of borders, mentions of salmon linked with sense of place, and expressions of transborder regionalist unity involving salmon iconography or, by contrast, nationalism and separation; 2) any use of the language of sovereign territorial rights; 3) issues of race and marginalization in the salmon conflicts; and 4) examples of cross-border cooperation.

The purpose of this work was to contextualize the salmon problem and transborder salmon conflicts generally, but also to place them more specifically within the discursive terrain governed by the notions of sovereignty and territoriality. Mills' (1997) summary of discourse analysis techniques has provided useful theoretical and methodological background to this and later phases of my study. Examples of discourse analysis such as that found in research conducted by Fraser (1989), Kaplan (1996),
Mitchell (1991), Newman and Paasi (1998) and Paasi (1996) have also served as models for my research. Discursive analysis enabled me to map the positioning of stakeholders and to begin to unpack the part that geography and geopolitical frameworks play in the conflicts. It afforded me a picture of how stakeholders understand the geography of the salmon problem and the language that they use to describe the issues.

The archival research that focused on the salmon problem (rather than on geopolitical theory) took several forms. It began with a review of books (mostly scholarly in nature, but included some other genres as well) and articles in refereed journals. These works describe, discuss and analyze the salmon problem as a whole or focus on specific aspects such as historical and contemporary legal issues of Native fishing, the politics of hydroelectric and timber operations and their impacts on the fishery, and the like. Highly technical research on fisheries or research focused on specific issues in salmon biology were rejected in favor of work that emphasized the qualitative aspects of the salmon problem. That said, there was sufficient research conducted into salmon lifecycles and environmental requirements and the workings of harvest operations to allow an informed analysis of the human/geographical dimensions of the problem.

The second form of archival research was a web-based search for sites and email lists relevant to the salmon problem. There are dozens of World Wide Web sites containing data on the salmon problem or with links to such information. Many of these have little information of value to this study. Of the sites that were found to have information that bears on the issues of interest here, some of the most useful included government sites, both Canadian and American, with information on salmon recovery, sites discussing the Pacific Salmon Treaty, sites sponsored by Native peoples outlining their stance on salmon issues, and sites authored by individuals or groups that contain (or consist entirely of) links to homepages for agencies and organizations that are involved in salmon issues. There are also web sites for most of the organizations that were subjects of this research, but they will be discussed in the description of Phase Two below.
Email lists have been especially important as sources of background information and for maintaining currency with the ups and downs of the salmon problem. Ecotrust, an organization dedicated to the establishment of a conservation economy and operating at a bioregional, transborder scale (see Chapter 6), in cooperation with InfoRain (a bioregional information system) sponsors and maintains two lists.¹ These lists have been a continuous source of important salmon news and other regional environmental information. The first, called morningTIDE, provides abstracts of, and daily links to, environmentally-significant headlines from the entire North American rainforest coast. The ebbTIDE provides the same sorts of information on a weekly basis. Fishlink is a weekly service provided by the Institute for Fisheries Resources and its affiliate, the Pacific Coast Federation of Fisherman’s Associations (PCFFA) (see Chapter 6 and Appendix D for details on the PCFFA). Fishlink is more specifically focused on fishery issues than the Ecotrust lists and provides updates on fishery regulations, the status (abundance, health, legal standing relative to the Endanger Species Act (ESA)) of salmon and other commercially important fish, new scientific findings of import to fish management and harvest and any other news of relevance to conservation conscious, small, family-owned fishing operations and other interested parties. This list has headlines and links to full news stories, but it also announces symposia, conferences and meetings, and covers issues outside the region that have bearing on local fisheries such as fish production in other countries.

The final method of archival research was a review of newspaper articles pertaining to the salmon problem from two major regional daily news publications, The Seattle Times and The Vancouver Sun. These two were chosen because they are representative of mainstream media sources for salmon information in the region and provided an opportunity to compare American and Canadian coverage of the same events. The survey of the two daily papers has been continuous throughout the research process. Additionally, Lexis Nexus (an on-line journalism media database) was searched using keywords and parameters specifying years (1985-present) and geographic extent
(North American northwest coastal region) for additional useful articles. Pertinent articles in trade publications and such as *The National Fisherman* and *The Fisherman's News* were also reviewed.

In addition to these sources, I was given access to archived salmon news articles assembled by the Canadian Consulate in Seattle that dated back to 1990 and included clippings from a variety of sources and thus provided greater depth to this part of my search. Also, a professor emeritus in the UW Department of Geography who had done research on PNW salmon management, water rights, hydroelectric power and other regional concerns cleaned out his office during the summer of 1999. I was allowed to go through and select any of the archived information he no longer needed for my own use. I was fortunate to find salmon news clippings and a few other assorted pieces of information from the early 1970's and more recent years that proved to be useful.

**Phase Two**

Interviews with representatives of Canadian and American organizations that are involved in the salmon problem constituted the main research activity for Phase Two, and indeed for the entire project. Research at the level of organizations appeared to be the best way to address my central research questions regarding discourses and theories of sovereign territorial space because: 1) organizations represent significant numbers of people, interviewing spokespersons for those organizations results in a more comprehensive body of information than interviewing private individuals; 2) of the impact that organized stakeholder groups are beginning to have on the salmon problem (as was revealed in Phase One; and 3) organizations, particularly NGOs of various kinds, are the entities most involved in innovative, cross-border salmon initiatives.

The following paragraphs describe how these organizations were selected and contacted, provide details on the length, format and number of interviews conducted and include some details regarding particular questions asked during the interviews. In addition to describing the interview methodology, this section discusses the review of
websites and literature produced by organizations of interest to this study (those organizations selected for inclusion in the study and hereafter referred to as ‘Groups’).

**The Selection of Groups:**

In selecting Groups to focus on in Phase Two, several questions had to be answered. How many Groups should be included in the study? What types of organizations should be included? Should government agencies be included and if so which ones? Initially, organizations from five categories were considered:

1) environmental NGOs (ENGOS) concerned with the preservation of the Pacific Salmon
2) government agencies directly involved with fishery management and policy formation
3) organizations representing indigenous peoples with an interest in the fishery
4) organizations representing the regional commercial fishing industry
5) sportfishing organizations

The total number of Groups selected for inclusion in Phase Two was twenty-two (See Appendix A). Fourteen of these Groups can be classified as ENGOS, four are indigenous Groups (all with ties to government agencies), two are commercial fishing interests and two are strictly governmental. The Groups from each category are evenly divided in number in terms of the country in which they are based (i.e. 7 ENGOS from each country, etc). The number of Groups included was a result of a combination of factors, specifically the willingness of organizations to participate, time and financial constraints on the research, and subjective selection based on the type and amount of cross-border initiatives being undertaken by different organizations, their expressed ideas about sovereignty or territorial boundaries, and their positioning in the conflicts.

In my empirical research, the activities of marginalized segments of the population including indigenous fishing peoples and environmentalists represented by nongovernmental organizations (NGOs) have been emphasized. This emphasis is in response to: 1) the increasing influence of disenfranchised stakeholders in relationship to management and policy; 2) the importance of including all stakeholders in policy decisions if those policies are to be effective; 3) the tendency for the efforts of these Groups to be among the most transgressive relative to established circuits of power and
related geographies; and 4) the intention of the researcher not to participate in the continued marginalization of such Groups.

Sportfishing Organizations

In the end, the organizations representing sportfishing interests were the only ones completely excluded from Phase Two. That choice was made because it became clear that the interests of anglers closely resembled and were often explicitly represented by ENGOs. In fact, many of the people on staff or supporting the ENGOs are anglers themselves.

Government Agencies

Governmental agencies were not included on a larger scale for several reasons, two of which are key. Firstly, the position of governments is a matter of public record and is available elsewhere. Secondly, my research is concerned with transgressions of borders that may be progressively unbundling territorial sovereignty. Government agencies are not particularly active agents in this regard and, as should be expected, most often reinforce territorial space (with some notable exceptions—see Chapters 4 and 5). One government agency from each country was included, however, to provide perspective and as a source of information not available from nongovernmental Groups. Focus in these interviews was on recent changes in salmon management and policy and the work of the Pacific Salmon Commission (PSC), the agency charged with administering the PST.

Commercial Fishing/Aquaculture Organizations

Commercial fishing organizations were also included to provide perspective and balance to the project. The commercial fishing industry is obviously a key stakeholder in the salmon conflicts and could not reasonably be excluded. They were not included in greater numbers because of the apparent lack of significant transborder initiatives among these organizations. The two operations that were chosen were selected because they: 1) represent different segments of the industry—one is an example of the large-scale commercial fleets and major canning operations (Canadian Fishing Company), and one
serves small-scale, mostly family-run fishing enterprises (Pacific Coast Federation of Fisherman's Associations); 2) each represents a large number of stakeholders; and 3) spokespersons for these Groups each had a record of long-standing involvement in salmon politics (such as experience as a Commissioner to the Pacific Salmon Commission).

Salmon aquaculture operations emerged in the preliminary research as another major stakeholder in the salmon conflicts. Salmon fish farming, both locally and outside the region, has become a huge factor in the regional salmon problem and a major source of contention. Even so, these companies were excluded from the study because the local operations are almost entirely located in Canada (although there are some in Washington state in and around Puget Sound), they do not have much involvement in cross-border issues at this time and their concerns are not yet a particularly large force in salmon policy-making choices, though this will assuredly be changing. Salmon aquaculture and how it impacts the salmon problem will, however, undoubtedly be a very important area of research in the future.

Indigenous Peoples' Organizations

The indigenous peoples' organizations chosen for inclusion are among the most prominent and influential Groups representing the interests of Native fishing peoples living within Canadian and U.S. borders. These four Groups together speak and act on behalf of dozens of tribes who live and fish for salmon (when possible) from Oregon north to central B.C. While there are other entities representing Native fishing concerns, they are smaller, representing individual tribes or bands grouped in a particular area, and they are currently less active than the selected Groups, at least in the transnational arena. The four organizations chosen are all associated with government agencies, both federal and state/provincial. They work closely with these agencies and often receive a considerable portion of their funding from government sources, which necessarily influences their political agenda to some degree. One of the four Groups (the Canadian Columbia River Inter-Tribal Fisheries Commission or CCRITFC) is modeled closely on
the American organization that preceded it, the Columbia River Inter-Tribal Fish Commission or CRITFC. Similarly, the two other Groups chosen from this category (Northwest Indian Fisheries Commission and the B.C. Aboriginal Fisheries Commission) have similar mission statements and modes of operation. In each case, however, there are distinct differences between Canadian and U.S. based indigenous organizations. This is primarily because, on each side of the border (and in many cases, from tribe to tribe), the legal agreements and economic standing of the tribes are widely divergent as a result of historical circumstances explained in some detail in Chapters 4 and 5.

My research objectives could not be met without the inclusion of these Groups. Moreover, exclusion of these Groups would have replicated Native peoples’ experiences of peripheralization in an unacceptable fashion. Since the arrival of Europeans, indigenous people have been disenfranchised and often completely excluded from salmon policy-making and management. They have been required to wage continuous legal battles in order to secure their right to fish for salmon and the right to have a hand in the management of fishery resources. This is the case even though these rights were, in many cases, guaranteed to them by treaty over 100 years ago, or in the case of some B.C. tribes, were never extinguished or made subject to legal treaties in the first place. Their struggles are far from over, particularly in the case of Canadian First Nations. Until recently, there has not been either the appropriate political climate or the legal framework within which B.C. tribes could work to secure some of the rights now held by many Native American tribes in the PNW. Additionally, many Native peoples in the U.S. remain shut out of the commercial salmon fishery while others are dissatisfied with their current rights and level of influence in the management of the salmon resource.

Issues of Native sovereignty and territorial rights render the efforts of indigenous Groups especially interesting and pertinent to the theoretical questions asked in this research. Indigenous peoples’ active use of the language and logic of sovereignty to fight for their rights, the juxtaposition of their historical geographies with contemporary tribal
borders and international boundaries, and their transboundary organizing efforts all add to the importance of including a detailed examination of their perspective(s).

Environmental Nongovernmental Organizations

ENGOs make up the bulk of the Groups in this research. There are several reasons why this is the case. Firstly, ENGOs involved in salmon recovery, conservation and protection issues are numerous. This means that there was a large pool of potential Groups to choose from and it made it more likely that I would receive a substantial number of positive responses to my request for participation in the study as proved to be the case. In fact, I was unable to interview representatives from all of the ENGOs that agreed to participate due to time and financial constraints. Second, the work of ENGOs represents the largest body of transborder organizing outside the normal circuits of government, thus these Groups play perhaps the most significant role in the contestation and renegotiation of sovereign boundaries. Indeed, some of these organizations are very consciously promoting a de/reterritorialized approach to the salmon problem and other environmental and resource concerns that have cross-border implications, making them particularly pertinent to this research project. Third, it was obvious from the research conducted in Phase One that the work of these Groups includes some of the most innovative, cooperative and successful cross-border salmon initiatives. Given this fact, detailing these initiatives is crucial.

I decided which ENGOs to include in this study based on the following five criteria: 1) willingness to participate; 2) level of influence on domestic salmon policy or conservation as evidenced (or indicated) in Phase One, i.e. proof of successful habitat restoration or other recovery efforts, successful lobbying efforts or legal challenges on behalf of the salmon, etc.; 3) apparent or likely involvement in cross-border work; 4) obvious or suspected articulation of a transterritorial perspective; and 5) initial response to requests to participate, i.e. information given by respondents that indicated the appropriateness of the group for the study based on 1, 2, 3 and 4 above.
Contacting Potential Groups

Several potential Groups were first identified in the early stages of Phase One. There were a few that I had become familiar with through atypical means. I became aware of the Save Our Wild Salmon coalition through a mailing received at my home as part of one of their campaigns and later contacted the group in person at a University of Washington volunteer fair. I first saw the name of several Canadian Groups in a paid advertisement in the Seattle Post-Intelligencer (June 4 1997, A8) entitled Our Pacific Salmon, Our Common Heritage: An Open Letter from Concerned British Columbians (underlining in original) urging PNW residents to demonstrate their concern for the salmon by “insisting on fair implementation of the Pacific Salmon Treaty.” Some of the best initial sources of potential participant organizations were websites such as the one hosted by the Riverdale School called simply The Salmon Page. This site contains links to many salmon-related sites. I followed the links and performed searches for organizations that were not hyperlinked to the source web page and then reviewed the newly located site to see if the organization in question appeared to be a possible Group. If the organization seemed likely to satisfy the baseline criteria for inclusion, they were placed on a contact list. This snowball methodology was quite effective. My contact list, which was soon divided into separate Canadian and American lists for data management purposes, quickly contained over 50 potential Groups.

Later, during the early stages of Phase Two, I acquired the names of additional potential Groups at conferences that I attended. The first was the 2000 Salmon Forum, part of the Salmon Homecoming Celebration, held at the Bell Harbor International Conference Center in Seattle, Washington on September 6th, 2000. The forum “provides a venue for people working on salmon restoration to make connections, build bridges and learn from each other for the benefit of salmon” (Forum Resource Book 2000:4). At this forum, I was able to talk with organizational representatives and review literature in addition to attending presentations and discussion sessions on selected topics. As a result of connections made at the forum and by using the Forum Resource Book given to
attendees, which included a list of participant organizations and individuals, I added additional Groups to my contact list.

Once I had built up my source list, an introductory/interview request letter was drafted and emailed or mailed to the potential Groups. If no mailing information could be found, I located a phone number for the group and called to acquire this information and then sent the letter. There were two versions of the letter—one addressed to an unknown recipient and the other directed to an individual who had been named on a website or in some other source (see Appendices C and D).

There were some glitches in this system. In some cases, named individuals no longer worked at a particular organization. In one case, the organization itself no longer existed even though the website still did. On a few of occasions, I received either a belated reply (several weeks to 2 months) or no reply at all to my initial contact. Overall, however, the response rate was excellent. One of the unexpected pleasures of this project was the high level of interest in my study. Many respondents expressed great enthusiasm for the project and sincere eagerness to participate. Excitement about the project was evident in Groups from all categories. This enthusiasm often translated into helpfulness, as Group representatives suggested other potential Groups, forwarded news pieces, scholarly articles, and announcements for conferences that they thought might be of interest, or connected me with useful email lists such as Fishlink.

The Interviews

Scheduling and conducting interviews started in the summer of 2000 and continued until November of that year. It was a difficult process to make arrangements to meet with some organizational representatives, usually because of their very full calendars. Six interviews were rescheduled once and 4 were rescheduled at least twice and up to five times. During the interview process, new Groups were added to the contact list, especially in the beginning, as some organizations that I had no knowledge of or had previously excluded were recommended by Group spokespersons.

The interviews ranged in length from a minimum of 35 minutes (in the case of the B.C. Conservation Foundation) to a maximum of two hours. The average in-person
interview was 90 minutes in length while the phone interviews averaged closer to 70 minutes. The time difference is largely due to the exclusion of one question from the phone interviews. In this question, the interview subject was asked to draw a map depicting the key features of the salmon problem from the perspective of their organization. This question was inappropriate for the phone interviews because of the difficulty of interpreting any map they would draw without witnessing them being made. No follow-up interviews were necessary, though some statements made during interviews were clarified via email or phone upon review or transcription of the tapes.

Of the twenty-two interviews, there were three that, while appropriate and necessary and certainly productive on some levels, did not fully meet my expectations. Of these, there was only one Group, the Pacific States Marine Fisheries Commission (PSMFC), which in retrospect should have been excluded from the study in favor of a different governmental entity. This was not apparent until the interview, one of my first, was being conducted. The organizational purpose and practices of this agency were found to be less relevant to this research than I had hoped in that the PSMFC is mostly concerned with technical fisheries management issues, in particular coded-wire tagging of hatchery raised salmon, in the U.S. and Canada. The other interviews that did not meet my all of my expectations were with the representatives of the British Columbia Conservation Foundation (BCCF) and the Northwest Indian Fisheries Commission (NWIFC). In the case of the NWIFC, I believe that a different representative may have been able to provide me with more complete answers to my interview questions because of the technical rather than policy orientation of the representative with whom I spoke. The BCCF, on the other hand, turned out to be much less involved in cross-border work than I had anticipated based on email and phone communication with a member of the organization. In addition, the representative with whom I spoke is new to the organization and to the region and is not very knowledgeable about Pacific Salmon issues even though his background is in fisheries.
Other than these problems, the interview process was successful. Once an organization was selected to be a study Group and an individual to interview was identified through phone or email communications, an interview date was set. Specific interview subjects were usually chosen by the Group based on their assessment of the most qualified or suitable individual. Interviews were qualitative, taped and fairly structured. The interview included a set of questions grouped into five sections covering the following areas: 1) General Organization Identification and Descriptive Data; 2) Transborder Cooperative Organizing; 3) Scale, Territory, Boundaries and Sovereignty; 4) Management and Policy; and 5) Economics and Contact Information/Material Sources (See Appendix B). With one exception, Group spokespersons were not privy to the interview questions before the interview, nor were they given the opportunity to read the questions at the time of interview. Depending on the focus of the Group in question, individual questions or entire sections were sometimes omitted. In some cases, questions were asked but the subject had no answer to offer due to lack of information or, in the case of the Pacific Salmon Foundation (PSF), because it was a matter of organization policy not to speak to certain types of issues (specifically, aspects of policy such as the rules governing the allocation of salmon). Similarly, some sections received greater attention when appropriate given the nature of the Group (for example, the Management and Policy Section during the government agency interviews). In general, however, all sections and all questions were included in the interviews.

While the interview format was fairly structured, ample opportunity for free expression and discussion of unanticipated points brought up by the interview subject was provided. The order in which the questions were asked often varied because the subject would provide a response that led naturally into a particular question or set of questions. Also, the questions were not always asked using the exact same language. That is, the questions in Appendix B are guidelines rather than strict phraseology, even though I frequently used the language in the sample set of interview questions verbatim. Note-taking was minimal and consisted mostly of noting the tape counter number beside
the question being asked at that time. This allowed me to maintain eye contact and to otherwise engage the speaker more fully than would have been possible otherwise. Additional notes regarding my impressions and thoughts were made after the interviews.

Sixteen interviews were conducted in person and six were conducted by phone. Interviews were only conducted by phone when in-person meetings were impossible due to distance/time/financial constraints or scheduling limitations that could not be overcome. In most cases, I traveled to the offices of the Group which involved 2 trips to Portland, Oregon, several trips to British Columbia, and excursions to Olympia, Everett and downtown Seattle. Three interviews were held over meals in local restaurants while subjects were in Seattle for other business. Going to Group offices often meant that I was given greater access to organizational literature and publications, as well as video tapes, calendars and other materials, so this was the preferred interview site option.

**Group Publications**

Publications and other materials produced by Groups were the final source of information I used in this research. While it was easier to get a hold of descriptive pamphlets, bumper stickers, annual reports, books, periodicals, maps and other materials produced by the Groups at the in-person interviews, several representatives took the time and effort to send me these materials, again demonstrating their support for the project. The Group publications and other materials helped me to fill in descriptive blank spots left after the interviews were completed and also serve as examples in many cases of the cross-border efforts of the Group or describe those efforts in greater detail than could be achieved in the interviews.

**Data Analysis**

Data Analysis began in November 2000. It centered on integrating the source materials from Phase One and Phase Two, highlighting meaningful patterns, and attempting to uncover links between discourses of territorial sovereignty, regional ecopolitical geographies and the perpetuation of conflicts over wild salmon in order to answer the research questions detailed in Chapter 1. The taped interviews were transcribed then organized using a simple system of data coding developed during Phase
Two. This system was designed to make retrieval of data more expedient by grouping it according to subject matter. A list of twelve themes or topics of particular interest was generated and each received a code. Sections and statements from the transcriptions were then coded based on this list. For example, all statements concerning salmon aquaculture, whether positive or negative, received the same coding. Then, when addressing aquaculture in my analysis or writing, I was easily able to locate relevant statements. Sections of text and individual statements were cross-coded when appropriate.

The Next Step

In the chapters that follow, the geography of the salmon problem is closely examined. Part and parcel to understanding changes in sovereign space, territorialization and borders in the context of the salmon problem is an exploration of the socially and historically constructed geographies that are pertinent to this study. In Chapters 4 and 5, regional salmon geographies are traced, emphasizing and analyzing moments or periods of radical deterritorialization and subsequent reterritorialization. The development of the spatial mismatch and the continual geographic flux in relationship to differently spatialized modes of governance in the region are illustrated in these chapters. This lays the groundwork for the empirical research presented in Chapters 6 and 7 regarding the transboundary salmon efforts of the Groups and the conclusions drawn in Chapter 8.
Notes to Chapter 3

1 Ecotrust and InfoRain also maintain an excellent web site called Tidepool that provides news and information concerning environmental and ecopolitical issues in the Northwest bioregion.
2 Of course, not all indigenous tribes and bands have the same interests. Care has been taken to not misrepresent Native peoples interests as unified or singular even though many of their arguments regarding sovereignty and territorial rights are similar.
3 Cleve Steward of the Sustainable Fisheries Foundation insisted on seeing the questions before the interview and requested another copy during the course of the interview, which he was given.
CHAPTER 4: TERRITORIAL MOMENTS IN THE EARLY HISTORICAL DEVELOPMENT OF THE SPATIAL MISMATCH

Introduction

The wild salmon of the west coast of North America have a geography all their own, but that geography has been dramatically altered by interactions with humans. Habitat has been depleted and degraded by urban and suburban development, agricultural irrigation, dam building and hydroelectric power generation, logging and pollution. Particularly during the last 150 years, human activities and interventions have made feeding and rearing grounds inaccessible or unfit for salmonids. Entire streams have disappeared, and with them, unique stocks have become extinct. Over-fishing along the salmon’s entire migratory path, poorly conceived scientific management techniques and unsustainable fishery regimes (largely based on political considerations rather than ecology) have combined with habitat destruction to disrupt the salmon’s natural ecological and geographic patterns.

The results have been catastrophic. Wild fish which once traversed the region in the tens of millions and which were distinctively adapted to the micro-climatic characteristics of specific locations have been reduced in number and a tremendous amount of genetic diversity has been lost. Dozens of stocks face extinction if recovery efforts are not swift and dramatic. In the words of fisheries journalist Terry Glavin writing for Canada’s David Suzuki Foundation: “There’s no time left for argument or assigning blame as to what has caused this crisis. If wild salmon are to be a part of our future, a decision must be made now” (1998: 3).

How is it that salmon have come to be in such imminent danger? Clearly, this is a complex question for which there are no easy answers. There is no single entity, practice or institution that is to blame. This outcome was not intended, premeditated or desired by any group or power. Rather, it is a by-product of many interacting elements.
Objectives of the Chapter

"Integrating a spatial perspective helps us to envision complex cultural and material relationships people have developed toward salmon and salmon environments... [and] helps illustrate the distribution of social power in society, the social and environmental consequences of policies, and the internal contradictions of salmon management" (Taylor 1999:11-12).

In this chapter, I follow Taylor’s lead in introducing a spatial perspective on the salmon problem by charting the historical development of what I argue is one of the spatial mismatch between natural salmon geographies and human geographies of resource management and political organization. During the course of the last 200 years, the spatial mismatch has emerged in connection with a series of moments of territorialization——significant periods of change in the spatialization of human societies and salmon populations and in regional territorial behavior, structures, and norms. These moments of de/re-territorialization have remade and reconfigured the geography of ecology, sovereignty, and political economy throughout the Northwest Coast region and have had a substantial (negative) impact on wild salmon. It is important to emphasize at the outset of this process that these “moments” were not discreet, successive events, but overlapping and sometimes simultaneous sets of practices and processes. They are presented in a more or less chronological, linear fashion for the clarity and ease of comprehension only.

This analysis focuses on mapping the historical geographies of the salmon/human nexus through six successive periods or moments of territorialization, deterritorialization and reterritorialization. Each period is analyzed with a persistent attention to the enframing effects of sovereignty discourse relative to the spatialization of the salmon and the political economy of the region. This process serves several objectives. Firstly, and most importantly, sketching the historical geography of salmon in the Northwest reveals the gradual imposition of an interwoven set of spatialized social, economic and political systems that have led to fragmentation, division and dislocation in the utilization and management of salmon resources—the spatial mismatch. Understanding this process of dis-integration is one of the keys to understanding the ‘hows’ and ‘whys’ of the salmon
problem and ultimately, its resolution. Second, tracing the historical territorialization of the salmon contextualizes the contemporary salmon problem and provides a clearer picture of current efforts to transcend the spatial mismatch. Third, charting the geopolitical flux of salmon geographies exposes the effects and the weaknesses of the territorial trap. It does so in part by outlining the concurrent expansion and shrinkage of salmon geographies. On the one hand, the range of salmon has been reduced, the number of streams that support salmon populations has declined, and the distribution of salmon throughout the region has been simplified. On the other hand, previously regional or local salmon geographies have, over time, expanded so that they are now impacted by influences originating in increasingly distant locations. Salmon markets are now world markets and salmon fisheries are, more than ever, of global concern. As a result of these changes and the social, economic and especially political wrangling associated with them, the normalized conceptions of the sovereign territorial state and static, impermeable borders are challenged. The geography of the salmon/human nexus is shown to have experienced change and thus is subject to forces that may change it again. In other words, this work makes it clear that the current (political and managerial) frameworks related to salmon and the scale at which they are organized are not “natural” or inevitable, nor are they the only possible frameworks. This opens up the possibility for establishing a new, respatialized avenue of approach to the salmon problem and illustrates the theoretical implications of the salmon’s historical geography relative to notions of territorial sovereignty and borders.

The Six Moments of Territorialization

INTRODUCTION AND OUTLINE

In this chapter, I begin my discussion of territorialization processes related to the salmon with an introduction to the pre-human geography of wild salmon. The first of the six major changes in that geography occurs with the gradual formation of indigenous quasi-territoriality. I use the term ‘quasi-territorial’ to highlight the difference between territoriality as it is understood within the dominant European model and the stewardship-
based territorial control practiced by peoples native to the Northwest Coast. The second moment of spatial change covered in this chapter is the era of dramatic deterritorialization and the nearly simultaneous period of radical reterritorialization ushered in by the appearance of colonials on the scene.

In Chapter 5, I continue the analytical process started here by introducing the third moment of change that occurs with the beginning of the industrial fishery in the middle of the 19th century. This territorial moment leads to the fourth period in the 1930s—a time of large-scale habitat disruption and harvest-related changes. The signing of the Pacific Salmon Treaty in 1985 marks the fifth moment of territorial change covered in this historical geography of the salmon. The sixth and final moment details the period since the PST went into effect. The moments of geographical change described in these two chapters set the stage for my empirical examination of the cross-border activities, initiatives, agreements, and understandings currently affecting the territorialization of salmon and the limits to transterritorial action.

Natural Salmon Geographies

Wild salmon geographies are fascinating. The story of the salmon's dangerous journey—from its natal stream to the ocean, the vast distances traveled at sea, the struggle upstream to spawn, only to die in the effort—seems to resonate strongly with the people who share the area with this amazing fish. It is no wonder that the salmon have become a potent symbol of this region of North America.

Natural salmon geographies are, of course, intimately tied to their ecology, and can be examined and explained using different scales of analysis ranging from the macro to the micro. At the micro scale, salmon geographies can be differentiated by species—coho, chinook, pink, and so on—and then examined according to the spatiality particular to stocks of that species. For the purposes of this project, however, the specific adaptational and range differences of the individual species are less pertinent than broader geographic considerations, therefore salmon geographies will for the most part be discussed using a macro-ecological scale as the point of departure. Since detailed
information regarding salmon ecologies and life cycles, range, distribution and migration patterns can be found in innumerable texts on fisheries biology, salmon management, and elsewhere, this section will present only the most relevant basic information.

**Historic Distribution**

The total historic distribution of Northwest coastal anadromous salmonids covered an immense area that closely approximated the extent of the temperate rainforest biome and the drier inland areas of regional watersheds (please refer to Figure 1). Salmon of various species spawned in rivers from what is now south central California in the south to the most northern rivers of Alaska in the north. They could be found in streams as far east as Wyoming and the inland river systems of the Northwest Territories nearly to the Alberta-Saskatchewan border and west to the western most reaches of Alaska and the Aleutian Islands. Almost all river systems throughout this region supported populations of one or more species of salmon\(^2\) at one time since the family Salmonidae first developed perhaps 100 million years ago (Lichatowich 1999:11).

**The Lifecycle, Life Histories and Geographies of Wild Salmon**

Nearly all salmon are anadromous—meaning they live part of their life in fresh water and part in the sea—and they all follow a similar lifecycle pattern (i.e. the course of development through different biological stages). There are, however, tremendous differences in salmon life histories\(^3\) (the timing of different biological stages of development)\(^4\) and geographies (where different stages occur, overall range, particular stream of origin).\(^5\) Even so, the following basic description of the life of a salmon can be applied to most species and varieties with some exceptions, particularly for steelhead and cutthroat varieties. Eggs are laid in redds (gravel nests) by females and fertilized by males and both parents then die. The eggs hatch into fry that live and grow in fresh water environments (streams or lakes) for anywhere from a few days up to 2 years. The salmon then begin the journey to the ocean and along the way, they undergo the many necessary biochemical and morphological transformations necessary to survive in their new environment. The silver fish spend one to four years foraging and growing larger in the
sea. In some cases, the salmon remain close to the mouth of the river, in others they migrate but remain close to the coastline before venturing into deeper waters, while still others go directly to the open sea and travel great distances. During their years in the ocean, the adult salmon change in form and color, taking on a red or pink hue and the distinctive hooked lower jaw. At the appropriate time, the salmon return to the stream where they were born, swimming upstream against currents and leaping their way past waterfalls. They return to the streams from which they first emerged to procreate and then die within two weeks.

As a result of this rather complicated lifecycle, the salmon play an important role in the transfer of nutrients. They graze the ocean environments where they mature and then return that accumulated wealth back to the watershed of their birth. The number of species that feed directly on salmon, such as birds and bears, is at least 22 (Cedarholm, et. al. 1989; Willson and Halupka 1995) and many other species, perhaps as many as 150, benefit indirectly. The decaying carcasses of salmon return nutrients to the river and the forest. The forest cover provides shade for streams and makes them suitable for young salmon to grow, thus completing the circle. As Barbara Cairns of Long Live the Kings told me:

"These are integrating creatures. I mean, they integrate across landscapes. They carry marine biota into the mountains. Somebody once said that in one sense, the mountains were built a salmon at a time (George Frampton, former head of the Washington Council on Environmental Quality). That's particularly true when you look at the salmonberry DNA and find that it's the same as the salmon and it sort of blows your mind. Salmon are really important conveyors of marine biota into the mountains. They just become the mountains" (Interview, October 12, 2000).

**STOCKS AND MICRO GEOGRAPHIES**

Salmon are not only differentiated by their lifehistories but also by their micro geographies. Some salmon never live in the ocean and others spend up to two years living in lakes before making the journey to the sea. Moreover, "because salmon return to their native streams to reproduce, they divide naturally into distinct populations that rarely interbreed with their neighbors. Each population, or 'stock,' adapts to the
conditions of its home river,” (Lichatowich and Zuckerman 1999:19) or inversely, “the unique characteristics of each place shape the life history of each population of fish” (Zuckerman 1999:68). Fisheries managers coined the term “stock” to refer to “a geographic aggregate of populations that includes many local breeding populations” (National Research Council 1996:12). Specific stocks are thus directly linked to the particular streams or portions of a given watershed they inhabit. Even within stocks, individual populations vary geographically, inhabiting one stream and not another. Their survival strategies and life history patterns are specially adapted to the conditions present in their microenvironment such as rate of stream flow at different times of year and interactions with other species.

The development of diverse stocks is the salmon’s answer to the problem of how to survive in changing environments. It emerged as a response to changes in climate and geology over millennia and is the ecological equivalent of not putting all of one’s eggs in one basket (Lichatowich 1999:22). It also means that the degradation of one stream within a watershed can (and does) mean the extinction of unique populations of salmon evolved over thousands of years to survive and thrive in a very specific set of conditions. Thus, when entire watersheds are damaged or made inaccessible, the loss of the genetic diversity that ensures the salmon a healthy future is lost with it. It is apparent that salmon are so inextricably linked to their habitats that the two can not be considered separately if attempts to manage or restore them are to be successful and sustainable. The salmon cannot be thought of apart from their immediate environments and similarly, those micro-environments cannot be abstracted from the larger context of the watershed. Everything that effects the watershed, effects the salmon—from logging to irrigation to development.

**Migratory Geography and the Origins of Contemporary Conflict**

It is useful to understand salmon micro geographies, but large-scale salmon geography—in particular, their migratory routes through the Pacific—are of even greater importance to this geographical analysis. The implications of differing directional patterns of migration among populations of salmon combined with interdecadal
variations in ocean conditions have enormous relevance for the development of the spatial mismatch in salmon management. For example, many salmon populations, whether they originate in the Columbia River or the Georgia Basin, migrate north, often to the waters off of southern and eastern Alaska. A much smaller number of populations migrate in a southerly direction, though most of these are native to B.C. and Alaska streams and most often stay to the north of the 49th parallel. These patterns set the stage for what are called ocean “interceptions” wherein fish born in one location are caught by fishermen from a different locale. Interceptions become a problem in combination with the largely accepted “stream of origin” concept. This is the notion that the right to claim migratory fish belongs to the people in the country/state/local area in which they are born. Thus, it is easy to see the writing on the wall. The migratory path of many salmon allow for large-scale interceptions7 of “our” fish by “other” fishermen, thus creating conflict.

Regular or predictable patterns of migration and abundance set up the conditions by which a balance of fishing interceptions may be obtained through agreement, but unpredictability or instability in migration patterns or salmon abundance can lead to conflict. Interdecadal variations are changes in ocean⁸ temperature, pressure and other conditions which, by changing the amount of food available to them, affect the productivity of salmon themselves.⁹ Even though information regarding salmon ecology and habits while at sea remains limited, there is increasing evidence that the abundance of salmon populations fluctuates in response to these interdecadal variations which tend to favor northern and southern populations in an alternating fashion (Beamish and Bouillon 1993). In other words, when the salmon populations are strong and abundant in the north, there will tend to be a period of decreased strength and abundance in the south and vice-versa. This means that interception agreements made at one point in time may be complicated or invalidated by changes in the abundance of fish migrating north or south due to interdecadal (and other) variations.
To conclude, salmon in the Northwest have a richly textured geography. Their anadromous lifecycle brings them into contact with many different environments, thereby making them vulnerable to disruptions throughout the many watersheds and ocean habitats they traverse. Salmon have evolved into distinctive populations that are born and breed in particular streams and are especially adapted to the conditions present in those streams. Migrating salmon follow general patterns of travel that, placed within the context of competing spatialized claims to harvest rights, create the conditions for conflict. In addition, these migratory patterns are subject to alteration based on oceanic and climatic conditions that are not yet fully understood, but which clearly impact their abundance in different regions at different times and thus have important consequences for policy and management.

**Salmon and Indigenous Cultures**

*Early Resource Utilization: The Political Economy of Salmon in Indigenous Cultures*¹⁰

The first people to live in the temperate rainforest biome of the North American Pacific coast and the dryer inland reaches of the major rivers systems did not make significant use of salmon as a resource. The speculation regarding why this was true is inconclusive, but it was likely due to either the lack of skills necessary to preserve salmon (that were available and abundant only for short periods of time), unstable conditions of salmon productivity in the post-glacial period, or both.

We do know that the rise of salmon-based economies in the region began, albeit slowly, around 9,000 years ago. It was not until about 6,000 years ago that salmon became a staple food and began to exhibit its future dominance in the cultural economies of the region.¹¹ It was about 3,000 years ago, with the development and mastery of the technologies necessary to preserve salmon, that their value as a resource increased throughout the region. Preservation, by making salmon available more or less year round, was the key to making the salmon the centerpiece of Northwest indigenous economies, geographies and cultures.¹² Preservation tied the people of the region
together in ever more complex spaces of social and material exchange by providing the basis for increased population, extended trade networks, permanent or semi-permanent residences, and the accumulation of wealth (as well as marked social inequality including the development of elite classes and slavery). The abundance of salmon and other critical resources promoted the growth of a fairly dense and remarkably sedentary population for a non-agricultural type economy. Population has been estimated conservatively at 182,000 along the entire Northwest Coast before the first epidemics of smallpox afflicted the region.

Native societies co-developed with the salmon. Yearly cycles of movement and activities such as celebrations and food procurement and preparation were intricately interwoven with salmon lifecycles and geography. Even though there were distinctive differences in language, mythology and customs, as well as certain elements of social organization, there was also a great deal of cultural and economic similarity. Extensive networks of trade and kinship facilitated the cultural unity of the region and linked autonomous groups together.

By at least 1,500 years before the arrival of European explorers, salmon had become the staple food source for most of the peoples of the region, comprising between 80 and 90 percent of the indigenous diet. The degree to which salmon were utilized depended on various factors including geography, with coastal peoples, for example, making greater use of other marine resources than their inland neighbors. Preserved salmon were particularly important to indigenous peoples of the interior because of the lack of other food sources during a large portion of the year (Copes 2000:76).

Regardless of the locale, dependence on the resource was instrumental in promoting a complex relationship between salmon and people. This relationship, which involved increasingly ritualized cultural customs and rules governing the use of the resource, had a distinct spiritual basis. The world view of indigenous people did not encourage any conceptual separation between the realm of the spiritual and the physical realities of daily life.
"...[T]o the original peoples of the Pacific Northwest, salmon were not merely food. To them, salmon were people who lived in houses far away under the sea. Each year they undertook to visit the human people because the Indian peoples always treated them as honored guests. When the salmon people traveled, they donned their salmon disguises and these they left behind perhaps in the way we leave flowers or food when visiting friends" (Jay 1991:33-4).

Indigenous people of the Northwest believe that all parts of the earth are equal members of the community whether they are plant, animal, water, rock or human. This world view led to the evolution of the gift-based economy that dominated the region during the pre-colonial period and was, for the most part, in harmony with the ecology and geography of the salmon. This economy was based on obligatory cycles of giving and receiving, both between people and between people and the natural world, and included the important institution of the potlatch. Salmon gave their lives so that people might eat and the people in turn were required to show thanks and respect lest they anger the salmon, causing them not to return the next season. Even though this approach does not fit easily within the accepted definition of conservation, "ceremonies and taboos... moderated harvest effectively, if not intentionally. They retarded consumption across time and space so significant portions of runs could escape upstream to spawn" (Taylor 1999:36 italics in original).

Thus, in conjunction with increasing economic and social complexity, indigenous cultures developed a rich mythological and spiritual connection with the salmon that helped provide for the sustainable use of this, their most prized and principal resource. That said, it would be a repetition of a frequently perpetuated mistake to underestimate either the impact or the destructive potential of the indigenous fishery. This was not a cultural economy that was somehow "naturally" in harmony with the salmon and Native fisheries could have significantly threatened salmon runs. Indigenous groups no doubt learned by trial and error how to live in balance with the salmon resource.

The sheer scale of Native fisheries in combination with the level of dependence on this resource could have resulted in the decimation of the fishery and yet it did not. The rivers of the region were replete with salmon when people of European descent first
arrived. Indigenous peoples actively managed their landscapes and their resources just as any modern society does. That management took several forms including close observation of the fishery and the release of the largest salmon from traps and weirs to allow them to spawn upstream to insure the strength of the run. Myths and spiritual beliefs, social sanctions, ceremonies and rituals all had a moderating affect on salmon consumption. But settlement patterns and quasi-territorial claims involving usufruct rights of access based on kinship and reciprocity were indispensable in restricting salmon harvests to sustainable levels.

**Indigenous Social Organization**

To understand the way that access to salmon was organized along quasi-territorial lines, it is useful to first understand some elements of the social structure of Native Northwesterners.

"The basic social unit was the local group with its house site or sites, resource sites, and origin myth. Although each group was basically autonomous, in fact, it was linked with other groups through marriage, kinship, and participation in ceremonial systems. Over much of the area, several local groups shared a winter settlement—a village or town—and formed the group often called the tribe" (Suttles and Ames 1997:259).

The system of rule used to govern society (and resource access) was based on kinship ties rather than territory in the European/Westphalian sense. Territory was *occupied*, to be sure, and indigenous social structures contained elements of territoriality and spatial demarcation, but territorial imperatives did not *define* the native kin-based system of rule found in this region. European and indigenous concepts of land and territory were vastly different.

"Territorial boundaries and identifications, in contrast to those in European society, had little effect on [the] movement of people. . . . The land was not thought of as a possession owned, or as something which could be alienated or exchanged for something else” (American Friends Service Committee 1970:7).

**Indigenous Quasi-Territoriality and Salmon Resources**

The spatiality of indigenous culture and political economy was one of the key factors that explains the long-term, sustainable utilization of the fisheries. Localized, in-
river harvests and watershed-based settlement patterns\textsuperscript{18} created a good fit between the size of local runs and the amount of harvest. Access to particular fishing sites was intimately tied to kinship, carefully arranged marriages, displays of wealth and prestige and power garnered through gift-giving. These kin ties and the related values of interdependence and reciprocity organized fishing rights just as they organized society as a whole. To maintain order and regulate the use of this most important of resources, the indigenous peoples of the region employed what I have termed a quasi-territorial form of salmon management. I use the term quasi-territorial only to highlight the difference between territoriality as it is understood in the dominant European culture and that practiced by peoples native to the northwest. Territoriality applied to resource control in this case was not based on private property and land ownership, but rather on community ties and use rights. The right to fish at a given location was determined by kinship ties and was also linked to reciprocity arrangements that had their basis in kin affiliation, particularly marriage.

"Both individuals and communities claimed fishing sites, Some . . . groups acknowledged individual rights, but villages usually controlled major sites like falls or weirs. The distinctions often blurred in practice. Individuals could hold priority claims to a station, but all community members enjoyed access” (Taylor 1999:37).

Families or clans did not own fishing sites, but rather controlled the use of the site for fishing purposes only. Others could pass freely through the region. This method of social and spatial organization was well suited to the natural economy of the northwest. Kin and reciprocity relations allowed for access to fishing sites over a wide area. This provided a measure of protection in that local groups could rely on their relatives for resource access in times of local scarcity.

The Arrival of Europeans: Radical Deterritorialization and Reterritorialization on the Northwest Coast

Two Powers

Before introducing the changes in territorialization that occurred with the on-set of colonialization, I feel that it is necessary to explain my greater reliance on American
historical data. Throughout this chapter and the next, my concern is with tracing the history of events primarily as they occurred on what would come to be American rather than Canadian soil. This is not because the different paths taken in the development of political and social structures, economies and environmental management schemes in the Canadian and American contexts are not important. On the contrary, those differences are a principle cause of the spatial mismatch between contemporary human geographies and the natural salmon geography. But it is the fact of difference—the creation of divergent political and management structures, goals and policies—rather than the details and minutiae of how those differences arose that is most significant. Sketching the changes in the U.S. context sufficiently illuminates the key processes at work throughout the region and their effects, but when appropriate, information specific to the Canadian context is included. Political disparities and related developments created variations in the rate, intensity and form of change in the two contexts, but overall, many of the impacts on salmon, indigenous people and their geographies were similar on both sides of the border.

From the very first days of contact, European powers competing for territory and resources introduced fragmentation and division into the landscapes of the Northwest related to whether explorers, traders and settlers vowed their allegiance to the U.S. or Britain. The fractures and dislocations implicated by this type of dis-integration started immediately upon the arrival of whites and only worsened with time. For example, Crown operations, exemplified by the activities of the Hudson’s Bay Company (HBC), were different from those of the U.S. government in many ways. The HBC was granted leases on land and exclusive rights to trade on the future Canadian west coast (and into Oregon Territory at first, but they were pushed North over time as Americans took control). The U.S. federal government granted no such exclusionary contracts. It was trying to expand its sovereignty from coast to coast by encouraging settlement and industry primarily through policy measures.
If only one power had seized on the region or only one country was formed in the end instead of two, the geographic structure of management would have been more or less uniform throughout the salmons' range. This unity would have facilitated future use and conservation of the resource. Instead, two countries were formed in the region, with one being sandwiched between two parts of the other. Thus, there is dissimilarity in terms of environmental management goals, systems of measurement, and the relative influence of federal versus sub-federal government agencies. The two systems do not match—spatially or otherwise—which creates barriers to successful and cooperative management of a resource whose geographic range is bisected by the artificial international boundary.

_Early Non-Native Exploration_

“The immigration of Euro-Americans into the Pacific Northwest, with their accompanying cultural and industrial perspectives, transformed the region in ways that were previously unimaginable” (National Research Council 1996:47).

The first Europeans to visit the Northwest coast were Spanish and English explorers who sailed the seas during the late seventeenth century, but little contact occurred between Native people and Europeans until the late eighteenth and early nineteenth centuries. Captain James Cook first brought knowledge of the natural riches and market potential of the region to a wider audience of Europeans and Americans with the publication of *Voyages to the North Pacific Ocean* in 1784. In this book, he recounts his travels, including descriptions of his experiences trading with Native people for furs and the tremendous profit to be made selling the pelts in China. His account was instrumental in encouraging a rush of American and European interests (particularly the British HBC) to enter the fur trade, which was in full swing by the last decades of the eighteenth century. The fur trade was the first source of international conflict related to access and control of natural resources between the various countries vying for jurisdictional rights in the region.

Two powers, Britain and the U.S., explored and laid claim to regional lands during the colonial period. Alexander McKenzie traversed the Rockies and made his way
down the Fraser River to Bella Coola in 1789. In 1792, Captain George Vancouver took possession “of all the countries we had lately been employed in exploring, in the name of and for, His Britannic Majesty, his heirs and successors” (Quoted in Robbins 1997:314). Lewis and Clark reached the Pacific via an overland route in the name of Manifest Destiny in 1805-6. In 1811, David Thompson began exploring the Upper Columbia River, and when he reached the sea, he found an American fur-trading post had already been established at Astoria. White settlement was quickly encroaching on the region from all directions.

The arrival of Europeans led to astonishing and unprecedented social, environmental, and spatial changes throughout the region. These changes occurred as a result of many different interlinked factors. The single most important driving force behind these changes was capitalism. The introduction of previously unencountered diseases into Native populations and the drastic demographic shifts that resulted were also extremely significant. The imposition of a new political economy, new rules of sovereign rights to land and resources, and a different worldview, caused the long-standing balance that had been established between salmon and people to begin to disintegrate.

**Disease, Depopulation, and a New Political Economy in the Colonial Northwest**

Estimates of the demographic devastation wrought by diseases such as small pox vary, and the effects were not evenly distributed across the landscape. Upriver and inland Native peoples were spared some of the magnitude of destruction experienced by coastal populations, though their losses were still severe. It is generally agreed, however, that diseases introduced by Europeans killed 80-90 percent of the indigenous population. Some tribal groups disappeared altogether. Depopulation caused by these “virgin soil epidemics” was instrumental in the deterritorialization of indigenous people—breaking down cultural and social systems and opening the way for white settlers to lay claim and take control of the land and resources.
Several other important factors combined to disrupt and deterritorialize the established human-salmon economies and geographies of the region. These were in large measure related to the other half of the demographic change story—the growing tide of white traders and settlers who brought with them “the cultural prescriptions and the commercial practices and technologies from the industrializing world” (Robbins 1997:318). This was a period of nearly simultaneous processes of destruction and deterritorialization and restructuring and reterritorialization. The Native people and their world view, economy, cultures, and geographies were replaced a bit at a time by the settlers and the social systems they brought with them. The pace of change was slow at first, as the new economy did not gain ascendancy immediately or to the exclusion of old patterns. The two systems, Native and non-Native, coexisted, adapted and changed overtime. Eventually, however, the indigenous economic system based on respect, reciprocity, and gift-giving was supplanted by the interests of the marketplace, which saw the land as a vast storehouse of resources free for the taking. The capitalistic imperative drove entrepreneurs to seek additional markets for salmon and methods by which to supply them and ultimately, the range of salmon consumption expanded.

**Establishing the International Border: The Early Geography of Sovereignty**

The social and environmental landscape of the region began to be reshaped with the beginnings of the fur trade, although more significant changes, including changes to salmon ecological geographies, came later with the full-scale resettlement by whites. The 1840's saw the gradual beginning of what soon became the great overland migration of American settlers into the region over the Oregon Trail. The trickle of emigrants turned into a flood when Polk became president in 1844 on his slogan of “Fifty-four Forty or Fight,” a reference to the battle over possession of northwest lands between Britain and U.S. Two years later, in 1846, the United States and Great Britain settled on extending the 49th parallel out to the sea as the official boundary between sovereignties.

The drawing of the international boundary and the establishment of the Oregon Territory in 1848 encouraged settlement on the American side as did the later Oregon
Donation Land Claim Act of 1850 which entitled settlers to 320 acres of land per adult. This created a swell of American emigrants who “overran and pushed aside an already decimated Native population from the most valuable agricultural lands . . . . The interlopers then imposed upon their freshly established homelands new bounds for reckoning the landscape, new definitions of natural phenomena, and new perceptions about a common environment” (Robbins 1999:317). The creation of these “new bounds for reckoning the landscape,” that is, spatially-defined units of sovereignty, such as territories that later were divided into states, as well as towns, cities, and even homesteads—set up new spatialized landscapes of inclusion and exclusion, power and control. The spatial mismatch was beginning to form both on the small scale and the large scale. The unified geography of the salmon and of indigenous cultures was being carved up and claimed in the process of establishing sovereign control over the area.

Treaties with Native Americans

“Those of a Euro-American background wanted formal treaties and required the signing of agreements to assign land ownership, sovereignty, and rules for fishing and hunting. . . . The treaties signified radical changes in property rights. They were primarily about land division and private land ownership, and they marked a formal transition from a culture coevolved with salmon and their landscapes toward a cultural assemblage that substituted intervention, engineering, markets, and mitigations—all undertaken on time scales shorter than a single human generation—as ways to mediate humans’ needs and nature’s capacities” (National Research Council 1996:48).

Along with the establishment of towns and territories, treaties with indigenous people were primary vehicles of deterritorialization and reterritorialization in the PNW. Until 1850, the official policy of the U.S. Congress required that the title to Native lands be negotiated before American settlers were permitted to take up residence. In the Pacific Northwest, however, the Land Claims Act was put into effect even though Native title had not yet been extinguished. Whites came to the area en masse, taking over Native lands with impunity. Conflicts ensued throughout the region and included attacks by Natives, a series of small-scale wars, and indiscriminate slaughter of Natives by whites.
To resolve the conflicts and re-place the Natives, the U.S. Congress passed the Indian Treaty Act in 1850. The Indian Treaty Act was the legal vehicle used to purchase Native land in the area, remove the indigenous people from their traditional homes, and relocate them to the land that white settlers did not want—the least desirable lands in terms of resources, location, and so on. A total of nine treaties were signed during the years of 1854-57. By signing treaties, Native peoples ceded their land, but not their fishing, hunting, and gathering rights at “usual and accustomed grounds and locations” (Treaty of Medicine Creek, 1854: Article III). This was a key point at the time and it remains so to this day. Even though Native people gave up their private property ownership rights as defined by the U.S. legal system, they were supposed to be able to continue to provide for their welfare by fishing, hunting and gathering at off-reservation sites, even if those site were privately owned by someone else. This, unfortunately, proved to be a mostly hollow promise until recently, as will be discussed in the pages that follow. The treaty making process created what have come to be known as “Treaty tribes” and “non-Treaty tribes,” designations that were instrumental in finally regaining aboriginal fishing rights for some groups (the Treaty tribes) in the 1960s and 1970s (see Chapter 5).

Conflict did not end as a result of the treaties as indigenous groups fought against the invasion, persecution and broken promises perpetrated by white settlers and government agents, but in the end, most Native land was ceded and the people were removed. White population grew swiftly and exponentially while the Native population was reduced by 95 percent by the turn of the century.

CAPITALIST ECONOMY, RESOURCE EXPLOITATION AND CHANGES IN SALMON HABITAT IN THE MID-1800S: RESHAPING THE GEOGRAPHY OF ECOLOGY

New laws that inscribed the discourse of territorial sovereignty on the landscape encouraged large-scale white emigration. However, the economic incentives of moving to the northwest and the technological advances that made the exploitation of local resources potentially very lucrative were at least as important as those political moves in inspiring white settlement. Developments in resource exploitation, which were not linear
but overlapped one another temporally and spatially, brought new threats to salmon habitats and altered the geography of the fish. The effects of these activities were not evenly distributed across the landscape. Rather, some areas were more intensely impacted than others. The rate and degree of ecological change depended on the environmental and infrastructural limits and capacities of a given area. Taken all together, however, the geography of ecology in the region was dramatically altered by the interlinked effects of creating new sovereign territories through political action, the incentives of capitalism and the technological advancements that facilitated resource exploitation.

The reshaping of the land and salmon geography began with the highly lucrative trade in beaver pelts and other furs—the first resource of commercial interest to the Europeans. The trapping of beaver nearly to the point of extinction west of the Cascades reorganized salmon geography. Salmon prefer beaver ponds as rearing areas, so with fewer beaver, the salmon had to move to less favorable habitats.27

Close on the heels of the collapsing fur trade came the mining boom of the 1850’s that introduced a new list of threats to the salmon. Hydraulic mining for gold started in California as early as 1849 and on the Fraser River in 1858. Gold mining as well as streambed excavation for silver, copper, sand, gravel and other minerals eliminated some salmon runs altogether and seriously damaged habitats throughout the region through chemical alteration of the water, siltation, the smothering of spawning beds and the death of adult and juvenile fish as a result of contact with mining equipment.

The miners had to be fed, and there were plenty of farmers, dairymen and ranchers arriving each year eager to sell their crops and products in the rapidly expanding local and regional markets and later to buyers overseas. Farming and ranching harmed salmon habitat in numerous ways including increased water siltation, diking and dredging of streams and erosion of streambanks by livestock action. Irrigation was a major factor in the accelerating decline of salmon populations and disappearance of salmon-bearing streams. Water draws left many runs dry, excess irrigation water returned to streams was
too warm and laden with silt for salmon to thrive, spawning salmon got caught in irrigation ditches and irrigation dams blocked the path of migrating salmon. Even the milling of grains and sheep’s wool took their toll because they needed dams to power the machinery and most mills neglected to install fish ladders.

Logging altered and ultimately diminished salmon habitats. In terms of annual numbers of board feet, logging operations were almost as substantial by the end of the 19th century as they were in the 1980s (Taylor 1999:55). Logging operations were usually concentrated in riparian corridors so that the logs could be floated downstream to the mills. The results were highly deleterious for salmon and included insufficiently shaded streamside, impassable logjams, soil erosion, unstable slopes and siltation. Logging practices such as the use of splash dams and explosives to clear obstructions also spelled danger for the salmon as did the byproducts of milling such as sawdust, which were dumped into streams and bays.

The reorganization of salmon geography and habitats continued with the development of urban centers. Cities, with their dense and growing populations, put increased demands on local and more distant resources. Citizens lobbied their governments for “improvements” intended to facilitate trade, such as draining wetlands, channeling rivers, and building roads, railroads, dikes and levees, and most deleterious of all, from the salmon’s perspective, dams. Water was dammed and diverted for domestic use making it increasingly less available for salmon. All of these changes made the environment less hospitable to aquatic species like the salmon and their populations suffered as a result (see Figure 5).

The spatial organization of the fishery was transformed hand-in-hand with the displacement of indigenous exchange systems and the imposition of the market economy. The imposition of that economy could not have been possible without the privatization and division of the landscape driven and supported by the powerful discourse of territorial sovereignty.
Figure 5: Lamenting the Loss of Salmon
**Demographic Change in British Columbia Before 1850**

Just as they did further south, Europeans were said to have walked into British Columbia "on the backs of salmon." As a result, the changes in salmon geographies in what would become British Columbia mirrored those south of the international border in many ways, but there were also key differences. The biggest difference was in the rate and intensity of change relative to the transition to the new political economy, de/re-territorialization of indigenous peoples and environmental alteration. This was due in part to the relatively smaller volume of white emigration, lower potential for agricultural development, and thus a slower rate of economic development. For example, one consequence of the later date of Canadian confederation (relative to the U.S.) was that technologies such as the railroad, which required large capital investments and integrated oversight over a vast distance, were slower in coming. Because the imposition of the new political system and the new economy was more gradual than farther south, the detrimental effects were less severe in some respects.

Native cultures, economies and landscapes were radically altered by the arrival of Europeans in the northern reaches of the region just as they were in the south. However, most First Nations peoples never ceded their lands through treaty, a fact that has tremendous contemporary implications. Rather, they were summarily forced off their lands and later had their fishing rights limited (see below).

Whether north or south of the 49th parallel, land that had been fully occupied yet only quasi-territorialized, became criss-crossed with an ever more dense network of boundaries and borders, representing a seachange in the spatiality of the region. These borders—whether they were international, state, provincial, city, farm, mining claim, or reservation—carved up and organized space in a totally new way and defined entities that relied on territoriality as the basis of their considerable power to control both people and resources. The development of the spatial mismatch was now well underway.
The Third Era, 1850 to 1930—The Industrial Fishery and its Effects

Salmon Commodification, Race and Sovereignty in the Pre-Industrial Colonial Fishery

In the earliest days of white occupation, salmon were not particularly favored as a source of food by the settlers (see Findlay 1996) and they were only a secondary commercial concern, after furs. While the settlers did some subsistence fishing, indigenous fishermen did the majority of fishing both for subsistence needs and for markets. This left the Natives in the position of producers and whites in the role of consumers. In response, Native fishermen carefully guarded their traditional fishing sites. In the first half of the 19th century, the HBC and other companies grew increasingly more active in the commercial fish market, supplied almost exclusively by native fishermen. But without the technology to store salmon for extended periods in a manner that retained a flavor acceptable to palates of people of European descent, the total size of the commercial fish trade remained small but still fiercely competitive. American interests inherited a sizable portion of the trade in salmon “by default” in 1846 when the HBC moved north, but they only took marginal advantage of the resource.

The volume of trade continued to increase commensurate with the mushrooming of the white population and a growing appreciation for salmon as a quality source of nutrition. Natives, however, remained largely in control of fishing in the region until 1850s. Salmon from the region was reaching distant markets by this time, facilitated by both transportation and developing world market systems, but it was still not a favored commercial product in its salted form and production methods were in their infancy.

The tide began to turn south of the 49th parallel with the completion of treaties with the indigenous peoples and the authorization of the first grants allowing white fishermen exclusive rights to fish selected stretches of rivers. Many traditional Native fishing sites were taken over by whites and others were established based on their accessibility to transportation links and urban markets. With these developments, sovereign power over the fishery was transferred from indigenous people to the state and to white business interests. This transfer also marked the disappearance of a locally-
oriented subsistence-based fishery as capitalist markets redefined the organization of space and labor. In B.C., the establishment and expansion of the commercial fishery had similar socio-spatial and racial impacts, though the mechanism of change was legislation rather than treaties (see below).

The era of industrial fishing in the Northwest was ushered in during the early years of the 1860s with the introduction of salmon canning technology. This revolutionary new development in food processing would forever alter the geography of salmon ecology and of political economy and sovereignty in the region. This newest era in the environmental history of the salmon required significant restructuring in the social organization of the fishery, including a new and slowly emerging twist on the racialization of fishing space, which hinged on processes of deterritorialization and reterritorialization.

**CANNERIES AND THE INDUSTRIAL FISHERY**

Canning began in California on the Sacramento River in 1864 and then spread north to the Columbia River in 1867, and to Puget sound in 1877. The industry matured through a series of fits and starts caused mainly by the need to perfect the canning technology that allowed fish to be stored for extended periods in a “flavorful” form and shipped to distant markets. It did not take long, however, for canneries to take hold and begin to alter the interlinked geographies of the region in an unprecedented way.

Over approximately the next 55 years, canning operations were set up throughout the Northwest to take advantage of what seemed like limitless, inexhaustible supplies of fish. Canneries were first opened on Canadian rivers beginning in 1870 with the first facility at the mouth of the Fraser. The statistics associated with the salmon canning industry, particularly during the peak years between 1870 and the end of World War I, are impressive. The number of canneries ballooned in a short time frame as did the total number of pounds of salmon canned for market. As a result, salmon canning soon became the second largest economic activity of the region (Brown 1982).
Enter Alaska

Thus far, not much has been said about Alaska because the territory was not part of the U.S. until it was purchased from Russia in 1867.\textsuperscript{32} Alaska was, and is, the largest natural salmon producing area in the region with over 2,500 rivers that once supported salmon (Netboy 1980). The first cannery was built on Prince of Wales Island at Klawak in 1878 and the industry developed rapidly from there.\textsuperscript{33}

Alaska quickly made its mark as a supplier of cheap canned salmon, feeding people in Europe and the U.S., and outstripping the production capabilities of the PNW and B.C., though B.C. ran a close second in high-output years. By the 1880s, the salmon canneries in Alaska were exploding with production, beginning what would come to be an overwhelming influence on West Coast salmon supplies.

Canneries Change the Geography of Salmon Ecology

Indigenous and industrial fisheries both harvested large numbers of fish but they impacted the wild salmon populations very differently. Salmon canners "colonized aboriginal fishing sites," installing highly efficient fishwheels and other equipment that dramatically reduced escapement. Run times were short so the canners were driven to fish aggressively while the salmon were available. As a consequence, it was not at all uncommon for huge piles of fish to rot on the riverbank beside the cannery because the canners could not process them quickly enough. The amount of waste was tremendous and at the same time, not as many fish were making it past the weirs, nets, lines, fishwheels, dams and other new obstacles between the ocean and the spawning grounds. The industrial fishery focused on particularly profitable and favored stocks and located packing plants where costs of operations and transportation would be the least—near the source of fish and also near deep water ports. The Native fishery had been spatially diffuse and varied in terms of timing and the species and runs exploited. In a very short time span—a matter of only a few years—a "swidden fishery" ensued in the region, in which cannery operations would fish one stream to exhaustion and then simply pick up and move the operation to a new location.
Race, Place, and Sovereign Territory in the Industrial Fishery

The industrialization of the fishery had serious consequences for different racial and ethnic groups in the Northwest. The salmon canning industry initially relied heavily on the labor of local indigenous people with the men fishing the rivers and the women employed in processing. Over the course of just a few decades, however, the commercial expansion of the fishery attracted more non-Natives, mostly from outside of the region. The newcomers usurped the sovereign rights of the indigenous population by taking over their fishing sites and making related claims to territorial control that forced the Native people off their land.

Out of concern among Euro-Americans and Euro-Canadians that Native fishing would endanger the stocks and negatively impact their profits, restrictions on Native fishing increased. When Native people were able to locate a place to fish, they were often accused of causing the fishery to decline. Herein we see some of the earliest instances of indigenous fishing becoming the target of blame for the results of the new industrial fishery. Of course, the true danger to stocks came from the failure of that new fishery to maintain the balance of escapement and harvest necessary to ensure the survival of the runs as the Native fishery had.

South of the international border, the treaty rights of indigenous groups were gradually eroded and Native people were re-placed in their role as producers in the fishery. Treaty rights turned out to be hollow as privatization of the land, enforced with locked gates and barbed wire, prevented indigenous people from accessing their traditional fishing sites.

In Canada, restrictions on indigenous fishing became progressively tighter until the Fisheries Act was passed in 1888 which “confined Native people to a ‘food fishery’ for their domestic use and prohibited them from selling salmon, thus eliminating what for many was their primary source of cash and barter” (Copes 2000:76). They were also limited in the types of gear they were permitted to use. The Native people resisted these restrictions and considerable “illegal” fishing went on throughout the region. A large portion of the salmon resources that were once held and used by the First Nations of B.C.
was "forcibly taken from them, without any significant compensation. . . . Their salmon trade, which supplied them with many needed goods, was prohibited by law and greatly inhibited in practice" (Copes 2000: 81).

**THE DECLINE OF THE FISHERY**

The re-organization and re-scaling of the salmon fishery commensurate with the growth of the canning industry decimated successive stocks and runs. Throughout the region, run sizes began to fall off and harvest levels dropped. The intensity of decline followed a spatial pattern, with conditions being worse the farther south one traveled in the salmon's range. This was due to differing degrees and rates of development, population growth and the expansion of the fishing industry and thus habitat alteration or destruction.

There are many reasons for the swift decline of the wild Pacific salmon between 1850 and the second decade of the 20th century, but blaming fishing and fishermen has been the most common explanatory scenario since the salmon first began to disappear. It is quite misleading, however, to blame industrial fishing alone for the reduction in salmon populations—to set fishing apart from the dynamic processes at work in the region as the cause of the salmon problem. Over-fishing must be placed within the complicated social and environmental context in which it occurs if finger-pointing is to be avoided and real understanding of the problem is to emerge. It was a combination of factors—demographic shifts, reshaping of the landscape and salmon habitats through resource procurement and production activities, and the lack of social, cultural or economic limitations on the harvest—that together spelled the beginning of the slide into extinction.

**A TALE OF DIVIDED (MIS)MANAGEMENT: THE GEOGRAPHY OF SOVEREIGN BORDERS**

One of the pivotal explanations for the decreasing wild salmon populations during this period is the proliferation of divisive boundaries and borders that established sovereign jurisdictions and rights. During the early years of the industrial fishery, the British and the Americans extended the border along the 49th parallel in 1848. In 1867
the British North America Act heralded the birth of Canada and the 49th parallel became fixed as the dividing line between the two nations. In that same year, secretary of state William Henry Steward purchased Alaska from Russia for two cents per acre in a transaction that was widely derided at the time as “Seward’s Folly.” The Russians withdrew from North America and Americans began to make their presence known in Alaska Territory, thus sandwiching Canada between two areas of American control. Territories were formed in the U.S. PNW and later remade into states and the province of B.C. was established in 1871. Thus, in the span of one hundred years, white settlers had completely reconfigured the political landscape into an elaborate and tangled mesh of borders and sovereignties.

As a result, attempts to protect the salmon became fraught with difficulties because the salmon’s natural geography did not fit within the spatial context of political borders that people had imposed on the natural landscape. This highly fractured management environment that was at cross purposes with the needs of the salmon. Boundaries at the local, county, territorial (and later) state, reservation, and international level carved up the land, defining access rights and responsibilities relative to the fishery and fish habitats, but the ecological geography of the fish did not conform to these units of sovereignty. The management of the fishery was more often an exercise in politics or a scramble for jurisdictional control rather than a comprehensive attempt at conservation.

Spatialized politics and tensions over the fishery based on territory were ubiquitous. Jurisdictional designations were frequently unclear, and disputes between fishing interests based on territorial distinctions were common and often “ugly, violent affairs.” Throughout the region and at all scales—from local management zones and districts to the international realm—political manipulation based on the location/existence of boundary lines was a commonplace method of circumventing government efforts to manage the fisheries through policy initiatives. Economic imperatives and political rivalries, allegiances and patronage rather than conservation imperatives, tended to be at the center of management decisions at all levels. States made
claims to hegemony and sovereignty over fishery management to avoid interference by the federal government. All interests involved used the rhetoric of conservation and protecting fish, when in reality, they were protecting their own financial and political interests.

**THE DIVISIVE GEOGRAPHY OF THE INDUSTRIAL POLITICAL ECONOMY**

The new industrial regional economy introduced massive deterritorialization and reterritorialization of salmon geographies and was instrumental in the deterioration of the fishery. The industrial political economy and the natural salmon geography are spatially incompatible in at least four fundamental ways. Firstly, salmon ecological geography is organized at the watershed level and includes all of the rivers, lakes, springs and so on. The only boundaries in this context are biophysical in nature. The salmon are part of an integrated whole. As described above, the industrial political economy is based on hierarchical political entities that use boundaries to fragment the landscape into competitive divisions with conflicting claims to the ownership or use of resources. Secondly, salmon ecological geography is organized around small units of production at dispersed locations (stocks and runs), which encourages diversity. The industrial political economy favors large, centralized production facilities such as canneries and hatcheries, which tend to decrease biodiversity and lead to technological monocultures. Third, the industrial economy tends to exploit resources throughout the entire watershed, thereby disrupting the large-scale ecosystems that are at the heart of the salmon’s abundance. Finally, the unified watersheds in which the salmon make their home are complex and interconnected, each part functioning in concert with the others. The industrial political economy, on the other hand, leads to discrete economic activities operating independently from one another, partitioning the watershed into separate zones for mining, fishing, irrigation and so on. Taken together and within the context of other changes and their effects on the landscape, these four spheres of spatial mismatch between the natural and industrial economies have had disastrous consequences.
Rescaling the Geography of Political Economy

Industrial fishing re-scaled what had been a local economy to a far-flung market enterprise, expanding utilization of the resource in terms of both extent and the scale and thus dramatically escalating the pressure placed on the salmon. Native peoples had harvested and consumed massive quantities of local salmon resources, but they operated within local cultural and environmental constraints that maintained a degree of balance with the natural economy. Whites harvested in large measure for external markets, facilitated by advances in harvest methods, processing technology, transportation and economic systems. Capitalism was the motivating force and there was relatively little to restrain the extent of their activities. Salmon caught and packed in the Northwest were now being exported to feed factory workers in Europe. Canned Salmon Day began to be celebrated as far away as Denver, Los Angeles, New York and Boston, replacing the First Salmon Ceremony traditionally practiced by the local Native peoples. It is vital that we recognize this process of spatial expansion in order to contextualize the past, understand the present, and prepare for the future.

Political Responses to the Decline in Salmon: Charting the Effects of Sovereignty Discourse

The decline of salmon runs was recognized beginning as early as the 1850s in California. Within a decade, calls for fishery limitations, protections, and enhancements were being made with ever greater vociferousness. Throughout the Northwest, competition became increasingly fierce as more and more fishermen vied for fewer and fewer fish. Fishermen, business men with an interest in the fishery, and affected citizens demanded that government officials and resource managers take action. Official and unofficial attempts to manage the fishery illustrate the ways in which sovereignty and territorial control were inscribed along various axes in the region.

The management of salmon in the Northwest would prove to be no easy task. Initiatives that imposed restrictions on fishing or other financially beneficial activities that affected the fishery were rarely proposed, seldom passed, and when they did exist, enforcement was weak or impossible. From the beginning, legislators and managers
found themselves facing a vexing tangle of political and social problems, of which the question of jurisdiction—essentially a question of territorial sovereignty—was paramount. The separate, spatially-defined entities assigned the task of managing the fisheries, most often operating in isolation from one another, were clearly as much a part of the problem as they were a part of the solution at this stage. Management was severely fragmented until the first moves towards cooperative management were initiated in the 1910s.

The ineffectiveness of official management agencies led to fishermen, canners, miners, loggers, and other stakeholders using several spatially-based, unofficial methods to protect their interests. These socio-spatial “solutions” had a transformative affect on the geography of the fishery during the second half of the nineteenth century and into the twentieth century.

There were myriad unofficial means employed to segregate and exclude different groups from the fishery. Race was one of the major faultlines in the struggle over fishing space. Natives (and other minority groups, especially Asians), strongly resisted efforts to deny them access to the fishery, but they were generally unsuccessful during this period and experienced large scale dislocation. White settlers wanted indigenous people to be wiped off the map and they employed the concept of territorial sovereignty to achieve their ends. They enlisted the assistance of the federal government and they stood in their way. Settlers raised the banner of private property when indigenous fishermen, guaranteed access to usual and accustomed fishing grounds off-reservation, tried to exercise their rights to fish at these sites and on many occasions beat or killed the “trespassers.”

The industrial fishery became a largely white enterprise, but conflicts persisted over proprietary claims based on gear (which had a strong spatial element because certain gear is usually used only in the most lucrative locations), location and social distinctions. Competition over territory was cutthroat as fishers divided themselves along various axes and each group attempted to secure exclusive use of particular fishery spaces and
ostracize all others. Government officials offered little in the way of mediation of these conflicts and instead counted on fish culture in hatcheries to solve everything.

The Hatchery System or the Mistaken Miracle of Scientific Management

In a scenario with what seemed to be few legislative or management options, the powers that be turned to the common belief of the day that scientific knowledge and management would compensate for the damage done to the environment by modern society. The science upon which people put their faith to save salmon was artificial propagation at salmon hatcheries. Beginning in the 1870s, the hatchery system gained predominance in the U.S. as the solution to declining fish populations and harvests. Fish hatcheries garnered public and official support because they helped to avoid or mitigate jurisdictional conflicts between local, state and federal agencies and governments. Official policy became almost entirely focused on the application of fish culture technology to solve what were essentially social problems—unrestrained fishing and habitat destruction.

The same three major threats to salmon that exist today—excessive fishing, dams which block migration and changes in stream habitat—were clearly identified as the key threats to the Pacific salmon industry as early as 1875 (Lichatowich 1999:111-2). But it was far easier and politically sensible for legislators to support artificial propagation then it was to restrict harvests or limit development, especially given the distaste for fishing limitations among salmon industrialists, who, not surprisingly, also widely supported hatcheries. Fish culture became nearly synonymous with salmon management in the PNW. This scenario of management continues today. Politicians and managers attempt to deal with the salmon problem by attacking the easiest target in terms of political and economic expediency, rather than addressing the issue in the most scientifically supportable fashion.

But, as fisheries biologists and managers are acknowledging with greater frequency and unanimity, the hatchery system, for the most part, does not really work. Not only is it ineffective, but it also has negative consequences all its own. There was evidence of this from the earliest days of the program, but the problems were denied or
minimized and blame for the inadequacies of the program was shifted continuously. There are many reasons why hatchery production failed to accomplish the desired goals of run enhancement and stabilization. These include a dearth of accurate information about salmon ecology and the failure to effectively monitor success rates, but a detailed explanation is beyond the scope of this project and is elaborated on extensively elsewhere (c.f. Lichatowich 1999; Lichatowich and Zuckerman 1999; Manning 1999; National Research Council 1996; Taylor 1999).  

The hatchery system has proven to be the most enduring response to the declining fishery. Challenges to the validity of the program were, for many decades, nearly intolerable. Today, we continue to cling to this technology of intervention, even though it is obviously inadequate, expensive, and fraught with negative consequences. Other potential solutions were too politically costly to allow for an honest assessment of the system. This is remarkably similar to the imperviousness of the political discourse of territorial sovereignty, which has perpetuated the spatial mismatch in domestic and international salmon management.

**Domestic Legislative Action Until 1930**

For nearly fifty years, fishermen and industrialists played tug-of-war with the salmon. Spatially and racially segregated groups of stakeholders competed for the fish and fishing sites, and for the right to use the landscape for other economically lucrative enterprises, using the language and logic of sovereign space to back up their claims. The result was on-going rancor and destruction of salmon runs.

By the turn of the century, however, the level of animosity amongst stakeholders and the shrinking salmon harvest became impossible to ignore. Law suits and legislative moves such as the institution of licensing fees started to come into the picture. The first closures of in-river fisheries did not occur until the first decade of the 1900s and even then, the passage of these measures was hotly contested. Gear, season and geographic limitations on the fishery were used to stave off the threat of federalization, to defuse the turf wars and spatial tensions between fishing interests, and to deal with increasing public
dissatisfaction over the (mis)management of the fishery. The sovereignty of states and the rights of the public began to take greater precedence over the rights and desires of individuals and companies. President Roosevelt came close to federalizing all of the Pacific fisheries because of the poor track record of the states in managing these shared resources. By the second decade of the 20th century, this threat gave rise to greater cooperation and new agreements for coordinated management. The social and economic geographies of salmon would no longer be decided by vigilantes, but by elected officials and the courts.

Herein is the first example of what would come to be a pattern in the history of Pacific salmon fishery management and conservation. This pattern is characterized by a period of political inaction and half-measures, followed by wide-spread and undeniable crisis, which finally leads to action and change.

**THE INTERNATIONAL ARENA**

At this stage in time, most salmon fisheries were in-river, which limited the amount of international interaction necessary to manage the fishery. International negotiations concerning allocation and management of stocks that were harvested by Americans and Canadians began to develop as early as the turn of the century, but real cooperation and meaningful agreements were not forged until the 1930s. Most of the international concern at this stage related to the Fraser River sockeye fisheries. The conflict over these stocks increased with the expansion of ocean fishing in the early part of the century, a change that signaled the beginning of a new territorial era in the history of the fishery.
Notes to Chapter 4

1 Since people were not present when the salmon began to inhabit the region, it is technically a misnomer to speak of this as a period of territorialization per se, given the political implications of that term. It is, however, a period marked by the establishment of important geographic patterns. Understanding those patterns is useful for the discussion that follows, so it is outlined here.
2 Historically and today, Pink salmon, which mature in their second year, are the most abundant overall, but are concentrated in the region north of the U.S.-Canada border. Sockeye are the second most abundant and predominate in B.C. and Alaska rivers, though significant populations resided in the Columbia River basin prior to the construction of dams and resident populations remain in Puget Sound and other areas south of the border. Chum make more use of estuaries than other species and are more evenly distributed to the north and south then the sockeye and pinks. They were once common as far south as Monterey Bay, but now they are relatively scarce south of the Columbia. Coho, a species that prefers smaller streams and tends to remain close to shore during their marine residence, are native to both coastal and interior rivers from Monterey Bay in the south to Alaska in the north. Chinook, the largest of the salmon, are similarly found from the Sacramento River system in the south to Alaska in the north. They prefer to spawn in large rivers and are a species marked by a relatively long lifespan and the great diversity of lifehistories of different populations. Anadromous steelhead trout are less abundant than coho though they often co-occur with them in streams from Alaska to central California. They spend little time in the open ocean and mature in 1 to 2 years. Cutthroat trout are relatively common as "resident populations in coastal and interior streams and are native to drainage systems of the continental interior" (1996:33). Because of the cutthroat's complex life history and the relatively high use of this species as a target of recreational rather than a commercial fishing, it has not been emphasized in research so less is known about their historical range.
3 For example, some species hatch in the Spring and others in the Fall. Some spend a year or more in streams and rivers before heading out to sea while others leave for the ocean immediately after hatching.
4 These stages are influenced by annual fluctuations in weather and other environmental factors.
5 The migratory journey of wild salmon can be relatively short in distance and time or quite long on both counts. Tagged salmon from the Pacific Northwest have been caught as far away as the waters off the Russian coast. The timing of migrations and the rate of development among immature fish are subject to occurrences and trends that affect ocean conditions such as El Nino, La Nina and (in all likelihood) global warming.
6 "A run of salmon or sea-going trout—composed of fish that are separated by species, timing, or geography from other groups of fish, and thus reproduce primarily with each other—is referred to as a "stock." " (Brownell 1999:46).
7 This is especially true in the case of Fraser River and Columbia River salmon being intercepted by Alaskan fishermen, the former causing international conflict, and the latter creating strife domestically.
8 Inland conditions may also be affected but the extent and nature of these changes are not well understood.
9 These changes may also influence the migration routes of salmon.
10 This section treats Native American and Canadian First Nations as a complex whole. This approach is based on the fact that, while there was certainly linguistic, social and cultural diversity, the level of similarity in terms of culture, settlement patterns and so on throughout the region was a much more significant feature. This is not surprising since the artificial line that today separates First Nations and Native Americans did not exist and the free transference of ideas, cultural traits, and goods was unimpeded. People living in (what would become) B.C. and the Pacific Northwest at the time of first contact had densely settled the land and spoke dozens of different languages and dialects representing diverse cultures. In spite of this diversity, the characteristic attachment to the land found among other aboriginal peoples of the Americas was/is clearly evident.
Namu, a settlement North of Vancouver Island that has been continuously occupied for nearly 10,000 years, provides an archaeological history of the importance of salmon to indigenous people's diets (Manning 1999:34). Eighty percent of the animal remains found at that site dating back 6,000 years are salmon bones, but by 3,500 years ago, the percentage had risen to 94.

It is interesting to note that the continuous supply of preserved salmon was a turning point in regional utilization of the resource 3000 years ago much in the same way that aquaculture is remaking the salmon industry today by making fresh salmon available for markets year round. The availability of uniform quality fresh salmon has essentially wiped-out the biggest market for frozen U.S. and Canadian salmon—Japan.

Use of the past tense is not intended to indicate that contemporary indigenous peoples do not retain many of the cultural traits of their ancestors, as in fact, they do.

The potlatch, which was banned under colonial control, but which continued nevertheless and is now in a period of widespread renaissance, is a formal gathering involving food, celebration and the redistribution of wealth through gift-giving. It was a means for dealing with catastrophes such as floods or landslides that could leave some people on the brink of starvation while others prospered. Potlatches further provided a venue for humans to meet their obligation of respect for the salmon as did the First Salmon Ceremony, common to almost all tribes, in which the first returning salmon was honored and celebrated in a highly ritualized fashion (c.f. Amoss 1987; Jay 1991; Lichatowich 1999).

Salmon were thought by most groups to be immortal, conscious, generous beings deserving of respect and thanks for the gift of food they gave to people by allowing themselves to be killed. In other words, the gift-based economy did not just take place between humans but rather it extended to relations between people and the rest natural world. “The Indians understood that salmon’s gift involved them in an ethical system that resonated in every corner of their locale. The aboriginal landscape was a democracy of spirits where everyone listened, careful not to offend the resource they were a working part of” (Jay 1991:34 italics in original).  

Consider, for example, the fate of large mammals in the Americas. According to an article in the Seattle Times, “about half of the American animal species weighing more than 100 pounds—including the camel, horse, and mammoth—became extinct after humans arrived” nearly 50,000 years ago (Recer, February 11, 2001)

Anthropologist Randall Schalk supplied one of the most plausible estimates of the aboriginal salmon harvest in 1986. While the impact of the fishery varied based on fluctuations in river and ocean conditions, he believes that 28 to 57 percent of a run might be harvested in any given year. This represents a harvest very similar in magnitude to that of the highpoint of the industrial fishery (in terms of pounds of fish), which occurred between 1883 and 1919 (Taylor 1999:23).

“... For the Indians of the . . . region, their fishing waters formed the basis of the relationships among themselves. . . . From the geographical concept of the drainage system, they derived their major concept of social unity. . . . [The] tie which they recognized as most binding, as most closely paralleling what we know as political allegiance was based upon this geography of the drainage system. The Indians of the area lived in small groups, the members of which came together during the winter months, when life was sedentary, at certain sites which may be . . . called ‘villages.’ [The village] was also the center from which radiated all of the year’s food gathering and similar activities. . . . A particular village site and the drainage connected with it bore the same name. The people called themselves by the name of the village site plus a suffix meaning “people of” (American Friends Service Committee 1970:5-6).

However, the activities of the HBC extended all the way down the coast to Astoria, near Portland, so many Canadians would argue that the U.S. experience as such only developed after the 1846 boundary settlement establishing the international border at the 49th parallel.

As other indigenous people in North America had already experienced, the disorganization, lack of labor, and loss of knowledge caused by mass deaths left Northwest peoples vulnerable to the aggressive moves of whites to take over the land they inhabited and the fishing sites they favored. Demographic change of this
degree was particularly disruptive in this context because of the premium importance of kin affiliations. Familial, trade and ceremonial ties were severely disrupted by successive waves of deadly epidemics, preventing people from successfully participating in their economic systems of food procurement and exchange. Thus, the Native people became susceptible to rampant starvation, poverty, and social ills such as alcoholism. The Native economies and cultural systems, which co-developed with natural salmon ecology over millennia, began to fall apart.

21 As an example of the magnitude of this change, Taylor notes that there were less than 800 white traders, trappers and settlers in the Willamette Valley in 1841, but by 1850, there were over 12,000 non-Native people in western Oregon country (1999:43). By 1900 the number of Oregon country Indians had declined by 95 percent, while non-Indians had increased from fewer than 800 in 1840 to more than 1.1 million” (1999:39).  

22 In the early days of contact, there were few whites that came to live in the region apart from trappers and traders, so change (apart from that caused by disease) progressed slowly. Native fishermen and hunters traded salmon and pelts for cotton cloth, metal tools, and other goods. Over time, settler communities came to be established and the rate of change increased. Throughout these early years, from the late 1700s through the first three decades of the 1800s, competition for resources, land and markets between British and American interests remained fierce, but outright war was never a consequence and actual violence between the parties was minimal. This should not mislead the reader into believing that violence was not a part of the reterritorialization of the region. On the contrary, considerable violence was inflicted upon the indigenous people to move them off of their homelands and away from prime fishing and agricultural sites. This fact has traditionally been downplayed in the literature on white settlement of the area, although scholars from the Canadian side of the border have been somewhat more forthcoming in this respect.

23 Once again, much of the literature on the establishment of the international border focuses on how peaceful the disposition of the boundary was and further claims that the settling of the issue depended on the wishes of those who lived there. This view ignores the fact that the majority of the people living in the region at the time were Canadian First Nations and Native Americans who are rendered invisible in these accounts. Treatments of this subject tend to elide “the unmitigated exercise of power, the massive appropriation of the native land base both north and south of the international boundary, and the incidents of local genocide” that occurred in the formation of this important border (Robbins 1997:318). This was a case of unpeaceful dispossession that critically altered indigenous geographies, leaving Native families divided and isolated on opposite sides of the border and severing trade routes and social ties. They had no say in the proceedings, even though they fought to protect their homeland.

24 States were formed in salmon country on the U.S. side of the border in 1850 (California), 1859 (Oregon), 1889 (Washington) and 1890 (Idaho), as settler populations became sufficiently large to warrant such a move.

25 “No effort should be untried to procure the removal of the whole [Indian population], thereby leaving the country free for settlement by whites” (Commission of Indian Affairs A.S. Loughery, quoted in Taylor 1999:44).

26 Some of the most significant treaties in terms of the numbers of people affected and future political ramifications include the Treaty of Medicine Creek signed with the Nisquallys and Puyallups in December of 1854 and the Treaty of Point Elliot signed with the ancestors of the contemporary Muckleshoot people in 1855. Much has been written about the nature of treaties made with Native Americans across the continent—the problems associated with translation, the vast gulf between the agrarian, single-family, private ownership vision that whites held for Natives and the future that the Natives wanted for themselves, perfidy and deception on the part of U.S. representatives, the coercive conditions under which the treaties were signed—and the circumstances were no different in the Northwest. One of “the greatest sources of misunderstanding at the time of treaty-making” was “the difference between the Indians' and the white men's view of the land” (American Friends Service Committee 1970:8).
This vigorous over-hunting had a geopolitical as well as an economic rationale. The Hudsons Bay Company tried to negate American competition by decimating the beaver to the east and south of the Columbia river in an attempt to gain sovereignty over the region. In this way, international competition was an early factor in the demise of the salmon, even before the salmon themselves became commercially important.

Wild Salmon were a vital source of food for early explorers and traders like Simon Fraser and a tremendous source of wealth for the Hudson’s Bay Company.

Railroads were founded in Puget Sound in the 1870s and a decade later in southern British Columbia.

Colonials in North America historically took an interest in developing natural resources only as they became commercially viable, as befits the capitalist perspective. But when they did, the necessary steps to secure control of that resource were taken swiftly, deliberately and usually without regard for the interests of indigenous people or the agreements reached with them in the past.

As an example, consider the growth of the industry in the Oregon territory. There was a single cannery located in the territory in 1866 that packed 272,000 pounds of salmon. Within 4 years, there were five canneries that processed 10 million pounds. Production continued to grow at a steady pace, more or less, as entrepreneurs and fishermen flooded into the region drawn by the economic prospects of the fishery. By 1884, 42 million pounds of salmon were packed by 37 canning operations. The Columbia River only supported two gill-net boats in 1866, but demand for salmon grew so rapidly that by the 1880s, the fleet was 1,500 boats strong and it reached a high of 2,800 by 1915. Ocean fishing was made possible with the introduction of the gasoline engine and refrigeration in the early years of the 20th century.

This steep growth curve was replicated in Canada. Canneries appeared first on the Fraser River at Annville in June of 1870, and once they had become established, they spread quickly to the other rivers of the region. In B.C., output steadily climbed from 62,000 cases in 1880, to over ten times that amount in the first decade of the 20th century, and reaching as high as 1.5 million cases in the 1920s, a level that was enabled by the 80 canning plants established in the province by 1913 (Netboy 1980). In 1897 alone, 54 canneries produced over one million cases of canned salmon (Lyons 1969:737).

Prior to that time, Alaska was sparsely populated by Native Aleuts, Eskimos and Indians living a mostly subsistence-based lifestyle, and by Russians who were primarily trappers and used the fish for food only.

By 1889, 720,000 cases of salmon were packed by 37 canneries. The number of canneries reached 156 within 50 more years, with peak catches of Sockeye, pinks and chum totaling well over 100 million fish in many years until about 1941 when the catch began to shrink. The early fishery had a distinctive colonial flavor. Local capital was scarce in this frontier region, so “outsiders monopolized the industry, taking the wealth from the rivers and leaving very little behind to improve the lot of the natives who worked for them in the canneries or as fishermen” (Netboy 1980:260). Canneries often formed the nucleus of new communities such as Ketchikan.

They formed communities of ethnic fishermen—particularly Scandinavians but also Greeks and smaller concentrations of other groups—who started as transient workers and later became permanent residents. They gradually displaced the Natives who were treated as outsiders and were held responsible for the decimation of the runs. People of Chinese descent worked in significant numbers in the canneries, but they were completely excluded from salmon fishing, first by fear of racial violence and later by statute. Austrians also found themselves excluded, particularly after the onset of WWI.

The Indians’ right to fish was guaranteed by treaties, but their property rights to the fish conflicted with the property rights of the Euro-Americans who now owned the land through which the rivers flowed. When the Indians tried to follow their seasonal round of fishing, hunting, and gathering, the were confronted with fences and KEEP OUT signs. Although the courts, especially the higher courts, upheld the Indians’ right to fish as well as their access to the fishery, the lower courts and local government agencies made it clear that the native fishermen could harvest salmon only according to the terms dictated by the new culture” (Lichatowich 1999:99).
36 The pressure placed on upriver groups was especially strong due to their geographical location. As the last users along the salmon’s migratory path, they were often placed on them to make up for inadequate escapement downstream by reducing their catch levels.

37 The canning industry on the Sacramento produced 20 million cases of salmon in 1882, but the catch was halved in the next decade and fell to only 2 million pounds in 1891 when there were only 3 canneries left. California’s salmon canning potential was essentially played out within 30 years of its inception and the last cannery closed on the Sacramento river in 1919. South of the Fraser River, all the salmon streams had already achieved and then passed their point of peak harvest by 1915. There were at one time over eighty cannery operations located along the B.C. coast but they are all abandoned now. The situation was and is somewhat less dire in Alaska due to the productivity of the area and the relatively low levels of development and low density of population, but even there, commercial landings began to decline in the 1940s and numerous canneries were abandoned. Northwest fisheries hit peaks of production in the 1880’s and again during WWI, but then they were reduced and stayed that way, for reasons ranging from natural phenomena to the Second World War to the effects of the Great Depression, until the middle of the 1930s when the greater utilization of ocean fisheries began.

38 As is still seen today, however, the decline was not smooth, but rather good harvest years were interspersed with bad and downward trends were often broken up by sudden increases in harvest levels that would persist for a several years before the decline was evident again. These vagaries were due to many factors ranging from natural fish population fluctuations, environmental events such as El Ninos and interdecadal oscillations, and legislative moves that limited gear, altered the length and timing of harvest seasons and so on. One other key factor that allowed for occasional good years and upturns was the way that the fishermen would switch runs. They would fish the favored stocks, like the summer chinook runs, until they were depleted and then switch to another, less popular fish such as the Fall or Spring Chinook. This repeatedly created the false impression that fish populations were doing better than they actually were.

39 For example, the border between Oregon and Washington runs along the Columbia River, one of the most significant fisheries of the region. “The political division of the Columbia allowed fishers and canners to exploit the river’s ambiguous jurisdiction” and “... undermined coherent regulation of the salmon fisheries” (Taylor 1999: 150). Most of the early bills and measures proposed to regulate or conserve the Columbia River fishery were ineffective and pointless because opposing interests were able to use the border and divided jurisdictional claims to their advantage.

40 Similar celebrations had also emerged among isolated Finnish and Norwegian fishing communities.

41 This is true in large measure because: “Throughout the world, native subsistence fishermen have been and are being replaced by a new class of fishermen working within the industrial economy. When maximization of profits becomes the dominant goal, diverse and labor-intensive fisheries controlled by local communities of a fishers are usually replaced by expensive technology operated by a few people and governed by distant, centralized bureaucracies. This change weakens the negative feedback loops between fish and fishers, making it virtually impossible for a sustainable relationship to coevolve between the fish and the industrial economy” (Lichatowich 1999: 45).

42 The Sacramento River was one of the first sites of serious degradation. It had suffered early under the weight of habitat destruction due to hydraulic placer mining and other practices and so was highly susceptible to the ravages of industrial fishing and canning.

43 “They sorted themselves by race, ethnicity, class, gear, and place in order to exclude outsiders. They also made exclusive claims to sections of streams through physical alterations, social contracts, and legal fiat. The political contests to control fishing spaces did protect some salmon and salmon fishers, but by 1908 the struggles had also devastated communities and fractured the biological coherence of salmon management” (Taylor 1999: 133-4).

44 Government assistance in the removal of indigenous people came in the form of negotiated agreements, treaties, and executive orders that relocated Natives to reservations, as well as military support in the seizure of desired fishing sites.
Small associations and unions made efforts to claim pieces of the rivers by shaping, appropriating and enclosing water space in several ways: 1) actually altering river habitat by, for example, clearing the bottom and thus making it a more lucrative for certain types of gear; 2) division of rivers by fishermen into formal spaces that required membership and the payment of fees or dues to access; 3) the application of rules and guidelines enforced by these groups on member regarding the timing of harvest, sale of rights to fish a particular area, etc.; 4) threats, sabotage, vandalism and violence; 5) physically impeding the use of certain types of mobile gear through the installation of fixed gear; and 6) lodging complaints with the federal government and state governments (who usually assumed little responsibility, though attempts to pass legislation that would protect fish were occasionally made).

The first artificial propagation facility was constructed in September of 1872 in California. Fish were bred, based on a system developed for salmon by Canadian Samuel Wilmot, at (mostly) federally operated hatcheries in massive numbers and released throughout the region.

Some managers argued for greater centralized control of interstate waters and fisheries, but the idea of expanded federal management was dismissed in most cases due to the belief that policy at the federal level should focus on promoting industry, supporting research, and eschewing legislation when possible.

Even though the methods were simplistic and were not improved in any significant way until the 1960s, by 1910, five hundred million hatchery bred salmon were being released into coastal streams each year from B.C. to California (Lichatowich and Zuckerman 1999:26).

Habitat restoration would have been the most effective response, given that "human improvements [had] produced an almost total change in all the external conditions of piscatorial life" (George Perkins Marsh quoted in David Lowenthal 1958:185-86) but it was not politically feasible in the mid 1800s or even well into the next century.

However, it is interesting to note that one of the key problems of this system in the early years was geographic in nature. Eggs were harvested in one part of the region and then the fish were hatched and released sometimes hundreds of miles away. In most cases, these egg transfers failed to establish new runs or were fraught with problems of disease and high mortality rates. We know now that salmon are intimately connected with the environment of their particular home stream in terms of conditions necessary to thrive, timing of runs, and competition with other stocks. Thus, it is clear to see that this was an ill-conceived attempt at mitigation and restoration, but managers persisted with this approach regardless.

An example of such an agreement was the Columbia River Compact between Oregon and Washington (which excluded fishing interests in Idaho) that was created to manage Columbia River fisheries and to stave off federal incursion. This new level of cooperative management, such as it was, brought about a decrease in interstate conflicts, but at a significant cost to the fishing industry in political power. Other changes were made to reign in the uncontrolled exploitation of fisheries resources, including the creation of oversight agencies at the state level like the Washington Department of Fisheries, formed in 1921.
CHAPTER 5: ESTABLISHING CONTEMPORARY PATTERNS OF TERRITORIALIZATION AND RESOURCE CONTROL

Introduction and Outline of the Chapter

In Chapter 4 I introduced the early overlapping moments of territorialization related to salmon resources. In those moments, the inscribing and enframing effects of sovereignty discourse can be clearly seen and the affects of those discourses on the geography of political economy and salmon ecology are apparent. This chapter examines the last two moments of spatial change, setting the stage for an empirical analysis of the current territorial moment.

In this chapter, I continue my efforts to “theorize critically the polymorphous territorialities” that characterize the modern geopolitical landscape (O’Tuathail 1998:90). The goal of this work is to debunk the paradigm of state sovereignty as a naturalized discourse and confirm that sovereignty is an historically contingent, socially constructed set of ideas and practices. Further, tracing territorialization processes uncovers the ways in which some groups have been systematically alienated from resource access and management. Finally, it allows us to see how the spatial mismatch developed through processes of territorial inscription, thereby mapping the effects of sovereignty discourse on resource utilization and degradation.

Between approximately 1930 and 1985 (the year the Pacific Salmon Treaty was signed), the first territorial moment of interest in this chapter, there were several significant changes that: 1) intensified the spatial mismatch through interlinked processes that altered the geography of political economy in the region relative salmon management and conservation; and 2) restructured salmon ecological geographies. For the sake of clarity, key issues will be introduced following the historical narrative approach established in Chapter 4, though it is important to remember that there was considerable temporal complexity and overlap rather than a strictly linear chain of events. Deterritorialization and reterritorialization were often simultaneous processes, with different territorial imperatives and doctrines often existing side by side.
The rise of ocean fishing, particularly in international waters, was the first major spatial change that came about during this period. Its development was instrumental in reworking the geography of the regional political economy and greatly intensified conflict across the international border. Soon after ocean fishing began, one of the most significant and destructive trends in the geography of salmon ecology was initiated—the rapid construction of numerous large-scale dams in the PNW. During this period, the spatial mismatch mushroomed in that the status and management of salmon and their habitats in the PNW, B.C. and Alaska grew increasingly dissimilar and fragmented. The rate of decline in the health and stability of fisheries accelerated. Attempts by Native Americans and First Nations to regain some of their historical access to salmon resources figure prominently during this period. Toward the end of this fifth territorial moment, cooperative management schemes began to emerge, culminating with the signing of the PST. The major tenets of the Treaty and aspects of particular geographic interest are introduced to conclude this moment.

The sixth and final period of territorial change under consideration in this chapter examines the last fifteen years, focusing on the effectiveness, or rather the lack thereof, of the PST, its main shortcomings, and changes to the Treaty which have been recently instituted. This leads into the empirical section of my research in which I examine how and to what effect the spatial mismatch, sovereignty discourses and territorial structures put in place over the last 225 years are being challenged by transgressive cross-border salmon activism.

The Fifth Territorial Moment: 1930 to 1985

Ocean Fishing

Ocean fishing for salmon, which began at the turn of the century but did not gain significant momentum until the 1930s, dramatically reterritorialized the fishery and fish politics, raising the issue of state sovereignty and resource control to a new level of intensity. Fishing in the open ocean expanded the spatial reach and scale of harvest operations and intensified the detrimental effects of commercial fishing on salmon
populations. Battles over the allocation of the harvest and use of salmon habitat that had been mostly limited to the domestic sphere were made international issues by institution of ocean fishing. Territorially-based conflicts had mostly been between upriver and downriver fishers, opposing business interests in a watershed, or management agencies in different jurisdictions within nation-state boundaries, increasingly turned into political “fish wars” between the two sovereign nations of Canada and the United States.²

The Geography of Ocean fishing and Domestic Politics

Ocean fishing had been practiced since dependable motorized boats and refrigeration technology had made it safe and profitable for trolling vessels and purse seiners to operate in open water in the earlier decades of the century. It was the political changes that made ocean fishing feasible, however, that are of the most interest here. Those changes, which exacerbated the spatial mismatch and relied on the normalized rhetoric of sovereign territorial rights for their existence, had distinctly spatial impacts on the fishery. For example, in the 1920s Washington and Oregon passed laws prohibiting the use of fixed gear (used in-river) in an effort to conserve dwindling stocks. The main affect of these laws was to shift harvest to the oceans and to sportfishers (who had lobbied hard for such measures). The growing rate of in-river fishery closures also escalated the ocean catch and subsequently did little to mediate the problem of excessive fishing. Conservation efforts did not reduce the harvest, they had simply displaced it from the rivers to the oceans. This change in the spatiality of the salmon fishery rendered managers powerless to regulate the fishery due to: 1) lack of jurisdictional authority; 2) the variety and complexity of regulations from one state or management area to the next; and 3) the difficulties involved in enforcing any laws upon such a dispersed and mobile fishery. The negative consequences of nearshore ocean fisheries appeared quickly, as the quote below makes clear:

“... harvesters began to leapfrog over one another in a race to catch the fish before their competitors. When state legislatures turned their attention to regulation of harvesting activity in rivers and estuaries, fishermen developed new methods and places of harvest further from the rivers... to nearby marine waters. ... By moving the fishery out of the rivers, the trollers escaped the seasonality of river
fisheries, the reach of the regulatory and enforcement agencies, and the pervasive influence of the canning industry. The pattern of exploitation that emerged to harvest salmon was complex, costly to administer, economically inefficient, and nearly impossible to control” (Morishima and Henry 2000:220).

The Geography of Ecology in Domestic Ocean Fishing

As harvest moved to the oceans, harvesting mixtures of both mature and immature fish, some of whom were caught months or even years before they were due to return to their natal streams, became the norm. This led to an incredible amount of waste, a considerably lower yield than the potential maximum and the deterioration of the resource base (Morishima and Henry 2000:221).

Objections to ocean fishing on the domestic front were lodged by some managers and biologists, but the chief complaints came from in-river fishers who lost harvest share to these operators. Their objections were, as was standard, couched in the language of salmon conservation, claiming that too many immature salmon were being landed. Nevertheless, ocean fishing continued to expand. The development of ocean fisheries that moved steadily further off-shore over time destabilized the geography of salmon ecology in ways which were previously unencountered, putting additional stress on the already beleaguered fisheries and on the political and management agencies charged with their protection.

Reterritorialization and the International ocean fisheries

“When fish stocks are harvested by more than one nation, or when they cross internal jurisdictional boundaries, the management task is further complicated by the efforts of each nation or jurisdiction to promote the interests of its own harvesters” (Miller, Munro, McKelvery and Tyeders 2000:1).

Interceptions of salmon from both Canadian and American rivers by fishermen from the other country rose sharply as a result of increased ocean fishing. Canadian fishermen landed substantial quantities of Washington coastal, Columbia River and Puget Sound salmon. American vessels, mostly from Washington, plied the waters in the Strait of Juan de Fuca, Point Roberts and the San Juans seeking the treasure trove of sockeye native to B.C.’s largest River, the Fraser. The Fraser River, known for particularly large runs of sockeye based on a four year cycle, provided fishermen with 25 million fish in
1901 and 20 million in each of the next 2 big years—1905 and 1909—figures which established the Fraser as the single largest salmon producing river in the region. In off-peak years, it is estimated that over 90 percent of fish were taken by fishermen—obviously not a sustainable rate—which put tremendous stress on the fishery.

Up until the turn of the century, Canadians exploited most of the Fraser’s unmatched abundance, but with the rise in ocean fishing in the early part of the decade, American non-Native landings began to rival, and eventually surpassed, those of the Canadians, much to the distress of the latter. Fishermen from each country used the language of sovereign territorial rights to make claims on fish and fishing sites. The political concept of sovereignty, that supposedly provides a means for determining resource allocation and control, was in essence the cause of growing conflict between ‘rival’ fishermen. The notion of sovereign rights divided the salmon harvest based on geopolitical boundaries and citizenship privileges. These arbitrary divisions run contrary to the ecological geography of the salmon and the sustainable utilization of the resource. It seemed unfair to Canadians that Americans should harvest the largest portion of ‘Canada’s premier fisheries resource.’ This disparity led to competitive overfishing, which in turn put stress on the fishery and became a factor in decreasing production. Interceptions of Fraser sockeye, combined with the effects of a habitat disaster and a timely change in the sockeye migration pattern, would eventually lead to the first real cooperative salmon fisheries management agreement between the U.S. and Canada later in this era, but not without political wrangling and heel-dragging that lasted for decades (see below).

**Dam Construction: A Massive Re-engineering of Salmon Ecological Geography**

The construction of large-scale hydroelectric dams in the PNW during this period (and in B.C. and Alaska to a much lesser extent) has had a more intense and negative impact on salmon geography and abundance than any other single habitat-related change. By the early 1900s, relatively small but often impassable dams built for irrigation water storage had become commonplace in the PNW, in the more populated and developed
areas of B.C., and to a small degree in Alaska. These dams and the processes involved in building them had deleterious consequences for salmon, but nothing compared to the massive dislocations caused by large-scale dam projects in the PNW. Although scientists, fishers and fisheries managers warned against the likely effects of high dams on salmon and tried to mitigate the dangers, they were unable to stand in the way of the administrative agencies that recognized that other industries were simply more profitable than fishing for salmon.

The passage of the federal Reclamation Act of 1902 called for the construction of large, multi-purpose dams. These dams first appeared in California along the San Joaquin and Sacramento River systems. In most cases, early dam builders ignored the needs of anadromous fish and failed to install fish ladders. When they did, they tended to be ineffective. By 1929, the combined 46 dams on these rivers cut off approximately 80 percent of salmon spawning areas in northern and central California (Netboy 1980:214). The institution of the Central Valley Project in the 1930s further restructured and replaced the natural waterways of California and brought many new residents to the area. The effect on salmon was dramatic. The pressure to develop the region left only 300 miles of spawning ground in the Central Valley by the 1960s and harvests of salmon went steadily downhill.

The Bureau of Reclamation (BR) and the Army Corps of Engineers (ACE) were instructed to survey the watersheds of the PNW in the early 1930s. The survey culminated in the ‘308 Report’ by the ACE in 1932 in which 10 (later expanded to 12) large dams were proposed including Bonneville on the lower Columbia and Grand Coulee on the Upper Columbia. These two dams alone would destroy 1,100 linear miles of salmon spawning habitat and back up water into Canada for 150 miles (Netboy 1980:225). At first, the dam builders failed to even contemplate providing fish-passage facilities, but protests from the fishing industry and conservationists forced the inclusion of such facilities in the plans. Fish-passage facilities were generally inadequate and they remain problematic and expensive even today.
During the 45-year period between the authorization of the Bonneville (1933) and Grand Coulee (1935) dams, ACE completed 14 dams on the main stem of the Columbia River and 13 on the Snake (National Research Council 1996:226). Beginning in the 1940s, the combined efforts of tribal organizations, fisheries agencies, and state level legislative committees were repeatedly unable to dissuade federal officials from moving forward with proposed dam construction. The federal government, particularly the Department of the Interior, believed that PNW rivers had to be conquered and controlled for the good of industrial development, even if it meant the loss of some salmon runs. The construction of major dam projects continued unabated until about 1960 when appropriate sites and public support were exhausted (see Figure 6, reprinted with permission of Ecotrust).

Dams represent a major health risk to migrating salmon as they are repeatedly subjected to the perils of turbines, slack currents, fish ladders, bubble disease from supersaturated nitrogen gas, scoured streambeds from excessive flows and fatigue, causing considerable increases in mortality rates. Dams that inundated spawning habitat, created temperature changes that influenced migration patterns, or completely cut off large portions of rivers progressively and profoundly altered salmon geographies. Entire runs disappeared as a result of high dam projects and the distribution (and diversity) of salmon throughout the PNW was drastically simplified. Between one third and one half of the total salmon habitat was destroyed on the Columbia River alone.

Mitigating the effects of dams has had a high price tag, requiring the attempted restoration and reconstruction of salmon habitats, trucking of salmon fry around dams on their way to the ocean, and other expensive options. These spatialized measures have proven largely unsuccessful.
Figure 6: Dams in the Northwest
**Spatial Discrepancies in Dam Construction**

"Canada, with all due respect to the U.S., has done a much better job of protecting its rivers and watersheds" (Interview with Glen Spain, November 10, 2000).

The majority of the large-scale dam construction projects in the region were completed in the PNW states. Dam building on Canadian rivers including the Quesnel in 1896 and the Adams in 1908 also effected salmon runs, but these were smaller projects undertaken by mining and logging operations and they subsequently had fewer negative consequences. The construction of larger dams has proceeded much more slowly in B.C. and none have been located on the Fraser or the Skeena, the two major salmon producing rivers in B.C.\(^9\) Hydroelectric development has been directed to the Upper Columbia and the Peace rivers as a matter of public policy since the 1960s, leaving the two great salmon rivers free-flowing. The number of small and mid-size dams is also significantly less in B.C. than in the PNW, and Alaska has even fewer still.

Divergent rates of dam construction illustrate the increasing spatialized discrepancy between environmental policies that affect the salmon in Alaska, the PNW and Canada (B.C.). Variations in environmental policy had less to do with more enlightened management or greater adherence to scientific guidance being practiced in some locations than with political and economic considerations. Environmental use and management choices that differed from place to place, particularly rates of dam construction, created significant geographical differences in the rate of salmon population decline and distributional changes, harvest levels, overall participation in the fishery, and the extent and type of habitat disruption.\(^{10}\) The productivity and strength of wild salmon populations have thus suffered in direct proportion to levels of industrialization and therefore environmental disruption that follow a clear geographic pattern. Conditions are most favorable for salmon and salmon fishing the further south one travels in the fishes' ancestral range. Over time, these factors have combined to make Alaska the region's premier salmon producer, followed by B.C., and finally the PNW.\(^{11}\)

Dis-integration in the management of salmon fisheries—a lack of integrated coast wide oversight—exacerbated the effects of dams and ocean fishing during this era. A
formerly unified ecosystem had come to be characterized by disunification. Thus, territorially distinct differences in environmental management, based on the belief in the sovereign right of spatial units of governance, be they states, provinces or nations, to control “their” resources, has been fundamental in the creation and continuance of the salmon problem.

**DIVERSE MANAGEMENT STRUCTURES AND THE DEVELOPMENT OF GREATER COORDINATION**

In the early part of the century, it became obvious that a degree of coordinated management was necessary if the salmon were to have any future in the region. Coordination was needed between states and especially between nations because of the contentiousness of international disputes and the potential for irreparable harm to some of the most productive salmon populations (like the Fraser River sockeye). Thus began the process of significant political and managerial reterritorialization that led to the signing of the Pacific Salmon Treaty. In order to understand this process, it is important to first briefly outline the management structures that formed in the U.S. and in Canada and to examine the two systems side-by-side.

**U.S. Management Structures**

Management of fisheries occurs on all spatial scales. Some of the details of the smaller scales of management (sub-state and local) were discussed in the previous chapter as they pertain to PNW in-river fisheries during the 19th and early 20th centuries. Alaskan fisheries management was practically non-existent in the early years of commercial fishing due to the vast spatial expanse of the fishery and the tiny number of inspectors available to oversee fishing regulations. Supervision was maintained by federal agencies until Alaska became a state in 1959.

By the 1930s, many conflicts were occurring between states in regards to both in-river (when more than one state shared jurisdiction over a particular river) and coastal fisheries. Each state had its own administrative policies and harvest restrictions, causing frequent intraregional conflict. Real cooperation between states began in 1918 with the creation of the Columbia River Compact that mandated that the Washington Department
of Fisheries and Wildlife and the Oregon Department of fish and wildlife share responsibility for Columbia River salmon fishery management. Other significant coordinated management agencies established to oversee salmon fisheries during this time period include the Pacific Fisheries Management Council (PFMC), one of eight regional fishery management councils that resulted from the Magnuson Fishery Conservation and Management Act of 1976. This council “coordinates federal and state actions with respect to salmon management for California, Idaho, Oregon and Washington” with input from state, federal and tribal agencies (National Research Council 1996:258). Note that Alaska is not part of this council’s responsibility. States retain jurisdiction within three nautical miles of their respective coasts whereas the federal government has authority between 3 and 200 miles offshore as exercised by the regional management commissions (Miller 2000:5). Authority over endangered species rests with the National Marine Fisheries Service, which becomes important when stocks reach critically low population levels. Organizations such as the Northwest Power Planning Council, founded by Congress in 1980 to assure the mitigation of negative effects of hydroelectric development on salmon, and the Bonneville Power Administration (BPA) also play a role in public policy and management decisions that impact salmon. In short, what developed was a complicated bureaucracy that divides responsibilities for domestic fisheries among numerous agencies, panels, committees and councils, with states agencies maintaining much of their autonomy relative to federal control.

Aboriginal Fishing Rights in the PNW

The question of Native fishing in the U.S. has been a key element in the gradual sorting out of managerial rights and responsibilities regarding the salmon. Treaty-guaranteed rights to the salmon have been a source of long-standing, acrimonious feuding among the interested parties. As I outlined in the previous chapter, Native peoples have suffered officially-sanctioned and unofficial violence, race-based discrimination, displacement, marginalization and impoverishment at the hands of whites. Indigenous access to salmon was gradually eroded using a combination of tactics ranging from
threats, dishonesty, legal mandates and violence to spatial segregation and exclusion. As recently as the 1950s, white fishermen encouraged state officials to limit the Native harvest even though it was already less than 5 percent of the total. In response, managers of fishery resources systematically coerced indigenous fishermen into abandoning their fishing areas in Oregon and Washington.

Native peoples continually struggle to maintain the harvest and management rights they have, and never stopped fighting to regain those rights that were stripped from them. They fished covertly and 'illegally,' resisted displacement by political means and through direct confrontation, and they brought their case before judges in the white courts. Following the example of the civil rights "sit-ins" of the 1960s, PNW tribal fishers staged several "fish-ins" in the latter part of that decade in which the participants blatantly ignored fishing regulations. The response by enforcement officials included the seizure of fishing equipment and sometimes violent arrests. These actions fanned the flames of public opinion on both sides of the issue, which the media covered with great intensity. The end result was the decision to bring the issue of Native treaty rights to the courts to determine the 'validity and scope' of those rights.

The provisions of treaties that PNW tribes signed during the middle of the 1850s have been interpreted by the U.S. Supreme Court eight times thus far and the decisions have tended to favor Native interests to a progressively greater degree. Of the court decisions that have been handed down, two stand out as dramatically advancing Native salmon fishing rights—the decision by Belloni in 1969 and the 1974 "Boldt decision." Each of these was critical in establishing the legal basis for indigenous access and management rights in the contemporary era.

The case of United States v. Oregon (302 F. Supp. 899) was brought by the Columbia River tribes and was heard in federal court by Judge Robert C. Belloni in 1969. This was the first case that offered guidance regarding allocation principles by providing a pragmatic legal interpretation of the concept of 'usual and accustomed.' As written in treaties signed in the 1850s, Native fishermen reserved the right to hunt, fish and gather
in all of their 'usual and accustomed' places, whether those places were on reservation land or land held by the government or a private party. Native fishers were, for the most part, denied these rights for nearly 125 years. Belloni decided that the notion of 'usual and accustomed' meant that Natives had the right to independently obtain their 'fair and equitable share of the resource' whether on or off the reservation. This ruling is considered by many to be "the crucial building block for other federal-court decisions important to the region's tribes" (National Research Council 1996: 131). It was wildly unpopular among non-Native Oregonians and others effected by the decision, but state officials who agreed to manage salmon in an equitable fashion with the tribes conceded the issue.

The second and much more well-known ruling was in the 1974 case of United States v. Washington (384 F. Supp. 312) brought by the Treaty tribes of Washington. In this case, Federal Judge George Boldt interpreted Belloni's reading of the treaties to mean that the signatory tribes have the right to half of all the catchable salmon destined for the 'usual and accustomed' fishing places of indigenous fishermen. The Treaty tribes thus secured rights to 50 percent of the catch, to catch all salmon species be they wild or hatchery bred, and to do so whether on or off the reservation. They also became entitled to participate in management to sustain runs, including the right to protect necessary habitat. This decision fundamentally altered the role of Washington indigenous peoples in contemporary fishery management and their position as users of the resource. The decision met with shock and intense criticism from white fishermen, some politicians, and citizen commentators. In several cases, racist violence resulted. To this day it is common for racist finger-pointing to surface whenever there is a shortage of harvestable salmon as white fishermen decry the fairness of the 50/50 division and blame Native fishing for declining runs (See Figure 7). Whites tend to resent any of 'their fish' being taken by Native fishermen. In the words of Mike Sato of People for Puget Sound, "You don't have to scratch very deep and the anti-Indian feeling comes out really quickly when you talk to folks" (Interview, September 26, 2000).
Figure 7: Racial Tension in the Contemporary Fishery
The billboard pictured on the previous page in Figure 7 is a graphic example of the racial tension still common in the fishery. I spotted this billboard along the I-5 corridor near Chehalis, Washington in June of 1998 about 200 yards from the Central Regional Department of Natural Resources offices. It reads, "Indians police their own salmon harvests. Would you let the fox watch the henhouse?"

Some of the acerbity that came out of the Boldt decision was the result of racism, but some of it was also due to the legitimate effects on other resource users. Non-Native fishing had to be severely cut-back to meet the court-ordered Native harvest requirements. The effect of curtailing the non-Native fishery was to make financial matters tough for white commercial fishermen while Treaty tribes built up their fishing fleets using government subsidies. This situation inflamed matters further and some non-Native fishermen openly defied fishing regulations, leading to increased federal court involvement in state fishery management. Treaty fishing rights remain unpopular among non-Natives and are also a source of consternation for non-treaty tribal peoples. Nonetheless, the application of the 50/50 standard launched the Treaty tribes of Washington into a cooperative management position together with state government and utilities agencies.

The Treaty tribes of the PNW, represented by the Northwest Indian Fisheries Commission (NWIFC) and the Columbia River Inter-Tribal Fish Commission (CRITFC) (see Appendix D) have become active participants in fisheries management and many have become extremely efficient, heavily capitalized utilizers of the resource, catching salmon for ceremonial and subsistence purposes and to sell on the commercial market. Even so, the catch among Native fishers was only half as large in the average year of the 1990s as in an average year of the 1940s. This figure reflects the overall decline in harvestable salmon populations since the proportion of Native allocation rose from approximately 5 percent to 50 percent during that time.

Alaska Natives secured their fishing rights through the Alaska Native Claims Settlement Act of 1971. The deal included the transfer of 40 million acres of land and
one billion dollars in cash to the Natives and it marked the institution of Native Corporations, the entities that now represent indigenous interests in Alaska. Fishing rights are coordinated through the Native corporations in cooperation with state fishery agencies, but it is not as simple as it sounds: "Well, it’s pretty complicated and it has gotten more complicated. We’re getting into this jurisdictional no-man’s-land right now. It just keeps getting more and more complicated" (Interview with Tim Bristol, November 27, 2000).

Indigenous fishing and habitat management rights vary within PNW states depending on the treaty or non-treaty status of individual tribes. There is also a notable difference between Native rights in the PNW in general versus in Alaska. Even so, there is a measure of cooperative management between indigenous user groups and state and federal government agencies in both areas that has become a model for Canadian First Nations aspirations.

**Canadian Management Structures**

Canadian management of fisheries differs from that which is found in the U.S. in many ways. These geopolitically-founded differences complicate the management of Pacific salmon resources and are an invitation to conflict. There are significant contrasts in terms of management goals, public opinion and legal frameworks. Some of these discrepancies may appear to be insignificant technical matters, such as the use of different terminology and variations in how management zones are defined, but they are actually central to the problems associated with trying to coordinate cross-border management. Many of these are elaborated upon in Chapter 7. In this section, focus is on differences in management structures because of their constitutive role vis-à-vis the spatial mismatch, and also because of their importance in the development of cooperative international strategies and treaties that were forged during this period.

There are only two agencies directly responsible for fisheries management in B.C. At the provincial level, the Fisheries Branch of the B.C. Ministry of Environment, Lands and Parks oversees freshwater/river fish and fisheries. The federal Department of
Fisheries and Oceans (DFO) is responsible for the management of ocean-going fish and fisheries, including the salmon, and the conservation of their freshwater habitats (Narver 2000:67-68). In this we see that the federal government plays a central role in managing Canada’s fisheries. Conversely, in the United States, each state has considerable control over the fisheries in its own waters. This fact represents the most weighty and materially significant discrepancy between Canadian and U.S. management structures relative to international cooperation. Differences in the degree of federal authority over fishing issues slows and complicates treaty-making processes and has proven to be a major sticking-point in the execution of cross-border cooperative strategies.

In Canada as in the U.S., conservation has often taken a back seat to harvest interests and economic ventures that affect the fishery. Conservation of wild stocks has received a shot in the arm in recent years, however, as the diminishing abundance of naturally-produced stocks throughout much of the province has forced fishery closures and necessitated ‘stringent conservation measures.’ Additionally, the newly affirmed priority fishing rights of First Nations has added weight to the need to adequately assess salmon stocks in order to assure their conservation (see below).17

As in the U.S., there is a significant amount of legislation aimed at the conservation of fish habitat embedded at both the federal and provincial level. The policy of keeping major salmon rivers dam-free has allowed a greater range of responses to declining salmon runs than in the U.S. The lack of dams has also meant less pressure on the runs and thus a slower rate of decline and in some cases, the steady improvement of runs. The Federal Fisheries Act (FFA) is Canada’s most influential legislation regarding fisheries habitat. The FFA “encourages habitat protection and enables strong punitive actions for damages to fish habitat” (Narver 2000:68). The down side to this act is that punitive action is only possible after the fact and damage must be proven, which often requires expensive and time consuming litigation in court. The FAA has other short-comings and has not fared particularly well in practice despite being well-conceived. Thus far, attempts to amend the FAA to make it more proactive have not
been well received. Legislation to protect fish and fish habitats crafted at the provincial level has been generally ineffective.\textsuperscript{18}

\textit{Canadian First Nations Fishing Rights and Land Claims}

The First Nations of B.C. have always participated in the salmon fishery in one way or another—legally or illegally, as part of the commercial fishing industry and/or for subsistence.\textsuperscript{19} The vast majority of First Nations did not sign treaties with either the British authorities, the B.C. provincial government or the Canadian Federal government. Their lands and rights were progressively stripped from them by legal statute and force. But the First Nations never stopped claiming their legal right to the salmon nor did most tribes lose control of the resource completely (apart from those groups whose access to salmon was cut off by dam construction, including dams built in the U.S. on the upper Columbia river, or other habitat transformations). The continuity (and quasi-territorial structure) of First Nation’s salmon fishing access and control over time is strongly suggested by the comments of Fred Fortier of the B.C. Aboriginal Fish Commission: “There were protocols set up to share fish . . . Those protocols have been carried on for many generations. Some of them now are being written down. . . . After thousands of years we still are controlling who fishes in our territory” (Interview, December 12, 2000).\textsuperscript{20}

Even so, the First Nations have been extremely dissatisfied with their limited legal rights and their lack of a voice in regional and international negotiations and management decisions. They have brought many cases before the Canadian courts trying to settle their claims in a drawn-out process which continues today and increasingly favors the interests of First Nations people. In 1990, the Supreme Court of Canada heard a series of cases, including the case of R. v. Sparrow. In the \textit{Sparrow} ruling, “First Nation’s rights to a priority allocation of fish were confirmed” (Pinkerton 1997:202). As a result of this and other court decisions, and in response to shifts in public opinion, the federal government adopted the Aboriginal Fisheries Strategy (AFS) in 1992, which permits fishing for food and ceremonial purposes, but only after conservation requirements have been met. “The strategy involves interim one-year agreements
between the federal Department of Fisheries and Oceans (DFO) and selected First Nations, specifying harvest quotas and, in some cases, the right to sell fish” (Pinkerton 1997:202). The AFS allows First Nations to participate in multi-party decision-making regarding allocation of fish and management issues such as the development of shared goals, cooperative enforcement of regulations, approaches to mixed-stock fisheries, stock analysis and programs to monitor sales.

First Nations continue to struggle to regain land and harvest rights through agreement and litigation when necessary and their progress, which has been considerable, is boosted by decisions favoring First Nations across Canada. There is still a considerable amount of work to do and it is generally agreed that First Nations are at least ten years behind Native Americans in their struggles, but the future looks promising. Tribal people of British Columbia see the decisions in favor of indigenous fishers south of the border as potentially providing some benefit in their struggles to regain lost fishing rights. However, since the legal frameworks in each country are considerably different, especially given that most First Nations did not sign treaties with federal or provincial governing bodies, the potential benefits emerge more from lessons learned about strategy, procedure, and organizing rather than legal precedent for the most part. CRITFC, the Columbia River Intertribal Fish Commission (formed in 1976 by four of the Columbia River Treaty tribes to unify the regional Native voice in fishery co-management) is an especially influential model, providing the inspiration for the creation of a Canadian First Nations organization known as the Canadian Columbia River Intertribal Fisheries Commission. While this organization doesn’t have the same authority or power as its namesake, its existence is testament to the influence of indigenous cross-border organizing.

**The Evolution of International Fisheries Agreements**

The history of binational conflict and negotiation regarding Pacific salmon is as long as the history of commercial fishing in the region, although conflict accelerated with the onset of extensive ocean harvest. The fisheries that are of particular concern in
international agreements are: 1) the Fraser River fishery (Sockeye and Pinks); 2) ocean
trolling fisheries (particularly for Columbia River Coho and Chinook; and 3) Southeastern Alaska fisheries. Each of these is discussed briefly below to demonstrate the role of sovereignty claims in creating and perpetuating the spatial mismatch. Emphasis is placed on examining the Fraser River fishery because it provided the greatest impetus for the crafting and implementation of the Pacific Salmon Treaty. Jurisdiction over Fraser River salmon is a binational issue even though the Fraser is an entirely Canadian river because large numbers of highly prized salmon migrate through both American and Canadian waters on their way to the spawning grounds and many of these fish have historically been caught by American fishermen. The role of the other fisheries in international agreements and disagreements is presented to further demonstrate the crucial spatial issues surrounding management of the international resource.

In examining the events that eventually led to the ratification of international agreements on salmon management and allocation, a trend towards cooperation emerges in which the parties begin to recognize and address salmon issues in a more spatially unified way. This trajectory is a political departure from the process of dis-integration characteristic of the historical geography of salmon during the previous eras. However, it quickly becomes evident that function is slow to follow form. The divisive spatialized forces built-up during the previous eras are tenacious and continue to fragment the management of the resource even though unifying structures, agencies and institutions are being put into place.

The Fraser River Fishery and Events Leading to the PST

Official negotiations relating to the conduct of Fraser River fisheries began as early as 1892 (Woodey 2000:209), but the drive to establish international agreements regarding the allocation and management of Pacific Salmon began in earnest in the 1900s when Washington’s ocean trolling and net fishing fleets started to land more of the salmon from the Fraser River than Canadian fishers. The disparity in harvest precipitated negotiations between the state of Washington and the Dominion of Canada and later between the two federal governments. The initial result was the Bryce-Root Treaty of
1908. It provided for the fair allocation of Fraser River Sockeye and was quickly made law in Canada but in the end, it failed. A key reason for the failure of the treaty was the discrepancy between the way that the U.S. and Canada manage their fisheries. As discussed above, individual states have jurisdiction over the fisheries in their waters, while in Canada, the Federal government is largely responsible for salmon management. Consequently, the treaty that the U.S. government negotiated was for a fishery over which it had no legal control. The state of Washington used the claim of states rights to prevent the treaty from becoming law. By 1914, the U.S. Congress—lobbied hard by intransigent fishing interests in Washington state—still had not passed enabling legislation and the Canadians gave up on the treaty. Thus, conflicts over sovereignty and jurisdiction prevented this early treaty from being ratified into law.

The failure of Bryce-Root did not bring an end to the negotiations, however. A series of events coincided to launch the two countries into new treaty talks during the early part of the century. The most significant was the Hell's Gate Disaster of 1912. The Canadian National Railway blasted massive quantities of rock into the Fraser River while laying tracks along the east bank of the river canyon. The channel was narrowed and the speed of the current was increased. Hell's Gate became all but impassable for the salmon that had made it past the nets and lines of the thousands of fisherman that had come to take advantage of the high point of the four-year salmon migration cycle in 1913. Attempts were made to reduce the velocity of the water flow through the canyon by removing the rock, but it was a case of too little, too late. To add insult to injury, railroad workers upstream triggered a massive landslide the next year. Even though quick action was taken to remedy the problem, difficult conditions made the work hazardous. Subsequently, only the minimum was done to make the obstruction passable.

It would not be until at least 1917—the next 'big' migration year when the offspring of the 1913 run returned to spawn—that the real impact of the Hells Gate incidents would be known. The results were truly disastrous. The Fraser River sockeye run of 1917 amounted to about 8 million fish as compared to 38 million in 1913.
(Lichatowich 1999:174). Barely over 600,000 of those were able to make it to the spawning grounds. Had there been an international agreement in place limiting the catch, the results of Hell's Gate would not have been so disastrous. In the next big year, only 2 million fish returned to the once-great river and the catch declined precipitously during the 1920s and 1930s, yielding only 10 percent of the pre-Hell's Gate harvest. The First Nations living above Hell's Gate who relied on the salmon for food throughout the year suffered the most from the disruptions, but the commercial fishermen were intensely impacted as well.

By 1917, Canadians and Americans were concerned that the fishery was on the verge of total collapse. In response, a commission was formed in 1918 with members representing the U.S. and Canada known as the Hazen-Redfield Commission. They recommended the creation of an international commission with both regulatory and research capacities. Again the Canadians ratified the treaty and again Washington state lobbied Congress in opposition to the treaty, effectively preventing it from being approved.

The Fraser River sockeye had no chance to recover and the big runs all but disappeared after 1917. Overfishing prevented adequate numbers of salmon from reaching the spawning grounds to build up the stocks and the population was decimated. During the 1920's, unsuccessful treaty negotiations continued, leading to tremendous frustration on the part of the Canadians. They contemplated drastic solutions to the problems, some of them distinctly spatial in nature. For example, they "even considered physically rearranging the mouth of the Fraser River—by cutting off the southern outlets—with the hope of redirecting the migration route of the fish away from American waters" (Lichatowich 1999:178).

In 1930, the incentive for Washington politicians to oppose cooperative international management was increased by a new fishing development. The American purse seine fleet had recently moved into international waters off the Strait of Juan de Fuca and they had figured out how to capture sockeye bound for the Fraser. A new
treaty—the Fraser River Convention (FRC)—was proposed and signed in 1930, but it was not ratified by the U.S. It was unpopular with American purse seiners because it would have required that the catch in international waters be split 50/50 between Canadians and Americans and would also have vested jurisdiction over international waters in the hands of an independent commission. Powerful lobbies and individuals used their influence to leave the treaty in a state of suspended animation for seven more years, once again demonstrating the detrimental role of border politics and sovereignty squabbles in attempts to conserve salmon resources.

The Fraser River Convention finally was ratified in 1937, but it took two unusual events to convince the Washington contingent that it was in their best interest to support the treaty. First, in 1934 Initiative 77 was made law by Washington voters. This voter initiative severely restricted fishing in parts of Puget Sound and made it illegal to use any fixed-fishing gear in the state’s waters. As a result, Washington fishermen saw their share of the Fraser River catch fall from 70 percent of the total to 43 percent in just one year, and by 1936 the Canadians landed 82 percent of the sockeye. This shift in favor of the Canadians made the 50/50 division of the catch proposed in the 1930 FRC much more appealing! The other event that helped to spur Washingtonians to action on the treaty was a natural variation in the sockeye’s migration route that occurred in 1936 (and also probably had a lot to do with the substantial increase in the Canadian catch that year). For unknown reasons, the salmon sometimes bypass the Strait of Juan de Fuca and instead approach the mouth of the River from the north, through Johnstone Strait. This gives Canadian fishermen a significant advantage in the fishery (see Figure 8, reproduced with the permission of the Pacific Salmon Commission).

These two factors combined to encourage support for the FRC and on August 4, 1937 both countries at last ratified the Convention. The FRC established joint responsibility for “the protection, preservation and extension of the sockeye salmon fisheries in the Fraser River system” and created the International Pacific Salmon Fisheries Commission (IPSFC), headquartered in B.C., to coordinate this work.
Figure 8: Fraser River Sockeye Migration Routes
The IPSFC was authorized to "investigate the status of the Fraser River salmon, to establish hatcheries if needed and take other measures to enhance runs. Most important, it was required to regulate the fishery on the basis of dividing the catches equally between Canadians and Americans" (Netboy 1980:253) and to split the costs of management and restoration between the two countries equally, as well (Munro and Stokes 1989).

The IPSFC began assessment and monitoring work on the Fraser and restoration activities at Hell's Gate immediately, but the treaty did not permit the regulation of the harvest until 1946 (Woodey 2000:209). For the next 40 years the IPSFC managed the stocks with some success. Greater parity in the division of the harvest was achieved, with the U.S. landing approximately 44 percent of the catch between 1946 and 1977. After 1977, the U.S. received a smaller share (25 percent) due to more of the salmon taking the northern migration route through the exclusively Canadian waters of Johnstone Strait and because of an increase in Canadian fishing outside the convention areas. United States fishermen still procured a sizable portion of the Fraser Sockeye, however, averaging nearly 2 million fish per year between the mid-1980s and the mid-1990s.

Even though the stocks began to improve, competition for the salmon increased as Japanese fishermen caught more Northwest salmon. In response, fishermen put pressure on their governments to increase harvest limits. This led to the 1952 North Pacific Convention limiting Japanese high-seas fishing followed by the 1957 Pink Salmon Protocol, which was added to the Fraser River Convention to provide for the protection of stocks that had not been included in the initial agreement.22

**International Fishery Conflicts Continue 1960-1975**

As demonstrated by the case of the pinks, the institution of the IPSFC did not end the political disputes over catch allocation between the two nations, nor did it end the downward slide of many of the salmon populations. Habitat destruction continued apace and other pressures continued to mount on the fisheries with the cumulative effect being the reduction of many runs and the disappearance of others. Competition for salmon
eventually led to the creation of the 200-mile fishery Conservation Zone (later labeled Exclusive Economic Zones or EEZs after the 1982 United Nations Convention on the Law of the Sea or UNCLOS III). The Magnuson Act established these zones of sovereignty in the U.S. in 1976. The 200 mile EEZ was claimed by Canada the following year. Although neither the U.S. nor Canada signed UNCLOS III until certain changes were made in 1994, the provisions of Article 66 were recognized as uncodified customary practices. Article 66 gave the ‘state of origin’ of anadromous fish priority harvest rights and excluded fishing for these species outside the EEZ. Adherence to this principle made sense since both Canada and the U.S. were investing heavily in the hatchery production of salmon during these years for the sole purpose of increasing the catch and each country wanted to benefit directly from the money they invested in these programs.

Apart from Fraser River conflicts, ocean trolling was another source of consternation during this period, with Canadians and Americans competing for their share of the chinook and coho harvests. Canadian and U.S. stocks of coho and chinook mix extensively along the coast, which leads to a large number of incidental interceptions of fish bound for the other country. Neither country is able to harvest the production of its own rivers without also taking fish produced in the other country. Southern B.C. fishermen used the tactic of intentionally intercepting U.S. coho and chinook to balance the U.S. catch of Fraser River pinks and sockeye.

Southeastern Alaska fisheries were and are major points of contention between the two countries and are also a source of strain between Alaska and the PNW states. Alaska is often considered by Canadian and PNW interests alike to be a rogue state—unwilling to compromise sufficiently with the other interested parties to enable acceptable fishery regimes and reduce conflict. There is a spatial reason for Alaska’s intransigence in the conflicts. Alaskan fishers have a distinct geographic advantage over their counterparts from B.C. and the PNW (a fact which all parties except the Alaskans readily acknowledge) because of the migration pattern of the majority of the region’s salmon. Most stocks that originate in southern B.C. and the PNW migrate northward as
juveniles to mature in the Gulf of Alaska. Alaskan fishermen are subsequently able to intercept large numbers of PNW chinook, transboundary salmon from the Stikine, Taku, Unuk, Alsek, Whiting and Chilkat rivers, and Canadian chinook, coho and sockeye. Alaskan stocks are considerably less vulnerable to interception. Even Canadian interceptions off the coast of northern B.C. of stocks from Alaska are substantially smaller than Alaskan interceptions (National Research Council 1996:271). The Canadians believe this imbalance has grown worse over time and that the Alaskan catch should be curtailed while the Alaskans claim that reducing interceptions is impractical due to the mixed composition of the fishery. This is an on-going and highly contentious battle in the Salmon Wars. In response to “the absence of progress on Alaska-Canada transboundary fisheries, Canada has resisted change in its southern British Columbia fisheries” (National Research Council 1996:271). By maintaining fishing pressure on the stocks from the PNW states, Canada hoped that Washington and Oregon would coerce Alaska into compromise. In other words, Canada used geopolitical tactics to try to force Alaska into compliance.

Events Leading to the Signing of the PST

“Canadians catch fish that spawn in U.S. waters and Americans catch fish that spawn in British Columbia waters. So, what is the answer to that? Is the answer to have gunboats patrolling the waters of this country (laughter) and drilling Canadian fishing boats and vice-versa? Or, do we protect habitat in both countries and then arrive at some kind of civil discourse in which we can determine how we allocate catch? Well, ostensibly, that’s the role of the Pacific Salmon Treaty” (Interview with Joe Scott, October 13, 2000).

Tensions between the two countries built up over time and became an extensive list of disagreements and conflicts, evaporating support for the Fraser River Convention. Tempers flared and U.S. and Canadian fishermen sometimes came to blows and “there were even occasional exchanges of gunfire across the bows of boats” (The Seattle Times, July 22, 1997). Canadians were growing increasingly dissatisfied with their 50 percent Fraser sockeye allocation. In their view, they were covering more than half the cost of keeping those runs productive by choosing to forego hydroelectric development on that
river system, and since the U.S. was showing no similar restraint on the Columbia and Snake Rivers, Canada should be entitled to benefits proportionate to its investment. The principle of management and harvest preeminence for anadromous fishes articulated at the UNCLOS meetings contributed to this perception.

Since the Convention only covered some of the runs exploited by both the U.S. and Canada, conflicts over other jointly used fisheries erupted. As discussed above, mutual Alaskan and Canadian interceptions in the northern areas were a continuing sore spot. Another key dispute was over the Columbia River fishery. The U.S. spent huge sums of money and many years attempting to rebuild the Columbia River fishery, devastated as it was by development, overfishing and dams. In the early 1970s, Alaskans were intercepting large numbers of fish from Oregon and Washington, which generated tension between the states. Add to that the problem of very significant Canadian troll fleet interceptions of these stocks and the stage was set for escalating trouble. Aggressive Canadian participation in that fishery prevented the states from finding a workable ‘internal solution,’ angered the Americans, and endangered the fish, but it also helped to force a change (Miller 2000:47). During the course of negotiations that would eventually lead to the Pacific Salmon Treaty, “British Columbia maintained intense pressure on the southward-bound U.S. coho and chinook stocks. As Washington and Oregon’s harvests of these species declined, particularly in the wake of the 1982-83 El Nino, Canada’s ‘fish war’ strategy succeeded in convincing the southern U.S. parties to support the proposed treaty” (Miller et. al. 2000:4). This intentional redirecting of fisheries was therefore somewhat effective, but Alaska remained uninterested in signing on to an agreement. Stocks declined rapidly and harvest allotments were severely curtailed.

“Fishermen of every region of every state and every country were screaming about the reduced harvestable numbers and the loss of their fisheries. Alaska fishermen were blamed by the Canadian and lower U.S. fishermen, Alaska pointed their fingers at high seas interception, tribal fishermen blamed the governments. The ‘Salmon War’ was on!” (Barnett 1996a:7).
The final push that brought all parties to the table was legal action (Confederated Tribes and Bands v. Baldridge [W.D. Wash. 1974]) brought by the Treaty tribes of the PNW against Alaska (Miller 2000:48). In this suit, the Tribes sought to have the 50/50 division of the harvest established by the Boldt Decision extended in order to limit the harvest of Pacific Northwest chinook by Alaskan fishermen. To avoid this legal confrontation, Alaska signed a side agreement in which the PNW tribes agreed to forego their right to bring suit over chinook allocations between the northern and southern resource users. In exchange, the tribes received equal representation, including veto power, along with Alaska and the PNW states within the U.S. delegation to the Pacific Salmon Commission to be established under the new treaty (see below). This action demonstrated the power of marginalized groups to affect large-scale ecopolitical change under the right set of conditions.

**The U.S.-Canada Pacific Salmon Interception Treaty (PST)**

In June of 1971, the U.S.-Canada Salmon Interception Negotiations had begun in an effort to resolve the conflicts over the fishery and establish a bilateral treaty aimed at securing the benefits of Pacific Salmon conservation via a cooperative management and oversight plan. After 14 years, countless frustrating hours of negotiations and numerous disagreements that sometimes brought the discussions to a halt, the two countries agreed on a treaty on December 15, 1984. Enabling legislation was approved in both countries and in 1985, The Pacific Salmon Treaty was signed in Ottawa by Prime Minister Brian Mulroney and President Ronald Reagan. The geographic area covered by the Treaty is shown in Figure 9, provided by the Canadian Consulate.

The PST is the first comprehensive agreement between Canada and the U.S. regarding Pacific Salmon.24 The Treaty has two key principles at its core. The first principle expressed in the PST (Article III) is the concept of equity. This principle follows after Article 66 of UNCLOS III in that it is based upon the premise that each country should receive benefits equivalent to the production of salmon resources originating in its rivers. The second important principle is that of conservation.
Figure 9: Area Covered Under the Pacific Salmon Treaty
The Treaty requires cooperation in the management and conservation of Pacific salmon stocks that are a source of concern in terms of interceptions. The PST further recognizes and spells out the desirability of reducing interceptions and preventing disruption of existing fisheries, as well as the importance of considering the variations in stock abundance from year to year when establishing fishing regimes.

To implement the Treaty's basic principles, the Pacific Salmon Commission (PSC) and three geographically-defined advisory panels were established. The eight member PSC is a bilaterally funded commission composed of four members representing Canada and four representing the U.S. Each country receives only one vote and both votes are necessary for a Commission decision. The Canadian federal government selects the Canadian representatives. The four presidentially-appointed U.S. commissioners include one from the federal government (non-voting), one from Alaska, one from Washington or Oregon and one representing the Treaty tribes. Since each country only receives one vote, domestic consensus among the commissioners is required. The requirement for consensus gives each delegate the ability forestall action. This arrangement has been the source of considerable conflict and difficulty in implementing the treaty since its inception for as we have seen, the PNW states, the aboriginal fishers, and fishing interests in Alaska have very different concerns related to their geography or affiliation and often do not agree.

The PSC meets annually to carry out its main function, which is to assess and review the past year's fishery statistics and to decide on necessary changes to the fishery regimes—i.e. the size and allocation of the harvests. These conservation and sharing arrangements are set for specified periods of time for a wide range of salmon stocks representing each of the 5 primary species from Alaska to Oregon and including stocks from transboundary rivers. These decisions are made with the input of the three advisory panels.25 The three advisory panels each have an equal number of Canadian and American representatives who are drawn from the fishing industry, government, and
Native American tribes (but not the Canadian First Nations, who were not party to the Treaty—a fact that has left them at a considerable disadvantage). Their job is to review fishery regimes and harvest statistic for stocks originating in the area they oversee. The format of yearly decision-making, while well intentioned in that it was supposed to make the management of the fisheries responsive to changing conditions, has been tremendously problematic in practice. If the parties are unable to reach consensus on fishing regimes, the regimes expire and decision-making for that fishery reverts to the state/provincial or federal authorities that have jurisdiction over that fishery.

AN END AND A BEGINNING

The authorization of the PST had the potential to be a major political, managerial, ecological event in the history of the NW salmon fisheries and in some ways, it was. It was the first time since before the resource was divided, fragmented and disunited by various progressive processes, such as the establishment of sovereign states, borders management jurisdictions, that real efforts were being made to cooperate and coordinate management of the salmon on a scale more closely approximating that of the resource itself. Concrete steps were being taken to address the mounting disagreements between user groups in the two countries as well as the on-going decline of stocks coastwide. The future of the Pacific salmon and the communities that depended on them seemed brighter. But as the next section of this chapter demonstrates, it was not to be. The signing of the PST, the establishment of new tribal entitlements and changes to regional fishery management councils also signified that new “institutions and boundaries (were) forming” in the Northwest (Morishima and Henry 2000:232). The seeds of the Treaty’s failure were planted from its inception.

1985 TO THE PRESENT

When the Pacific Salmon Treaty was signed, many believed that it signified the end of the Salmon Wars. The Commission began to meet annually to attempt to resolve the differences between the two countries in accordance with the goals and guidelines set out in the Treaty. The PSC did have success on a number of fronts including:
“1) the establishment of agreed harvest allocations in the transboundary rivers; 2) a re-allocation of the Fraser River pink and sockeye salmon harvest that preserved the U.S. fishery while giving Canada an increase in harvest due to stock enhancement; 3) a coho salmon conservation program, 4) a number of changes in Canadian and Alaska fishing seasons to reduce interceptions in the northern area; and 5) operation of numerous bilateral technical committees” (Huppert 1996:2).

While the value of these successes should not be overlooked, the PSC has also utterly failed to sufficiently address and resolve other issues of critical importance. One such issue is the need to rebuild struggling chinook stocks. This is a complicated problem because of the chinook’s geography. They migrate across an especially high number of fishing regions and management areas, thus regulations to conserve them have to contend with the needs and perspectives of diverse user groups. There are also significant variations in abundance of Chinook throughout the region. For example, the Columbia River chinook stocks are in such bad shape that PNW and Columbia River tribal agencies want to reduce harvest rates throughout the range of the stocks, which includes southeastern Alaska and B.C. Alaskans protested changes to their chinook fishery based on three arguments: 1) that Alaskan chinook catches are consistent with local production levels; 2) the fact that the PST does not permit disruption of an existing fishery; and 3) their belief that they should not have to pay the price for policies and developments such as large hydroelectric dams in the PNW that have depleted the salmon stocks when similar habitat disruptions have not occurred in Alaska. The Canadians, on the other hand, do not want to limit their chinook fishing unless they are compensated by a reduction in U.S. interceptions of Canadian fish in Southeast Alaska and/or the harvest of Fraser River pinks by the Washington fleets. Regional differences are thus the source of powerful discrepancies regarding harvest reductions for conservation purposes. With so many disparate and spatialized interests weighing in, it is hard to reach agreement on an acceptable and fair distribution of harvest rights and limitations.

It became apparent soon after the ratification of the Treaty that the U.S. and Canada differ in their interpretation of Treaty principles. Most notably, the Canadian and American versions of how to define and achieve “equity” and “interception balance” are
very different, and an agreed upon method for determining the value of interceptions has not yet been established. These problems have led to the inability of the PSC to do its job. Another key problem is the conflicting directives of the treaty. The admonition against disrupting existing fisheries is in direct contrast to the need to adjust harvest based on changing production conditions and the rise and fall of interceptions between the two countries. Finally, the ability of one member of the U.S. contingent to the PSC to block consensus is a huge problem as the findings discussed in Chapter 7 reveal. The interests of the southern states, Alaska and the Treaty tribes are often in conflict with one another, preventing the U.S. from speaking with one voice and allowing the concerns of one region to jeopardize the success of the Treaty. Canadian negotiators frequently complain that trying to work with the three U.S. factions is more like dealing with “three nations” than with the United States (Huppert 1996:4). This sense of dealing with three sovereign countries rather than one was expressed repeatedly in the interviews conducted for this study.

“Well, there’s a problem in terms of voting strength and the council process, the Salmon Commission process. There are really several different countries represented. One is British Columbia. Another is Alaska—another separate country for all practical purposes—as are the other states in the U.S. That weights all the decision-making in favor of the U.S., but it also means that conflicts within or between states in the U.S. paralyze the process. I don’t have any problem with weighting it towards U.S. interests in terms of the number of fish because the majority of fish do come from U.S. waters. But it shouldn’t be allowed to paralyze the process. The fights between Washington and Alaska over allocations have been serious ones and very debilitating to the PSC process” (Interview with Glen Spain, November 10, 2000).

It is a source of frustration for Americans as well as Canadians. The territorially-based assignment of commissioners to the PSC is misguided because there is often more agreement and common interest between, for example, B.C. fishermen and stakeholders in the PNW than between the interests of the four American representatives. Some system other than a place-based scheme for the selection of commissioners could prove to be less problematic and conflictual.
FIVE YEARS OF CONFLICT: 1993 TO 1998

“One of the reasons the past treaty collapsed is that there were fewer and fewer fish coming out of the Columbia that would actually survive to adult stage. And the fish in Canada were migrating and being caught in Alaska while there were fewer and fewer fish from the U.S. to make it up there to replace them. So, there was a greater and greater disparity. The other problem is [that] the fish that were replacing them were ESA listed. But, of course, Canada has no ESA and no obligation to pay any attention to our listings and was heavily targeting stocks that were in serious decline in the U.S. and as a result, we were not able to make escapement in a number of places even with zero fishing because of B.C. impacts. They did that deliberately on Coho as a political tool” (Interview with Glen Spain, November 10, 2000)

In the quote above, Glen Spain of the Pacific Coast Federation of Fishermen’s Associations illustrates some of the reasons why the PST has not worked very well. Indeed, the last eight years have proven the Pacific Salmon Treaty to be, for the most part, a managerial, ecological and political failure. The significant series of events during the five years between 1993 and 1998 related to the implementation of the Treaty bring the geopolitical basis of this failure clearly into focus. Moreover, they illustrate why new approaches, which operate outside the confines of sovereign territorial imperatives, are vital to the future of the fishery.

During the first several years that the Treaty was in effect, the PSC created fishing regimes or ‘annexes’ which lasted only a few years before they expired and had to be renegotiated. These regimes were primarily designed around setting harvest ceilings for specific species and locations. This system proved to be ineffective and detrimental to the fisheries when significant changes in abundance occurred, especially because of the tendency for the southern and northern portions of the salmon’s range to experience inverse shifts in abundance. Moreover, the parties did not agree that interception equity was achieved and the PSC’s data supported this claim showing the gulf in interceptions that favored the U.S. widening.

The Canadians were becoming impatient with trying to juggle various U.S. concerns and the inability of the U.S. representatives to reach consensus—all the while losing fish to the American fleets. Their impatience, combined with the long-standing
dispute regarding the equity provisions of the treaty, the problems related to rebuilding chinook stocks, and the other “built-in” shortcomings of the treaty, especially the regionally-based veto power of the U.S. commissioners, combined to undermine the commission process.

In 1993, the parties were unable to achieve consensus regarding several fishery regimes, which then expired. Localized authority over the fisheries in question was reinstated as outlined in Article III of the PST. In 1994, the negotiations reached an all-time low as the Canadian negotiators broke off the talks over what they perceived to be an imbalance in equity and out of a desire to conserve the fish from their waters (see Figure 10).

The dispute escalated, involving the intervention of high-level government officials including then U.S. Vice President Al Gore. Government negotiations were unsuccessful during 1994. Canada used a variety of strategies in an attempt to pressure the U.S. to return to the negotiations. They employed an “aggressive fishing strategy” whereby catch quotas of various stocks were increased to try to force the PNW parties to bring Alaska back in line, but the only outcome was a dangerously high level of harvest of certain fisheries as described by Mike Grayum of the Northwest Indian Fisheries Commission:

“Canada tried to put pressure on the United States for years. Prior to the Treaty, they did it by moving their fisheries seaward to catch the fish before they moved into U.S. waters. Then, they started putting pressure on our coho and chinook to cause us to knuckle under and give them more of their sockeye back, if you will. That’s the way they’re looking at it. So, they started heavily harvesting our coho and chinook in these seaward fisheries. We kept tellin’ ‘em this, but ultimately what happened is that they overfished their own stocks which were also suffering from many of the same kind of environmental habitat problems that our stocks are. The coho in southern British Columbia, at least . . . are in bad shape” (Interview, September 18, 2000).

Canada also instituted a transit license fee in June of 1994 which imposed a charge of $1500 CAN on all foreign vessels that wanted to fish in Canadian waters.
Figure 10: Salmon Talks Reach an All-time Low
The fee was also implemented on fishing vessels traversing the inside passage between Washington and Alaska. Nearly all ocean-going U.S. fishing vessels that fished in that region used this route. The use of such a tactic violated UNCLOS III, but technicalities prevented third parties, such as the United Nations, from intervening. Not surprisingly, this move was extremely unpopular and infuriated U.S. fishermen, politicians at all levels of government from the U.S. State Department to local officials, Native representatives and other involved parties. The U.S. responded by threatening to impose a transit tax on Canadian ships transferring oil through the Strait of Juan de Fuca. This threat proved effective. Canada lifted the transit license fee and both countries returned to the bargaining table.

In 1995, mounting concern over the fate of failing stocks of chinook and coho from the southern region led to some agreement between Canada, the Treaty tribes and the PNW states. These parties joined forces and brought suit against Alaska to force a reduction in catch of these species originating in southern waters. While the suit was temporarily successful, Alaska did not participate in any wider agreements and the truce did not last. A mediator from New Zealand, Ambassador Chris Beeby, was brought in but his proposal failed in February of 1996. New negotiators were appointed at different times, including John Fraser, Canada’s Ambassador for the Environment, in April of 1996, but to no avail.

In the summer of 1997, the Alaskans took advantage of an unusually large run of pinks and sockeye, harvesting well above the limits that would have been in place if the Treaty had been in effect. The Canadians were furious and frankly tired of Alaska’s refusal to take steps aimed at reducing the imbalance in interceptions. At last, Canadian frustration reached the boiling point. Tempers flared and angry rhetoric abounded, especially from B.C.’s fiery Premier, Glen Clark, who called American fishermen “pirates.” In a classic example of geopolitical maneuvering, he threatened to cancel the treaty with the U.S. which allowed Navy ships to use Vancouver Island’s NanOOSE Bay as a testing area, a policy that had saved the U.S. military over $2 billion dollars during the
40 in which it had been in effect. Premier Clark and the Canadian Fisheries Minister announced intentions to pursue an aggressive ‘put Canada first’ fishing strategy designed to cut U.S. access to the Fraser River runs, which were expected to be unusually large” (Miller 2000:51). Clark also sought damages to compensate for the ‘accumulated harvest imbalance’ totaling $253 million in a suit filed against Alaska, Washington, and the U.S. federal government.

It was not just Canadian officials who had lost patience, however. In July of 1997, approximately 130 B.C. salmon fishing vessels blockaded an Alaskan ferry in the Canadian port of Prince Rupert for 3 days to call attention to their grievances and to try to force a change in policy (see Chapter 1). Alaskans continued to hold fast to their position because there was no economic incentive for them to do otherwise and because they did not feel that they should reduce their catch when the level of production from Alaskan rivers was high. The Salmon Wars were raging again. Figure 11, a bumper sticker from Ketchikan, Alaska, shows that tempers were indeed running hot. This bumpersticker is also an interesting comment on the gendered image of fishing as a masculine endeavor. Even though there are a fair number of women involved in the fishery, salmon fishing is still generally thought of as a male occupation. The bumpersticker reflects this, as it is a play on words related to the saying “Real men don’t eat quiche.”

Later that summer, with the litigation of “suits and counter suits” imminent in both countries, former President of the University of British Columbia David Strangway and former U.S. Environmental Protection Agency Administrator William Ruckelshaus were appointed by their respective federal governments to try to negotiate an acceptable course of action to deal with the increasingly tense situation. Their 1998 report recommended that a two-year interim agreement be adopted by the parties during which a comprehensive review of the treaty and the Commission would be undertaken. They further suggested that the two sides needed to compromise more, that the U.S. would need to agree to strike a better balance of interceptions (i.e. more fish to Canada), and that Canada would have to accept that the balance would not be strictly 50/50.
REAL FISHERMEN DON'T HAVE TO PICK ON FERRIES

Figure 11: Alaskan Response to Blockade
THE 1999 AGREEMENT

The outcome of the two years of investigation into ways to make the PSC more effective was the signing of an Amendment to the PST in June of 1999. There are two major distinctive features to the new Agreement. The first "represents a dramatic break from the previous approach. Rather than short-lived, ceiling-based regimes whose frequent renegotiation provided ample opportunity for disagreement and brinksmanship, the new Agreement establishes a long-term commitment to define harvest shares as a function of the abundance of each salmon species in the areas covered by the Treaty" (Miller 2000: 54-55). These are 10 (chinook) and 12 (coho) year agreements that establish shares of the catch on a percentage basis so that more fish can be harvested in years of abundance and the catch is automatically reduced when stock populations are depressed. Initial escapement objectives were established and allowable catch levels will evolve based on information provided by special committees regarding whether those objectives are being met.29

Most concerned parties agree that this is a better solution than the yearly re-making of fishery regimes, but the jury is still out on whether this form of management will enhance sustainability and cooperation. Some Canadian observers are wary of the long-term nature of the new Agreement, fearing that they have become locked into an unfavorable arrangement. Canadian negotiators lobbied for a shorter commitment but they were unsuccessful. Some Canadians feel strongly that their concerns have not been adequately addressed, particularly concerning the issue of equity, which sets the stage for future problems upon the expiration of the terms of this Agreement. There is also the additional scientific issue of generating abundance estimates that are "accurate and timely." Failure to do so will be an invitation to conflict and considering the uncertain nature of the such projections, the potential for future disagreement is high.

The second new feature of this Agreement is the creation of two endowment funds.30 Endowment monies will be used to support to habitat restoration, scientific research projects, and efforts to enhance wild stock production. The North-South Fund,
as it is being called, is short for the Northern Boundary and Transboundary Rivers Restoration and Enhancement Fund (Northern Fund) and the Southern Boundary Restoration and Enhancement Fund (Southern Fund). The two funds will be supported by the annual earnings from investments and will be cooperatively managed by representatives appointed to committees by the Canadian and U.S. federal governments. Over the course of a four year period, the U.S. is contributing all of the initial monetary support for the project, but Canada, the U.S. or even a third party (if the parties agree) may make contributions to the fund in the future. It appears that the U.S. is shouldering the cost for this program initially as a form of redress for past interception imbalances, even though the initial $75 million for the Northern Fund and the $65 million provided for the Southern Fund represents a total that falls far short of the accumulated imbalance claimed by Canada. It also seems likely that the establishment of the Northern Fund is intended as an enticement for Alaskan cooperation since benefits will flow directly to enhancement and research projects in that state (O’Neil, Vancouver Sun, June 5, 1999).31

In addition to the North-South Fund, the Treaty signatories have articulated their agreement to protect spawning habitat and have called for the PSC to provide annual updates on factors other than harvest that affect the stocks covered by the Treaty. The new Agreement also creates a bilateral Committee on Scientific Cooperation (CSC) as part of a more general commitment to improving transboundary cooperation in the areas of data exchange and construction of assessment models that utilize common measurement systems and formats.

The creation of the North-South Fund and the CSC are important in that they signify a greater appreciation for the need to cooperate more actively on issues other than fishing regimes and with less emphasis on jurisdictional prerogatives. Commentary at a session that dealt with the salmon problem that I chaired at the October 2000 conference entitled Rethinking the Line: The Canada-U.S. Border, strongly indicated that the emphasis on fishing and fishery regimes, while important, has too often dwarfed the issue
of habitat preservation and restoration in international debates and agreements. According to Jim Heffernan of the Columbia River Intertribal Fish Commission:

"To provide sustainable fisheries in the ocean and in river, we really need to address the underlying problems effecting production. And that's going to be coming back to conserving available habitat and restoring other habitat, and reforming hatchery programs. You've got to deal with the effects of the hydropower system. . . . We've really got to focus on things limiting production and productivity" (Interview with Jim Heffernan, October 30, 2000).

The Agreement is thus a step in the right direction, but its success will depend on the continued efforts and goodwill of the parties, which considering the concerns already being expressed by the Canadians, is questionable at best.

Of special interest here are the spatial implications of the Agreement. Bill Green, the Executive Director of the Canadian Columbia River Inter-Tribal Fish Commission commented that matters of habitat conservation had in the past been the primary problem related to sovereignty in that neither country wanted the other "interfering in our management of fish habitat. . . . Given that fundamental jurisdictional sticking point, I think the progress that they've made in the last Treaty arrangements is small but significant" (Interview, December 21, 2000). The establishment of the North-South Fund indicates that the governments of the two countries have begun to recognize the need to spatially integrate scientific data as well as fishery and habitat management in a more comprehensive and intensive way—a way that acknowledges the salmon's natural geography. Moreover, it seems likely that the cooperative activities supported by the North-South Fund and those carried out by the CSC will foster greater managerial integration throughout the salmon's range. This would be a significant development in light of the diverse problems caused by the continuous processes of territorialization and reterritorialization, division and fragmentation occurring in relationship to the fishery over the last 200 years. Patrick Higgins of the Canadian Consulate General spoke excitedly about the potential implications of the North-South Fund:

"The very way that they're set up and what they're called is emblematic of the changes we're talking about. . . . It's actual U.S. federal legislation in the context of an international treaty between Canada and the U.S. which requires transboundary
scientific cooperation and cooperation on habitat projects on the salmon issue. It's big!” (Interview July 14, 2000).

Generally speaking, Group representatives view this most recent amendment to the PST in a favorable light. The change to an abundance-based form of management with long-term regimes replacing yearly negotiation and renegotiation of catch size, timing and allocation are believed by most commentators to be steps in the right direction. Beyond the issue of habitat, the de-emphasizing of jurisdictional prerogatives in the management and scientific evaluation of salmon habitats has been widely applauded. “I do think that it is close to a fairly major readjustment of getting to actually looking at the fish the way they really live rather than with a lot of random lines drawn . . .” (Interview with Patrick Higgins, July 14, 2000)

Any step that begins to erase the ‘random lines’ that divide the salmon’s range into a fragmented and tangled web of jurisdictions can only be of benefit to the management and health of the resource. Another possible benefit of the new Treaty in the eyes of NGOs is its potential usefulness as an instrument of legal coercion. According to Jim Heffernan,

“NRDC went to the Commission on Environmental Cooperation of NAFTA and went to the PSC in August of 2000 and said, ‘You have this Salmon Habitat Restoration Agreement which says that both parties agree to enforce their laws or implement other laws to protect the salmon resource.’ So, they went to the U.S. delegation and said, ‘We want you to call Canada on this one. We want you to talk to the White House and other congressional leaders. . . . They’re breaching the treaty and we want you to call them on it.’ So some people see that there are more teeth in the Salmon Treaty Agreement than perhaps we thought we were putting in” (Interview, October 30, 2000).

Joe Scott agreed and expressed some optimism about this aspect of the new Agreement when he stated that “We hope that the Pacific Salmon Treaty is going to provide a mechanism for us to help force habitat protection changes, especially in Canada” (Interview with Joe Scott, October 13, 2000).

The credit for the institution of these changes can be divided between numerous sources. The continuing loss of fish and habitat must be placed at the top of the list,
followed closely by the determination of politicians and managers to try to find more workable solutions. It cannot be denied, however, that the impetus for that determination comes in large measure from the coercion and lobbying efforts of the fishing industry and affiliated interests. But NGOs, indigenous groups and other organizations that have been agitating and litigating for change must also receive significant credit. Referring to environmental nongovernmental organizations, Glen Spain observed the trend towards greater involvement in salmon issues. “More and more of them are getting into the fisheries management end of things which is probably good in the long run” (Interview, November 10, 2000). Patrick Higgins believes that the influence of indigenous peoples in Canada may be one of the factors most likely to create change in salmon policies:

“The bigger effect than any of those things, probably, is gonna be this changing relationship and developing new relationships with First Nations. . . . You can bet that the importance of protecting First Nations rights to fishing in the province is going to be a major factor in how everybody has to deal with it” (Interview with Patrick Higgins, July 14, 2000)

Even while the amended Treaty appears to be a positive step inspired in part by the work of indigenous groups and NGOs, it is not without its problems. Firstly, several commentators specifically mentioned that it’s too early to tell if the June 1999 Agreement will be successful in the long run. It is possible that the Agreement may look better on paper than it works in the field. Indeed, numerous representatives including Joe Scott expressed doubt about the circumstances surrounding the signing of the agreement. “I have a suspicion that the U.S. has probably bullied Canada into a good deal for the U.S. I’m not entirely sure about that, but that’s my sense” (Interview with Joe Scott, October 13, 2000).

The question of allocation remains “politically divisive and very difficult to deal with” (Interview with Glen Spain, November 10, 2000). Moreover, not all representatives agree that the new Agreement signifies a change in approach or focus. “That treaty seems to focus on allocation and harvest. It doesn’t seem to me to be focused upon joint preservation or conservation or enhancement. [It’s] really just a matter of divvying up a transborder resource. I think that’s the wrong way to look at it”
(Interview with Daniel Burns, November 6, 2000). As the following statements reveal, others agree that fundamental problems remain with the Treaty as it is currently constructed and do not believe that issues of habitat are really being confronted wholeheartedly.

"We have to talk about protecting habitat before we talk about how much fish everybody catches! That to me is the very weakness of any mechanism like the PST. I liken it to the way that western medicine treats disease here. We treat symptoms and not underlying causes. Not only that, we're cutting up a pie that a lot of other critters have to eat. The demise of the salmon is going to have a cascading affect—a trophic cascade. Its not only a human issue, it's an ecosystem issue. So, y'know—the Pacific Salmon Treaty, yeah, it's great because two countries are talking about an issue that's pretty important. But it's a Band-Aid. It really is a Band-Aid. Even if it did address underlying causes, there . . . has to be enforcement and there has to be government accountability to citizens. . . . There is no such mechanism internationally. We need that. There has to be a strong legal framework because companies are not going to voluntarily do these things and neither are governments" (Interview with Joe Scott, October 13, 2000).

In addition to extending the focus on habitat even further, Daniel Burns suggested that "we need to have transborder policies, scientific policies, that we each adhere to" without placing commercial interests ahead of these or "using fish as a bargaining position to get a little better allocation. We need to . . . agree to adhere to certain principles—a charter of rights for salmon. And y'know, those principles have to flow right down either side of the border" (Interview, November 6, 2000). It is difficult to establish principles of this type when the salmon compete with so many other interests in the region—agricultural, industrial, etc.—as they have for over 200 years. Convincing citizens on both sides of the border that their fortunes are intertwined and that the welfare of salmon should, at least at times, take precedence over other concerns remains extremely challenging.

Thus, there are still many complicated problems—scientific, managerial, environmental, political, financial and social—which will need to be overcome if lasting agreements are to be reached which are considered fair by all parties and which adequately provide for the protection and enhancement of Pacific salmon stocks. In
addition to those discussed above, there are the on-going issues concerning the language, interpretation and implementation of the Treaty, the lack of NGO and First Nations representation in the face of increasing pressure to include their in-put, and the need to take into account changing societal attitudes (Morishima and Henry 2000:229).

There are problems that remain to be solved that are distinctively grounded in discourses of sovereign territoriality or must be approached with renewed attention to scale and spatiality if they are to be remedied. They include: 1) the failure to legitimize bilateral state-to-province arrangements when useful; 2) the growth of the salmon aquaculture industry in B.C. and elsewhere around the world, particularly New Zealand, Chile and Norway; 3) increased global scale competition for market share; 4) the continuing decline of salmon populations and habitats; 5) discrepancies between U.S. and Canadian conservation measures, particularly in regards to Endangered Species legislation, which raise numerous legal and policy issues; and 6) failure to recognize the necessity of cooperation on transboundary Columbia River fishery issues. Regarding this last point, Bill Green of CCRITFC very plainly stated that “The treaty is absolutely missing a whole piece in terms of the transboundary nature of the Columbia system and there’s absolutely no attention given to the need for transboundary cooperation on the Columbia within the Pacific Salmon Treaty” (Interview, December 21, 2000).

For these reasons, Bud Graham from the B.C. Ministry of Agriculture, Food and Fisheries (and former DFO official and PSC Commissioner), thinks the “treaty is fundamentally in trouble” (Statement made at Rethinking the Line Conference, October 24, 2000). He further believes that the June 1999 Amendment to the PST is a “bad Agreement” and that it “won’t work” (October 24, 2000). It definitely remains a possibility that the parties could return to where they were before, “…where the two states and their representatives found disharmony to be in their national interest” (McDorman 1998:112).
On the Threshold of a New Territorial Moment?

The history of the salmon crisis reveals the complexity of the problem. Issues of race and power, economics and nationalism, technology and scientific knowledge have all contributed to its development. History also demonstrates the profound affect that sovereign territorial claims can have on the management of this transboundary resource. The geographies of political economy and salmon ecology have both been enframed by the powerful discourses of sovereign space, leading to the development and entrenchment of a fragmenting and destructive spatial mismatch between structures of salmon conservation and management and the resource itself. The failure of conservation and management efforts to be pitched at the appropriate scale due to territorial claims is one of the primary reasons for the existence of the salmon problem and its development into a full-fledged crisis.

Recent positive steps to deal with the salmon crisis that have been taken in the realm of government, particularly in relationship to the PST and salmon ESA listings in the U.S., should be acknowledged for the progress that they represent. However, there is growing public discontent with the ineffectiveness of public policy and agreements aimed at protecting the salmon resource. The salmon continue their slide into extinction, and with their demise comes a host of negative consequences—loss of sense of place, diminished environmental quality, economic hardship, etc. Already the insufficiencies of salmon management have created “major reductions in economic opportunity for fishers” who have “without a doubt suffered possibly irreparable injury from the status of salmon and the management prescriptions to deal with it” (National Research Council 1996:274). In fact, in the PNW the decline in salmon-related income is more than for any other major natural resource industry.

As a result, the salmon crisis has raised important issues of social policy. Politicians and their constituents, managers and user groups have been asking difficult questions about salmon conservation, financial priorities and social and environmental values. These questions came strongly to the fore during the Winter of 2001. A regional water and energy shortage threatened salmon redds and migrations, pitting the interests of
irrigators and hydroelectric energy producers against those of the salmon and their proponents. Environmental groups and other NGOs, taxpayers and outdoor enthusiasts throughout the region were faced with tough questions. Should the needs of electricity and water consumers come before the preservation of salmon habitat? What amount of expenditure is justified for the continuation and subsidization (through hatcheries) of the inefficient wild fisheries given the potential of aquaculture operations to provide low-priced fresh fish year round (Morishima and Henry 2000:233)? In many cases, the interests of salmon and stakeholders directly impacted by the fate of the salmon are finding themselves towards the bottom of the priority list. This is forcing a growing awareness among stakeholders and user groups that, in general, “international environmental law regimes are only as advanced as the depletion of the resource” and that “[c]ooperation is quicker to come once it is too late” (Barnett 1996b:7). In response, NGOs representing environmentalists, anglers, small-scale family commercial fishing operations and marginalized user groups including First Nations and Native Americans are taking more into their own hands in an effort to achieve real progress on salmon preservation and habitat conservation region-wide. Denied a seat at the bargaining table, these disenfranchised groups are stepping-up their efforts to secure a future for the wild salmon through domestic and, most significantly, transborder extra-governmental actions while there is still a chance to preserve a remnant of the once-great salmon system.

Transborder action (as well as increased conservation activity at the local and watershed scales) is deterritorializing and reterritorializing the human-salmon nexus in the Northwest yet again. The spatial mismatch between salmon geographies and human geographies is being recognized and addressed in new, often cooperative ways that challenge the borders, boundaries and associated institutions that fragment the salmon’s natural spatiality. The transterritorial work of concerned groups, the geopolitical challenges they face and the implications thereof are the subject of the chapters that follow.
Notes to Chapter 5

1 Dams were also constructed in B.C. and Alaska, but in significantly smaller numbers and with fewer deleterious effects, mostly due to their location.

2 Conflicts over fishing rights based on social divisions and distinctions such as race and type of fishing gear used continued as well. Other pressures heightened the intensity of the salmon problem. During the early part of the century, sport anglers began to clamor for more access to the beleaguered salmon. More significantly, as population and development expanded, particularly in more southern areas, demand for fish increased, habitat was disrupted and fishery conditions worsened as a result.

3 By 1936, there were more than 375 trollers operating off the coast Oregon near the Columbia alone. By 1950, commercial trollers off coastal Oregon numbered 500 and sport trolling vessels were becoming an increasingly common sight. In that year, ocean fishers landed approximately 260,000 chinook and coho. By 1957 that figure had climbed to over one million fish.

4 Americans and Canadians were also not the only fishers interested in landing Northwest Salmon. Japanese fishermen began exploring offshore fishing in the Bering Sea in the 1930s in response to limits placed on fishing off Kamchatka Peninsula by Russian authorities, but their efforts were curtailed by the onset of WWII. After the war, the Japanese fleet again began to fish for salmon and concerns in Canada and the U.S. led to the 1952 International Convention for the High Seas Fishery of the North Pacific. Based on the proceedings of this convention, Japan agreed to abstain from fishing east of 175 degrees West longitude to keep its catch of North American salmon to a minimum. This abstention line held until the U.S. declared exclusive jurisdiction over a 200 mile fishery management zone under the Magnuson Fishery Conservation and Management Act of 1976. The U.S., Canada, Japan and the Soviet Union continued to remake agreements over fishing in the North Pacific, with the primary effect being the gradual displacement of Japanese fishing vessels. Japan ceased all high-seas salmon fishing in 1992 and also joined the global moratorium on large-scale drift nets pursuant to a UN resolution passed on this issue that year. The end of Japanese fishing had little effect on PNW fisheries in terms of conservation, but it did remove one element of discord from the tangled web of management.

5 Washington fishermen made very effective use of large traps to catch Fraser River sockeye and used Lummi Indian knowledge to do so. They made a habit of placing their traps right in front of Lummi reef nets, thus borrowing their knowledge of sockeye migration routes and simultaneously blocking their access to the fish. Americans canned over 1.1 million cases of Fraser River sockeye compared to just under 929,000 canned by Canadians in 1901. Overall, Americans landed approximately 60% of the Fraser sockeye until 1935. That Canadians were disturbed by these figures is reflected in the remarks of the Commission for Fisheries of British Columbia as early as 1902 when he stated that: "Unfortunately, there is a divided jurisdiction on the fishing grounds of the Fraser River. The American fishing grounds on Puget Sound must be considered part of the Fraser River district, as the sockeye captured there were bred in and are endeavoring to return to that river. This divided authority prevents, at least for the present time, the making of suitable protective laws which justly affect the fishery interests on both sides of the lines" (National Research Council 1996:266).

6 This survey happened when it did for several reasons. During this period, we begin to see the shift away from reliance on primary products and the growth of industrialization in the area. This caused developers and government agencies to look towards harnessing the electrical generating potential of the rivers to supply the factories with power. The expanding population, many of whom were farmers who had come to take advantage of the opportunities available in the PNW when they were displaced by the Dust Bowl, wanted protection from the frequent and heavy floods found in many areas and also wanted more reliable irrigation supplies. Additionally, the Great Depression gave President Roosevelt the impetus to start large public works projects to provide jobs for the legions of unemployed Americans. The burden of the economic troubles of the country was to be distributed more evenly across the country, but the salmon were ultimately stuck paying the highest price).
7 Rock Island Dam was the first to be completed on the upper Columbia mainstem. Bonneville spanned the Columbia in 1938 and its fishways were labeled a success, with 10-15% adult salmon mortality (under) estimated as a consequence of the dam. This gave dam builders confidence and the green light for rapid construction of high, large-volume dams in the PNW.

8 Dam building also provided a form of protection for the hatchery system. Dams (and economic development) shielded artificial propagation operations from scrutiny and the consequences of scientific evaluation because their existence precluded the possibility of relying on the regions natural system of production as a matter of policy. Thus, a symbiotic relationship between development and the hatchery system was put into place—as salmon spawning areas were destroyed by dams or other economic developments and natural reproduction dwindled, hatcheries became the only answer that would allow for continued development. The proliferation of hatcheries was justified as essential so that the public could have their development and their salmon, too.

9 This was due to local fishery experts pointing to the negative results seen south of the border. It was a persuasive argument, but pressure from the Canadian power industry did win some battles. Large dams used for hydroelectric power generation with a normal capacity of more than one million acre-feet of water only number 6 in all of B.C. as of 1998 compared with 22 in the PNW and zero of this capacity in Alaska.

10 The degree of dependence on the hatchery system to supplement declining runs also varied geographically and thus had spatialized effects. Reliance on the hatchery system continued unabated in the PNW, but after studies indicated that the system didn’t work and was too expensive to continue, both Alaska (1936) and B.C. (1937) closed the doors on their hatcheries in the mid-1930s (a choice ostensibly not available to PNW managers due to the existence of dams as explained above). While this was a temporary end to reliance on artificial propagation in both cases, it forced regulators to search for alternative management options.

11 Alaska’s salmon industry exploded in the first part of the century, but even it steadily tapered off after WWII. Average landings in the 1930s were in the 92.5 million range and by the 1960s, that figure had fallen to 51 million. The oil boom replaced fish and fishing as the mainstays of the Alaskan economy in the 1970s.

12 The scenarios that developed in the PNW differ from those in Alaska, and what has happened thus far in the states has been quite different from what has occurred in the Canadian context.

13 This came after State Attorney General Slade Gorton had waged a bitter, divisive and drawn out battle against Native fishing. He brought several cases against tribes of the Columbia River and Puget sound during the 1960s and early 1970s, claiming that treaties had created Native “supercitizens” who had more rights than they were entitled to have. His tactics ended up backfiring on him.

14 There are examples of racially-biased and culturally-demeaning assessments of the legal debate, including in academic literature. For example, Anthony Netboy places blame squarely on the shoulders of Native people for the ‘strife’ and ‘chaos’ surrounding fishery allocation issues, claiming that “Indians (are) benefiting from the generosity of the courts” at the expense of white fishermen, the health of the resource, and the political-legal-managerial peace of the PNW. Netboy quotes one official to make his point: ‘The more the Indians are given the more they want.’ The sense of conservation which was inherent in their ancestors before the white man came seems to have vanished. They appear to be as greedy as the non-Indian fishermen. . .’ (Netboy 1980:247-248)

15 This is true on both sides of the border. According to Sharon Chow of the Sierra Club of B.C., “There [are] huge conflicts over First Nations Fisheries. It’s, um, [non-Native] fishermen hate them” (Interview, September 11, 2000).

16 As a result of many years of political pressure applied by the Alaska Federation of Natives, Congress approved the bill that gave every U.S. citizen of at least one quarter Aleut, Eskimo or Alaskan Indian heritage entitlement to a share in the settlement.

17 In their attempt to conserve salmon, B.C. agencies have recognized the need to reduce the commercial fishing fleet, which is heavily overcapitalized. While all parties agree that as much as a 50 percent
reduction is in order, the programs that have been tried have had little effect and there is no agreement regarding how to achieve this goal. In lieu of fleet reductions, the federal government in 1996 initiated a new spatial arrangement for the licensing of commercial coastal fisheries. In the past, all of coastal B.C. was managed as a single license area that led to major rushes by fishermen using a variety of gear types to any area that had a commercial opening. The result was shorter fishing times, less money for everyone, and greater difficulty in stock-specific management. The 1996 initiative divided the coast into smaller areas, each with specific gear areas. The success of this strategy is still under review.

18 There are, however, some promising new pieces of legislation in the form of the Environmental Review Process, the Forest Renewal B.C. initiative, and The Forest Practices Code (the latter of which was just instituted in the late 1990s). It is too early to gage the full potential or success of these initiatives.

19 Some of those who live on the coast have been (marginally) involved in commercial gillnet and seine fishing since the early part of the 20th century while communities located on the rivers have fished for subsistence and ceremonial purposes on communal sites with gaffs, gillnets and dipnets since the right to use traps and weirs was denied in the 19th century. The in-river fishers have always claimed the right to participate in the commercial fishery and many have done so in defiance of the government's refusal to acknowledge that right.

20 It is relevant to note here that in the course of this discussion Mr. Fortiere went to great lengths to explain the nature of the territory mentioned here. His comments confirmed the information regarding the differences between indigenous and colonial versions of territoriality presented in Chapter 4. He simultaneously used the discursive language of sovereign territory when discussing areas to which First Nations lay claim—an approach that is commonly taken up by indigenous groups concerned with regaining or maintaining their rights even if this is not the language that best describes their view of the issue.

21 In that year, the biggest commercial catch in the history of the Fraser, Canadians canned 10 million sockeye and Americans canned 22 million. Approximately 6 million salmon eluded capture (though different estimates exist—both higher and lower), but then they were confronted with Hell's Gate. Some salmon got through when flow conditions were more favorable, but millions of dead sockeye littered the banks of the Fraser below the obstruction.

22 Fraser River Pinks were not initially included because they were not as commercially in demand and because they mixed with Puget Sound pinks. A scenario similar to the one described above regarding the sockeye took place—U.S. fishermen gradually increasing their share of the harvest up to 70 percent, competitive fishing by Canadians at the entrance to the Strait of Juan de Fuca leading to the gradual reduction of the U.S. catch, and the eventual passage of the Protocol when the U.S. found such a move to be in its best interest. Since the addition of the Protocol, the U.S. fleet has landed about 30 percent of the Fraser pink catch or an average of 2.1 million fish.

23 The ocean trolling fisheries are similar to the high seas fisheries in terms of the detrimental ecological effects of catching immature fish and causing mortality among sublegal fish that are caught and released.

24 Under the treaty each nation agrees to: 1) develop, provide and review a wide variety of technical reports and statistical compilations necessary for successful management; 2) manage its fisheries in accordance with the principles and goals of the treaty and the decisions of the PSC; 3) refrain from initiating interception fisheries and from redirecting fisheries in a manner that intentionally increases interceptions without the other country's approval; 4) cooperatively undertake management and research on stocks of common concern; and 5) coordinate enhancement measures. The treaty was also specified that it did not modify any existing Indian treaty right or other federal law (Canadian Consulate Handout 1997).

25 The three panels are as follows: 1) the northern panel which deals with fisheries from north of Cape Caution in central B.C. to Cape Sucking, Alaska, including the transboundary river systems; 2) the southern panel which addresses issues relevant to fisheries from southern B.C. (south of Cape Caution) and the PNW, excluding the fisheries allocated to the Fraser River panel; and 3) the Fraser panel which supplanted the IPSFC on January 1st, 1986 and manages the pink and sockeye fisheries for both countries in Canadian waters near the Fraser, as well as outer Puget Sound and the Strait of Juan de Fuca (National
Research Council 1996:259). The Fraser River panel differs from the others in that it has the capacity to manage the catch in-season and such decisions are made in consultation with user groups and management agencies from both nations with the advice of the Fraser River Panel Technical Committee. The Panel uses catch, escapement and significant biological data to support its decisions with the objectives being the sufficient escapement of all stocks or stock groups as decided by Canadian authorities, the equitable international division of the catch, and the appropriate allocation of the harvest among user groups in each country (Woodey 2000:210).

26 "Each fishing fleet is a local political constituency with a local fishery management agency. Therefore, protection of local economic interests competes with fish stock conservation in the policy debate" (Huppert 1996:2).

27 The method of using ceilings to balance interceptions was chosen for its apparent value for meeting the requirements of the Treaty. It allowed the parties to avoid disrupting existing fisheries, for the nation of origin to receive benefit for their conservation investment and it appeared to reconcile conflicting treaty goals.

28 In particular, Canadian fishermen anticipated that they would be permitted to harvest Washington and Oregon coho and chinook in numbers equivalent to the U.S. catch of Fraser River sockeye. While this was the case for the first few years, declines in the abundance of the Coho and chinook stocks related to changing ocean conditions (interdecadal oscillation) and other factors created an imbalance (Miller et al. 2000:6). After a period of poor catch numbers in the 1970s and 1980s, Alaskan salmon production increased dramatically leading to successive record harvests for 1993 through 1995 while southern B.C. and PNW stocks were declining rapidly. The Alaskans, wanting to take full advantage of this abundance, fished aggressively, often taking salmon from B.C. rivers in mixed fisheries and claiming that it could not be avoided.

29 Fishery regimes are also distinguished and managed differently based on the extent of their reliance on either strong or weak stocks. Healthy stocks are designated as abundance-based management fisheries (AABM) and depressed stocks are classified as individual stock-based management fisheries (ISBM). The Agreement goes on to chart how the Annual Allowable Harvests (AAH) of stocks found in Southeastern Alaska and Northern B.C. will be calculated and divided, and includes mechanisms for adjusting harvest levels to achieve equity.

30 Patrick Higgins of the Canadian Consultation explained the North-South Fund to me this way: "There's two funds, signed off on as part of the new agreement under the Pacific Salmon Treaty, that are jointly managed by the U.S. and Canada and primarily, almost entirely, funded by the U.S! It's 40 million divided between these two funds and it is money that goes into a trust fund and the interest earned is what gets spent. There are two panels established, two joint panels, with 3 U.S. and 3 Canadian reps on each panel. The U.S. and Canadian panelists make decisions about managing the funds and about how the money gets spent jointly. Funds are physically managed and housed by the Pacific Salmon Commission in Vancouver. So, right there, you have a very unusual transboundary financial and management arrangement that already is a complete change from where we had been. What the money expressly is for, by which I mean this is in the legislation, is for enhanced scientific cooperation and funding transboundary and other cooperative habitat projects for the benefit of the transboundary fisheries. . . . So, that's a fairly new thing and it's on a large enough scale that it could be significant. . . . This is U.S. funds that are in many cases gonna be—on certain projects it'll be 100% spent in Canadian territory. But the whole point, obviously, to finish the thought, is to benefit fish that everybody shares although they're caught in some cases by entirely U.S. fishermen" (Interview, July 14, 2000)

31 The North-South Fund represents a departure from Canadian unwillingness to accept monetary "side-payments" as a way to redress inequity. In the past, the Canadians were not interested in swapping anything but fish for fish in order to effect a fair balance of fishery benefits. The North-South Fund thus signals the possibility that financial side-payments may have greater potential applications in the future and such arrangements are being explored. Side-payment agreements that compensate effected user groups
have been implemented in other venues. For example, the North Atlantic Salmon Fund (NASF) has used private monies to reduce the commercial ocean catch of Atlantic salmon by organizing the buyout of operations based in Iceland, The Faroes, Greenland and Iceland (Miller et al. 2000:13). Similarly, it might be possible for environmental, hydropower, development or other interests in the Northwest to provide capital through the North-South Fund to compensate harvesters for reducing their catch.

32 To reiterate, I am labeling their work “transterritorial” rather than “international” or some other term to emphasize the ways in which their efforts exceed the limits of sovereign boundaries, jurisdictions and geographically-based institutions. They are reaching across space to cooperatively reshape and reform salmon conservation efforts and in so doing, they are beginning to reunite a disjointed and divided environment.
CHAPTER 6: CROSS-BORDER APPROACHES TO THE CONSERVATION AND MANAGEMENT OF SALMON

Introduction

In this chapter, I focus on describing and analyzing the cross-border activities of the research Groups. Those activities are assessed for their potential to reterritorialize salmon geographies by creating new alliances, networks, and structures of transborder environmental governance on the Northwest coast. I focus my attention on any cross-border action that defies sovereign space and reworks the spatial mismatch or seems likely to do so in the future.

This work relates directly to the first of the three primary research goals of this project outlined in Chapter 1—"to empirically examine transboundary efforts being made by selected, primarily non-governmental organizations in Canada and the U.S. which are aimed at facilitating the more successful management and conservation of wild salmon and their habitats." In my examination of some of the successes in this area, evidence of stakeholder organizations influencing public policy is revealed. Therefore, the second objective of this research regarding the affect of cross-border work on domestic and transnational governance processes is also addressed.

My discussion of the specific transborder activities of the Groups is followed by an analysis of those things that are allowing or encouraging such work in the current moment—political or legal agreements, technological advances, increased understanding of scientific issues and so on. Highlighting those things that permit or promote cross-border cooperation is important both for policy-makers and for NGOs confronting transborder issues. It makes clear those areas that should receive energy, attention, or funding to generate more successful cross-border work. I conclude the chapter by looking at the trajectory of cross-border governance.
Transborder Organizing and Theories of Territory and Sovereignty

In the previous two chapters, I traced the historical geography of the salmon problem in order to illustrate the enframing effects of sovereignty discourses and the negative environmental consequences of processes of territorialization. The ways in which Agnew’s territorial trap (1994)—the rhetoric, structures and institutions that naturalize borders and discreet political units called states—has contributed to the creation of the salmon problem were outlined. The territorality of the sovereign state has been the guiding force in shaping the spatial character of salmon management and conservation. The strength of this discourse has made it challenging to imagine, let alone implement, initiatives and programs that transcend sovereign borders in order to more effectively conserve and manage the resource.

In this chapter, however, I describe examples of action across borders that defy the rules of sovereign space and demonstrate areas of slippage in the discourse of territorially-based resource control. These ventures are a clear expression of NGOs and other groups beginning to “think outside the box” of territoriality—moving beyond the territorial trap. Some of the important transborder work that is described in this chapter represents a departure from territoriality in environmental politics in that it reflects the desire to implement strategies “to affect, influence, or control resources” (Sack 1986:1) that do not rely on controlling area. Discourses of territorial sovereignty are not simply being unmade and then re-inscribed in a new form as has been the pattern of the past relative to the salmon. Instead, territorality is, in some small measure, being unbundled and overwritten by transborder initiatives.

While these instances of transterritorial environmental governance are significant, they are still the exception to the rule. Territoriality will, as my research shows, continue to be a primary means of controlling people, activities or resources well into the near future. Indeed, in Chapter 7, it becomes clear that borders and the sovereign territorial states they signify are here to stay, at least for now. I believe, as do Agnew (1994) and O’Tuathail (1998), that we must move beyond the simplistic debate between the inevitable disappearance or the increasing relevance of states and borders. Neither
proposition is adequate for confronting emerging ecological interdependencies or trends in environmental politics. This reliance on outmoded models is a source of tension and conflict in many venues. The salmon problem is illustrative of this fact. Scholars must now ask a different set of questions about the changing role and character of sovereign states, borders and territoriality as political organizing structures.

Experimenting with transborder governance is not entirely new in environmental politics, but it appears to be gaining momentum in relationship to the salmon. There are numerous reasons that are introduced in this chapter to explain why this move may be happening. A discussion of the factors suggested by interview subjects that contribute to cross-border efforts is taken up in the second part of this chapter. They include such things as advances in ecological thinking, environmental philosophy, and scientific knowledge, the effects of the North American Free Trade Agreement, and technological improvements that aid in the dissemination of information. These and other contextual and historical changes that have helped to move transborder organizing forward are discussed in the body and conclusion of this chapter.

**Cross-border Activities**

In the pages which follow, transboundary activities regarding the salmon are introduced by type, with special attention given to the most innovative and far-reaching initiatives—those which represent the most significant renegotiation of borders, sovereignty and territorial control. When reading the description of transborder activities contained within this chapter, it may be helpful to refer to Appendix A. Appendix A organizes the Groups and representatives referenced throughout the text geographically and categorically (environmental, governmental etc.) and includes an alphabetical list of representatives. For a more detailed description of each Group, please refer to Appendix D which provides detailed descriptive information on each Group including mission statements, scope of operations, type and extent of linkages to the state (especially through funding and political links) and so on.
I identified ten types of cross-border action on the salmon problem in the interviews. There is a degree of overlap between some types of action thus when necessary, I made a subjective decision as to how to label a particular activity. The continuum of different types of transborder work has been further organized into two basic categories. The first category is ‘Information and Administration’ and includes the most common forms of cooperation—five different types in all. The second category is ‘Direct Action’ and includes the remaining five forms of cross-border work. Information and Administration types of action will be introduced first. They are discussed beginning with the most common activities and leading up to those that occur less frequently.

**INFORMATION AND ADMINISTRATION**

**Information Sharing**

By far the most universal form of transboundary work is information sharing. All but one Group clearly identified information sharing across the border as an activity in which they are involved and which they feel is of overriding importance in addressing their concerns. The newer organizations especially, such as the Canadian Columbia River Inter-Tribal Fish Commission, benefit immensely from the experience of more well-established organizations through information transfers. Without accurate and timely sharing of scientific, legal, strategic and political information, cooperative efforts across space are very difficult indeed.

The sharing of information occurs in many different ways. The most interesting forms for the purposes of this dissertation are those that have only recently gained importance and which are critical to the development of transboundary organizing. Within these parameters, the use of electronic forms of communication, including e-mail, listservers, organization websites and news distribution websites rise to the top of the list of critical new developments in cross-border cooperation. Lynn Hunter of the David Suzuki Foundation echoed the thoughts of many interview subjects when she stated that “This listserver that we have, this email discussion group, has been a real bonus because we’re able to talk to people in Washington (state). . . . So, when things are going on down
there, we’re made aware of it. . . . There’s lots of information sharing that’s mutually beneficial” (Interview, November 6, 2000). Technological advances in electronic communication help Groups to transcend boundaries of distance, time and money, allowing rapid dissemination of news of ecopolitical developments, technical and scientific research findings and announcements of future events as well as providing a forum for organizations to make contact with other groups that share some of their interests—obviously a key building block to future cross-border work.

**Conferences and Meetings**

Organized conferences and meetings were identified as key forms of cross-border organizing by all but one of the U.S. Groups (10 of 11). Among Canadian Groups, eight of eleven listed conferences and meetings as important elements of their transboundary work. It is not surprising that this form of cooperation is so commonplace given that getting together with other stakeholders and actors on transboundary salmon issues is an excellent vehicle for sharing information and forming alliances.

Conferences and face-to-face meetings include small, episodic or regularly scheduled consultation sessions between already allied Groups to discuss technical, scientific, strategy or policy issues. For example, the NWIFC representative reported that “We work directly with Canadian First Nations. We’ve had many meetings with them and discussions about Native issues, how to deal with our respective governments . . .” (Interview with Michael Grayum, Sept 18, 2000). Then there are the periodic, large scale conferences that bring stakeholders, organizations and individuals from many sectors and both countries together to share information and data, strategize, organize and plan. Many of the conferences, which may be annual or less regular events, have been organized by one or more of the study Groups. Others are attended by many of the Groups, such as meetings on Marine Protected Areas (MPAs), but are arranged by organizations not included in this study. These are tremendously significant events in the process of transcending territorial borders to confront the salmon problem. Some have attracted several hundred participants and thus are undeniably crucial in making the space for Groups to connect and share ideas.
Conferences and meetings are materially significant because they have catalyzed and facilitated other cross-border work including funding proposals for transboundary restoration efforts, publications, additional conferences, and workshops. They are also important as material manifestation of a geographic perspective on the salmon problem that is not confined by borders—a perspective which complicates territorial sovereignty and pushes at the edges of the territorial trap.

Of the study Groups, the organization that has sponsored the greatest number of large scientific symposia and conferences is the Sustainable Fisheries Foundation, which has a U.S. and a Canadian branch. An extremely diverse assortment of organizations concerned with fisheries issues from both sides of the border regularly participates in these conferences. The first of these took place in 1996 in Victoria, B.C. It was entitled Towards Sustainable Fisheries: Balancing Conservation and Use of Salmon and Steelhead in the Pacific Northwest (see Figure 12). It drew between 700 and 800 participants including scientists, politicians and representatives of state and federal agencies, tribal representatives, fishermen, non-profit environmental groups and concerned citizens. The conference was intended to raise awareness of the need for a sustainable fisheries strategy, to provide a forum for information exchange, and to publish and disseminate information to support the development and implementation of such a strategy across boundaries. "We wanted to get people to look holistically at the possibility of sustainability of fisheries coastwide, applied to all stocks, and not just focus on their narrow interest or the stocks in their neighborhood" (Interview with Cleve Steward, October 12, 2000). SFF put together a packet of proposals based on the sustainable fisheries strategies outlined in this conference and built on through a series of follow-up workshops that was later presented to the Canadian Millennium Fund but to no avail. SFF continues to work to develop an action plan to put these principles into action through on-going workshops.
Towards Sustainable Fisheries:

Balancing Conservation and Use of Salmon and Steelhead in the Pacific Northwest

April 26 - 30, 1996
Victoria Conference Centre
Victoria, British Columbia

A Multidisciplinary Conference Hosted by

The Sustainable Fisheries Foundation
and
The North Pacific International Chapter, American Fisheries Society

Convening Partners

Save Our Wild Salmon Coalition
For The Sake Of The Salmon
Wild Salmon Coalition
Coastal Salmon Restoration Group
American Fisheries Society

Figure 12: Conference Program Cover, 1996
Other transboundary conferences organized by SSF, such as the 1998 meeting focusing on the Upper Columbia (both sides of the border) and held in Casslegar, B.C. have been very successful. This particular conference had “a couple hundred people (in attendance), pretty good papers, and was enough of a success that they agreed to have another one—4 years, 5 years out” (Interview with Cleve Steward, October 12, 2000). This next conference is scheduled for 2002 in Spokane, WA and will involve considerable Canadian input. “This should be a huge U.S.-Canada scientific symposium and . . . sustainable fisheries will be a major focus. . . . It fulfills a critical need for getting information out there and getting people together. It will do well, I think ” (Interview with Cleve Steward, October 12, 2000).

The other big event that SFF has been largely responsible for is The Salmon Homecoming Forum, held annually in Seattle since 1996 and which I attended this year (see Figure 13 (note the language related to boundaries in this conference program cover)). This forum grew out of the first conference held by SFF in Victoria, B.C. and is part of the larger Salmon Homecoming Celebration sponsored by the NWIFC and the Seattle Aquarium. These conferences bring representatives of all the diverse interest groups involved in Pacific salmon issues—from energy officials and PSC commissioners to indigenous people, academics and fishing interests—together to work towards cooperative approaches to dealing with salmon habitat loss, declining populations, and reduced catch. In the past, SFF was “very successful at bringing down top Canadian folks” including Glen Clark and various government ministry officials such as Minister Anderson (then head of DFO) and they have also had top officials from NOAA in attendance as well as prominent politicians such as Gary Locke, Bill Ruckleshaus and others. Each year focuses on a particular set of themes. For example, in 1999, the conference was titled, “Connections of the Salmon: Sustaining Your Economy and Culture—NAFTA, The Environment and the Indigenous Peoples of the Northwest” and was aimed at introducing tribal and First Nation perspectives into the international environmental and trade debate (See Figure 14).
Fish know no political boundaries.

We need to cross ours and reach over to the other side to help them survive.

Moving Salmon Up the Political Agenda

1997 Salmon Homecoming Forum
Bell Harbor Conference Center
Seattle, Washington
September 13, 1997

Figure 13: Conference Program Cover, 1997
1999 Salmon Homecoming Forum
Connections of the Salmon:
Sustaining Your Economy and Culture

NAFTA, THE ENVIRONMENT,
AND INDIGENOUS PEOPLES
OF THE NORTHWEST

September 9, 1999
Bell Harbor Conference Center
Seattle, Washington

Sponsored by: the Quileute Tribe,
U.S. Environmental Protection Agency,
Northwest Indian Fisheries Commission,
and the Sustainable Fisheries Foundation

Figure 14: Conference Program Cover, 1999
Other Groups also organize transborder conferences and meetings. The Pacific Salmon Foundation holds regular fundraising dinners to support its activities in Canada that are widely attended by U.S. backers of the organization—primarily American anglers with vacation homes in B.C. or who travel there to fish and who “would like to contribute something back” (Interview with Ian Angus, November 11, 2000). These dinners are scheduled to expand to Seattle in 2001 or 2002 at the request of Americans who regularly travel to B.C. to attend these events. The Wild Salmon Center also organizes conferences and symposia.

For some groups, like the Sierra Club of B.C., attendance at meetings and conferences across the border is the most common form of cross-border activity. In the case of SCBC, this includes both large, topic-specific events and small U.S. Sierra Club meetings at which they work cooperatively on planning, policy development and interpretation of legal statutes. The Steelhead Society of B.C. also considers attendance at symposia and fundraising events a primary means of cooperation and information sharing. Members of this Group also attend board meetings of affiliated organizations (Wild Salmon Center and The Steelhead Society of the U.S.) in the states.

Scientific Cooperation and Technical Support

The next most common form of transborder interaction is in the form of scientific cooperation and technical support. It is interesting to note, however, that of the twelve organizations that identified scientific cooperation as important elements of their cross-border work, nine of them were U.S. based and one of the two Canadian groups was the governmental organization (Canadian Consulate). This discrepancy may be partially a function of the specific goals and foci of the Groups that were included in the study. I think it is also a reflection of: 1) the greater financial expenditures made on scientific studies of the salmon problem in the U.S. and thus the somewhat more advanced level of scientific proficiency; and 2) the relative geopolitical positioning of the two countries.

Most of the scientific and technical cooperation thus far involves joint studies of habitat and salmon stream production levels, scientific data sharing, cooperation on coded-wire tagging (CWT) of hatchery fish and similar operations. This work often
occurs outside governmental channels. However, those organizations with close connections to the state through funding, joint managerial responsibilities or political linkages, particularly the indigenous organizations on both sides of the border, frequently cooperate with governmental agencies on scientific and technical issues and thus undertake the bulk of this type of work.

**Branch Organizing, Partnerships, Agreements and Administrative Cross-Over**

On-going and short-term partnerships, binational branch organizing, administrative cross-over and both formal and informal agreements between Groups are fairly common. Seven U.S. and three Canadian Groups claimed these sorts of arrangements as keys to their cross-border work. Branch organizing and formalized affiliation or agreement are clearly among the most important forms of cross-border cooperation in that they represent an undeniable dislocation of the border as a signifier of sovereignty and the spatial separation of governance functions. Just as transnational corporations have disrupted borders, so too, conservation-oriented ventures of this type transcend and thereby transform the theoretical quality of absolute value attributed to sovereign space.

Take for example the case of Ecotrust and Ecotrust Canada, the later of which came into existence as an outgrowth of the work of Ecotrust. While they are legally separate entities, they are nonetheless very closely linked.

"Certainly at the strategic level, there is a lot of cross-over. We do joint planning, joint strategy-making . . . . . . We work cross-border on sectoral strategies to try and bring about the conservation economy. . . . We want it all to add up to a sort of cross-border—borderless frankly—conservation economy. . . . It's fairly emergent work, but we're beginning to realize real power . . . ." (Interview with Ian Gill, November 11, 2000).

The efforts of these two Groups are: "very collaborative, (including) a lot of joint planning . . . . We're operating in many respects . . . as one entity that crosses the U.S.-Canadian border . . . ." (Interview with Ted Wolf, October 30, 2000). It is quite clear how these two linked organizations, by working cooperatively, have found commonality on the two sides of the border and have used that to their mutual advantage. This type of
work is beginning to re-spatialize the salmon problem by recognizing shared transborder interests, goals, and challenges rather than emphasizing different needs and perspectives across space based on location.

The Steelhead Society of B.C. and the Steelhead Society in the U.S. are basically one and the same, thus there is considerable cross-border interaction between the two branches. The Sustainable Fisheries Foundation is likewise a federally registered nonprofit organization in Canada and the United States. The organization’s Canadian branch (also called the Sustainable Fisheries Foundation) is headquartered in Ladysmith, B.C. and the co-director in B.C. works in partnership with his counterpart on the U.S. side. Branch organizing simplifies many of the challenges of working across the border and provides for a much broader base of support.

Other Groups have links to organizations in the other country. The director of the binational Steelhead Society is also the president of the Wild Salmon Center. CRITFC and CCRITFC (the U.S. organization was established first and the two are not formally linked) met in 1996 made an agreement work together on, among other things, water quality and the restoration of salmon to the Okanagan River system. They are still working to implement that agreement.

Many of the Groups are similar to the Northwest Ecosystem Alliance which works with “just about everyone who’s involved in a specific issue” including fishing organizations, state and federal agencies, and other environmental NGOs (Interview with Joe Scott October 13, 2000). There are “elements and periods of cooperation with many groups in British Columbia . . . . We work intimately with people across the border,” (Interview with Joe Scott October 13, 2000) such as B.C. Spaces for Nature, B.C. Environmental Network, Defenders of Wildlife Canada, David Suzuki Foundation, Sierra Legal Defense Fund Canada, the First Nation organization called Interior Alliance in B.C. and several other tribal groups and bands (including some that straddle the border with members in both the U.S. and Canada).
These sorts of transborder networks are critical elements in the unbundling of sovereignty and territorial space. They allow for coordination and cooperation and the rapid transfer of ideas and strategies. When they involve links between nongovernmental (NGO, indigenous or commercial fishing) and state agencies, they can represent a dramatic departure from past policies whereby the input and perspective of such organizations were excluded from management and planning. When they occur between nongovernmental organizations and thus supersede the authority of governments, these arrangements not only strengthen the voice of marginalized groups domestically and internationally, but they also challenge the traditional limits of sovereign space. Cooperation among Groups from different sectors (for example the “working relationship” between People for Puget Sound and indigenous groups in the U.S. and in Canada) also represents a willingness to find common ground instead of conflict, thereby elevating the position of these historically marginalized segments of the population relative to that of more powerful stakeholders.

Strategic Cooperation and Advising
This form of transborder activity is practiced by a third of all Groups. Not surprisingly, the Groups involved in joint strategy development were the same groups with branches in both countries or with significant ties to another organization. Three of the four indigenous Groups in this study take part in cross-border advising, although the importance of this work was stressed more strongly by U.S. indigenous Group representatives. Mike Grayum of the NWIFC explains the need for this type of work as partly due to the fact that the Canadian First Nations are:

“in a different place than the tribes down here. In some respects you could say they’re ten years behind us. . . . They’re facing the same struggles that the tribes up here faced about ten years ago, fifteen years ago. So, recognizing that, they’re really interested in talking with us and understanding how we dealt with some of these issues” (Interview September 18, 2000).

Information and Administration: Conclusions
All five of the informational and administerial ways that Groups work together on issues of mutual concern outside official state channels represent a challenge to
traditional notions of sovereignty. In some cases the renegotiation of sovereign space is less significant, especially when it involves cooperation with government agencies, but it nonetheless speaks to the changing governance role of the state in transboundary ecopolitics. Transference of sovereign rights to supra-state political structures such as the United Nations and the World Bank, whose basis of power relies in territorial entities, are familiar to us. But states are increasingly transferring some of their sovereign status to organizations and institutions whose authority is not dependent on control of territory. NGOs only have authority based on linkages with territorial states indirectly (c.f. Hirst and Thompson 1999). These organizations have political clout based primarily on their representation of a population, which may be multinational, without having authority based on control of territorial space. They influence political issues (such as resource management and conservation) through: 1) actions which compel governments to make particular changes; and 2) by working with local, regional and other transnational organizations outside normal circuits of state power. Rather than (more or less) willingly transferring sovereign rights to NGOs as is the case with territorially-based institutions such as the UN, it appears in many cases that governments end up having little choice but to include NGOs in policy-making processes.

The amount of input that NGOs have in these processes remains very limited. Even minimal inclusion is still very much the exception rather than the rule as the most recent PST negotiations, which excluded NGOs and even Canadian First Nations, makes clear. Nonetheless, activities of these organizations create a political tension that strains the bounds of the sovereign state. This is especially true in instances of what I have termed direct action that are the subject of the next section of this dissertation.

**Direct Action**

The five types of work that have been categorized as 'direct action,' are: economic cooperation and restoration projects; public relations/advertising/educational campaigns; publishing; cartography and GIS; and lobbying and legal action. While occurring less frequently than informational or administrative forms of transborder work,
taken together they carry as much weight in terms of their (trans)formative power. All forms of direct action across the border bring into question the actual substance and character of that border. Perhaps more significantly, these activities tend to make visible the existence of shared goals and agendas which smooths the way for future initiatives and also serve as examples of potential strategies to be used by other organizations.

**Economic Cooperation and Restoration Projects**

The first area of work categorized as direct action includes both cross-border funding or economic ventures and hands-on efforts to restore or create new salmon habitat—what one interview subject called "the hip-boot stuff." These two areas are being considered together because a good deal of the cross-border economic ties between organizations is in the form of funding for restoration or other habitat-centered projects. One Group, the Wild Salmon Center has so far only been working "in-stream" with Russia rather than Canada. Otherwise, four U.S. and five Canadian Groups either have economic ties across the border or reported being directly involved in cross-border restoration programs. There are many reasons for the somewhat low numbers in this regard. They include the limitations created by distance and the greater overall value of streamside work when it occurs in a local community where the participants can see the results of their efforts and establish a connection to local salmon stocks.

Even with these and other hurdles to conquer, there are still groups doing this kind of work. In Canada, American supporters of the Steelhead Society from several states have physically taken part in restoration projects. So far, SSBC has not been involved in any American restoration activities, but this is a desire and a goal of the Group according to the president of the organization: "We'd love to do a joint project either on American soil or perhaps in Russia as well with the Wild Salmon Center. We just haven't gotten there yet. I think we're getting there now" (Interview with Daniel Burns, November 6, 2000). Other groups expressed similar interest in expanding their "hip-boot" operations onto the other country's soil. CCRITFC has made some modest efforts in this realm by working in cooperation with the Okanagan tribes on transborder stream-side restoration projects.
Economic cooperation is more common and takes several forms. Some groups, including the SSBC, the David Suzuki Foundation and the Pacific Salmon Foundation, receive sizable sums of money from individual supporters or granting organizations across the border, some of which is earmarked for on-the-ground conservation efforts. The Sustainable Fisheries Foundation funds many of its efforts jointly through its Canadian and U.S. offices. The NWEA has had transboundary involvement in the purchase of lands to be set aside as habitat for endangered species, including the salmon. The Canadian Fishing Company has obvious economic ties in the U.S. by virtue of its fishing operations. The company employs large numbers of Americans both full-time and seasonally, thereby linking the fortunes of people involved with the company on either side of the international border.

Foreign investment in the remediation domestic environmental problems, including salmon restoration, injects a destabilizing element into the practice of state sovereignty. It is a concrete affirmation of the realization that ecological interests do not stop at the border. As Lynn Hunter of the David Suzuki Foundation explains: “It’s a matter . . . of understanding that this is a global situation that we’re up against and that in order to have a solution we’re gonna have to attack it in a less parochial manner” (Interview, November 6, 2000).

Cross-border Public Relations, Advertising and Education Campaigns

Public relations efforts, advertising campaigns and educational initiatives undertaken by Groups are critical in that they tend to offer an alternative to the spatialized “business-as-usual” approach to the salmon problem. They raise public awareness of the issues, which precipitates action and material changes. Public awareness is raised in many ways, including through the use of advertisements in newspapers, information booths at public events, and the production of bumper stickers like this one from Save Our Wild Salmon (see Figure 15).
Figure 15: Save Our Wild Salmon Bumper Sticker
Transborder campaigns of this type can disrupt traditional sovereignty discourses by stimulating domestic action, thus indirectly influencing policies within borders from outside. For example, The Northwest Ecosystem Alliance representative reported that, “most of what we do is to work cooperatively with Canadian groups. (We) try to get out the message of what is happening in British Columbia contrary to the public perception that Canada is this incredibly progressive country that protects its environment and is looking out for the best interests of it’s citizenry because that’s certainly not the case” (Interview with Joe Scott, October 13, 2000). In so doing, NWEA may affect the course of salmon politics in B.C.

The David Suzuki Foundation utilizes resources and contacts internationally to address salmon issues in B.C. “In Washington state, there is a strong voice of opposition towards salmon aquaculture expansion and we have worked with the people in Washington state...” to address the topic of aquaculture and its effects on the environment, on wild salmon, and on fishing communities (Interview with Lynn Hunter, November 6, 2000). Cooperation with Alaska is also increasing out of mutual concern for aquaculture’s environmental and social effects. In addition, DSF is working with Americulture Systems (a company that produces closed containment fish farm systems) located in Washington on advocating a conversion to closed containment aquaculture in Canada, including through media broadcasts of a jointly-produced informational video (a project that also included the cooperation of First Nations). As a result, the provincial government is trying to start pilot projects using the system and there may be business arrangements between Americulture and the B.C. government on the horizon.

Publishing
Publishing in this context refers to the publication of printed (as opposed to web-based) materials that are distributed across the border. It includes work geared towards the scientific or academic communities, educational materials, and information for the general public. Formats range from newsletters to articles in refereed journals to edited volumes. Ecotrust has produced two of the most notable published works in terms of their transborder perspective. The first is entitled Salmon Nation: People and Fish at the
Edge (1999) and the other, a book which also contains significant salmon-related content, is entitled The Rainforests of Home: Profile of a North American Bioregion (1997). The production and dissemination of both of these books represents the cooperation of numerous entities on both sides of the border.

Another important publication produced by a Group is Sustainable Fisheries Management: Pacific Salmon (2000) produced by the Sustainable Fisheries Foundation, a transborder ENGO. This volume is geared more specifically to the scientific and managerial communities, but it also contains interesting contributions on the sociological aspects of salmon management such as the importance of adopting a region-wide spatial perspective on the salmon problem.

**Cartography and GIS**

Six Groups actively use cartography or GIS applications as part of their work on salmon issues. Data gathering and analysis, production and distribution of finished products, and use of spatialized data in lobbying, public information or other activities occurs in cooperation with actors across the border among both Canadian and U.S. based organizations. The importance of this work should not be underestimated (see Chapter 8). As geographic scholarship has shown (c.f. Sparke 1995; Wood 1992), cartographic images shape the ways in which people conceptualize space rather than merely representing it. Mapping the salmon problem in a way that de-emphasizes the border and stresses the unity of the salmon's geography across the extent of its range counteracts the divisive image of a landscape separated by national boundary lines and other demarcations of jurisdictional authority. In so doing, cartographic and GIS technologies applied to the salmon problem can have real material consequences as conservation and management are redirected to regional scale. Beginning to understand the salmon problem as one that spans the entire Northwest Coast rather than ending abruptly at the arbitrary border line is a key step towards actively managing the salmon with that border in the background rather than as the main focal point. "Counter-mapping" of the type described below by disenfranchised stakeholders is also an important strategy for
(re)gaining power, as recent geographic and political ecology research has shown (Peluso 1995; St. Martin 2001) and as I discuss in more detail in Chapter 8.

As the next chapter reveals, one of the largest obstacles to transboundary work on the salmon is the incompatibility of data formats used by government agencies in the U.S. and Canada, which prevent or inhibit scientific and managerial cooperation. By focusing resources on this cartographic data problem, the Groups in this study are effectively erasing one of the most obvious physical manifestations of the separation perpetuated by the existence of the borderline between the two sovereign states. In sharing their data with state agencies, they are contributing to a re-scaled, more effective approach to salmon management at the level of official government. This is a substantial achievement given that scientists, managers and politicians jealously guard their control over what is considered valid knowledge. The input of private citizens and nongovernmental organizations is often unwelcome. Barbara Cairns of Long Live the Kings gave an example of this when we were discussing citizen attempts to become involved in salmon conservation activities in the late 1980's: “That was apostasy! I mean, on the part of government folks, they just didn’t think that a private citizen should touch a fish. Y’know, that was just—they were aghast at that! And there’s still some who are. I mean, they really resent it enormously” (Interview on October 12, 2000).

Cross-border cartography and especially GIS have been used most extensively by Ecotrust and Ecotrust Canada, the Sierra Club of B.C. and People for Puget Sound. The work of People for Puget Sound is illustrative of how GIS applications can give NGOs the power to influence ecopolitical governance across borders. PPS has been working with the quasi-governmental Islands Trust on the creation of a transboundary marine protected area between the San Juan archipelago and the Gulf Islands. People for Puget Sound

“managed to jumpstart that process by designating an area in there as a stewardship area, bringing to bear as much of the GIS resources and the biological analysis as possible, to actually provide both jurisdictions with tools by which they could find some commonality and actually have a map to work from. That’s the proper role of what nongovernmental organizations ought to do. We’ve got to keep pushing
the envelope to make it comfortable, in a sense, for governmental entities to step up” (Interview with Mike Sato, September 26, 2000).

PPS uses GIS and biological data in lobbying and litigation efforts as well as in management planning. PPS shares data with Canadian organizations, too, but it is “more prevalent on this side of the border” (Interview with Mike Sato, September 26, 2000).

The SCBC has been involved in a major GIS mapping project of salmon stream status in B.C. The data on the maps that were produced as a result of this project end abruptly at the boundary line as many maps of the salmon still do, illustrating the ongoing influence of the international border. However, simply gathering and organizing the data is important for future cooperation, and SCBC has the definite goal of extending their GIS analysis of the salmon problem across the border.

Ecotrust and Ecotrust Canada have invested heavily in the production of GIS analyses of the salmon system and also use GIS in other activities that are linked to the salmon issue such as the promotion of indigenous land claims and rights in Canada. The publication of Salmon Nation (1999)—which centers around a series of fold-out, color maps of the status of Pacific salmon (see samples, Figures 16 and 17) and also includes other maps of the region—is one example of the organization’s involvement in cross-border information analysis and mapping as part of its public information goal.

These maps are scientifically and managerially important because, according to the representatives of Ecotrust and Ecotrust Canada, integrating data across the border divide helps build a regional salmon database, which in turn lays the material foundation for comprehensive, coast-wide conservation and management. Additionally, cartographic depictions of the salmon system which de-emphasize political boundaries help to reconfigure the geographical imagination of residents and policy-makers in the Pacific Coast bioregion, potentially impacting the political and managerial framing of the salmon problem. According to Ian Gill, the information analysis and GIS work completed has been intended to “try to kind of transcend the border . . . in a very comprehensive way that sort of essentially ignores the jurisdictional [borders] . . .” (Interview, November 11, 2000).
Figure 16: Status of Sockeye Stocks
Figure 17: Status of Coho Stocks
Ecotrust Canada sees these types of mapping projects as an example of “tak(ing) the tools back from government” in order to aid in decision-making about a variety of resource issues, including fisheries management, which is “quite radical and quite displeasing to the centralized powers” (Interview with Ian Gill, November 11, 2000). This is a poignant observation indeed. In these statements, Mr. Gill unmistakably acknowledges the disruptive power of these activities relative to notions and material manifestations of territorial sovereignty and governance.

**Lobbying and Legal Action**

Lobbying and litigation across borders is a challenging activity for nongovernmental organizations. The influence of external sovereign entities in domestic politics is vehemently resisted by both Canada and the U.S. (as it is by all nation-states)—indeed this is one of the most carefully guarded elements of sovereign status. Nevertheless, two Canadian and two U.S. nongovernmental groups have some involvement in cross-border lobbying or litigation to protect the salmon. The Canadian Groups doing this type of work—SCBC and CCRITFC—are more involved in lobbying while the U.S. Groups—NWEA and PCFFA—have ventured with greater energy into the realm of litigation. This discrepancy is perhaps explained by the litigious culture found in the U.S., which is not as prominent a feature on the Canadian social landscape. It is important to note that CCRITFC is closely linked with the provincial government, so the potential disruptive power of the Group’s activities must be assessed with this in mind. The power that may accrue to CCRITFC because of the Group’s relationship with the government, however, is likely off-set by the fact that it is a First Nations organization.

CCRITFC has been involved in lobbying the Washington Department of Fish and Wildlife, the NWPPC and the BPA for policy changes in cooperation with U.S. organizations and upper Columbia River tribes in Washington, Montana and Idaho. This Group “absolutely” wants to be doing more work of this type across borders to meet the long-term goal of restoring salmon to the Canadian part of the Columbia River basin.

“We think it’s absolutely essential in the first instance that the U.S. efforts to [restore] salmon in the mid-Columbia be successful. So... we really push for and
lobby for those [but] we need to do a better job in that area. We need to do a better job just in terms of lobbying on behalf of those U.S. efforts which we think might have a chance of success at salmon restoration. . . . That kind of work needs to be strengthened and expanded” (Interview with Bill Green, December 21, 2000).

CCRITFC is also staging a bid to gain compensation for loss of salmon from the American government through the International Joint Commission pursuant to the order of approval of Grand Coulee Dam in 1942.

SCBC sends representatives to U.S. Sierra Club meetings to work on planning, policy development and interpretation of legal statutes. The affiliated organizations have worked together on advocacy and lobbying in regards to hydroelectric and oil exploration issues that have serious consequences for the salmon.

The legal actions taken by PCFFA and NWEA both make use of the structures created by the signing of the North American Free Trade Agreement (NAFTA) and the side agreement on the environment that established the Council on Environmental Cooperation (CEC). Use of this transnational governance vehicle to promote salmon conservation is an evolving form of action seen around the world as a result of the proliferation of multinational trade, environmental and security agreements. Seizing on the opportunity for a stronger voice in transborder natural resource issues offered by these agreements is an important way in which nongovernmental organizations are transforming governance and assuming some of the authority previously reserved for sovereign states. For example, The Pacific Coast Federation of Fisherman’s Associations “filed a complaint under NAFTA [April 1997] with regard to B.C. Hydro’s operations that are deteriorating salmon runs in B.C.” (Interview with Glen Spain, November 10, 2000). PCFFA has been very cooperative in its use of this strategy. The organization filed the complaint, which is currently under consideration, in cooperation with the B.C. Aboriginal Fisheries Commission, the British Columbia Wildlife Federation, the Trail Wildlife Association of B.C., the B.C. Steelhead Society, Trout Unlimited and the U. S. Sierra Club.
PCFFA is also looking at the PST rule that requires that provisions be made for salmon passage relative to dams as a source of litigation against both U.S. and B.C. agencies. This group may become more involved in forestry issues that affect salmon, filing suits under NAFTA or other international trade protocols. "People want us to get involved in whole campaigns to make clear-cut logging in B.C. a major issue under the Pacific Salmon Treaty. . . . We do a lot of work with folks on common issues up there including aquaculture and habitat protection" mostly in the form of litigation "at this point" (Interview with Glen Spain, November 10, 2000).

Similarly, the Northwest Ecosystem Alliance considers litigation under the statutes imposed by international agreements to be useful vehicles by which to press for reform. This Group is very active in this area. Joe Scott reported that:

"We, along with NRDC (National Resources Defense Council), The David Suzuki Foundation, Sierra Legal Defense Fund (Canada), and Sierra Club, B.C. filed a submission under the Commission on Environmental Cooperation (CEC) which is the body set up by the NAFTA side agreement. The submission was over issues of salmon habitat degradation in British Columbia. This was early summer 1999. The submission asked for an investigation from the CEC of Canada for failing to enforce its federal fisheries laws—the Fisheries Act—which mandates that there be no net loss of salmon habitat.

. . . So we have been poking and prodding at the international establishment with our transborder conservation allies for a couple of years now. The other thing that we’re doing is we are starting to [press] the signatory states of the Pacific Salmon Treaty and the Pacific Salmon Commission about violations to the habitat provisions of the Pacific Salmon Treaty by British Columbia. And indeed, British Columbia, by virtue of the fact that they are destroying salmon habitat through logging activities and growth-building activities is in violation of the habitat provisions of the PST (Interview, October 13, 2000).

There are other trade agreements between Canada and the U.S., especially those which are specifically concerned with natural resources commodities such as wood, pulp and paper products, that are targets of NWEA legal action. These actions serve a number of related objectives—conserving forests, protecting bear, salmon and other species—and also bring diverse environmental organizations into cooperation with one another. These efforts have specific environmental goals in mind—protection of salmon and other
species and conservation of habitat—but they are also part of an attempt to promote a paradigm shift in transborder resource management. A conscious and clearly articulated vision for cross-border cooperation that entails a spatial reframing of the normative approach to the salmon problem—a reframing towards a more unified, coast-wide scale of analysis and management that signifies a movement away from the managerial spatial mismatch—is discussed in the following section.

**SUMMARY OF CROSS-BORDER COOPERATIVE EFFORTS**

Cross-border cooperation on salmon issues takes many forms and is growing in scope and degree. This cooperation is mostly a recent development, with the majority of Groups only coming into existence within the last 20 years (many of them as recently as the last 5-10 years) and with many of the salmon initiatives only taking shape within the last 5 years. This begs the question, Why now? What are the historical and contextual reasons for this move? I believe the next section—which presents an accounting of the factors that contribute to cross-border action according to interview subjects—largely answers this question.

While the Groups proved to be involved in many transboundary efforts, there are other groups that are doing as much or more in this arena that were not included in the study (the Sierra Legal Defense Fund in Canada, for example). Overall, more efforts to reach across the border are being made by U.S. Groups, particularly in the areas of scientific and technical support and publishing. Canadian organizations tend to favor public relations campaigns, forming partnerships and working cooperatively in the area of advising/strategizing. For Groups on both sides of the border participation in conferences is an important activity. Likewise, the use of cartography and GIS applications is considered to be an effective and appropriate element of transboundary salmon conservation strategies.

The two categories of cooperation described in the preceding pages—Information and Administration and Direct Action, both important in their own right, are mutually constructed and supportive. The story of how Ecotrust Canada came into being proves
this fact and also illustrates how individual transborder projects can lead to expanding networks of cooperation, particularly when they bring a variety of stakeholders together to work on a common issue. While not focused exclusively on salmon, the initiative discussed below was of direct benefit to the salmon stocks native to the area.

"When Ecotrust itself was created in the early ‘90s, we focused on activities in four coastal watersheds between Alaska and Oregon. Through some early work we had done GIS mapping and working with a consulting forester in British Columbia, the Kitlope River Valley had emerged from a coastwide analysis of watershed conditions in British Columbia as the largest, in-tact, unlogged, coastal watershed in British Columbia, which immediately made it a priority for us. Ecotrust, over a period of its first three or four years worked extensively with the Haisla Nation out of the village of Kitimat, B.C. who’s traditional territory encompassed the Kitlope Valley and some adjacent area, to come up with a strategy that would ensure the protection of the Kitlope. The Haisla people were interested in that for cultural reasons as well as for economic reasons of their own. So that was a great opportunity for us to work in tandem with a Canadian First Nation.

The unique outcome of the work with the Haisla was a still unprecedented decision by a forest products company—West Fraser Timber Company—to voluntarily relinquish its tree farm license rights to the Kitlope Valley and to create what became in effect a Canadian Protected Area. That announcement in 1994 that the Kitlope Valley—largest coastal rainforest watershed on earth—was protected by a joint commitment of the province and a Canadian First Nation through the agency this environmental organization—Ecotrust—really reached a lot of people’s attention all over North America, all around the world.

In a sense you can say it raised the stakes for Ecotrust in Canada, because all of a sudden, we had accomplished a very significant conservation victory in Canada. To sort of build on the momentum of that accomplishment, we recognized that as a U.S. based organization there were a lot of obstacles that we faced in terms of credibility and acceptance and legitimacy within Canada. So, it was partly out of that accomplishment and out of the sheer complexity of commitments and activities that were flowing out of it that we created Ecotrust Canada in order to have a fully Canadian organization, run by a Canadian board of directors, operating legally as a Canadian charity to give us the flexibility within the province that was really necessary. They’ve also developed a centerpiece strength around working with First Nations on GIS mapping and providing training and support to First Nations for GIS which is used very extensively, as you’re probably aware, on the treaty process in the province right now" (Interview with Ted Wolf, October 30, 2000).
In this example, the importance of sharing information and transforming data into spatialized formats (through the use of GIS) to generate concrete change is apparent. The mutual benefits to be gained by striking cooperative arrangements between indigenous and ENGOs is clear. Moreover, these efforts have a ripple effect—making future initiatives more plausible such as in the example of the growth of Ecotrust Canada’s Aboriginal Mapping Project (see the Ecotrust Canada profile in Appendix D). Indeed, were it not for this project undertaken by Ecotrust, Ecotrust Canada may never have been founded. This brief history also raises questions about the limits of cross-border work—“there were a lot of obstacles that we faced in terms of credibility and acceptance and legitimacy within Canada” (Interview with Ted Wolf, October 30, 2000)—which I discuss the next chapter.

**Contributing Factors**

In the interviews, I asked Group representatives to identify factors that they believe contribute to cross-border efforts. Based on direct responses to this question and related discussions, eighteen discrete factors were identified as contributing to, allowing or otherwise facilitating transborder work between nongovernmental organizations and across the public-private sector divide.

The eighteen factors have been organized into three classes (Classes I, II and III) based on quantitative analysis of the total number of responses to each question. The same three classes emerged using either an equal interval or natural breaks method of classification. Class I contains 3 factors which had between 12 and 16 responses each. Class II contains 9 factors that had between 7 and 11 responses each. Class III contains 6 factors that had between 2 and 6 responses a piece.

Overall, U.S. Group representatives were more able or willing to identify factors that have a positive influence on transboundary cooperation. In fact, 94 comments relating to contributing factors were made by U.S. Group representatives compared to 47 by their Canadian counterparts—exactly twice as many. This is an average of approximately 8 per group for the Americans and 4 for the Canadians. The reasons for
this discrepancy are unclear, but I believe that it indicates a heightened degree of
hopefulness regarding the prospect of cross-border work among Americans. This, in
turn, may be related to the relative historical (and current) positioning of each country in
the Salmon Wars. Canadian Group representatives in this study occasionally expressed
feelings of being “bullied” politically by the Americans around salmon issues. They
were more likely to express feelings of having gotten “the short end of the stick” in recent
salmon negotiations and allocation decisions (and indeed, several American Group
representatives agreed with this conclusion). In other words, the Canadian sense of
relative geopolitical weakness may be at the root of this discrepancy and as such, it
provides some insight into problems of transboundary cooperation between groups in
other locations around the world. Given that the U.S. and Canada are both “core” or
“first world” countries with similar cultures, economies, histories and political systems,
the importance of perceived and actual geopolitical differences would almost certainly be
more critical when considering cross-border environmental problems between countries
that lack these cooperative advantages.

Largely due to the disparity in the overall occurrence of responses, in all but one
instance, more U.S. than Canadian Group representatives identified each listed factor as
important to cross-border cooperation. Nevertheless, there were 6 factors for which there
was either a very similar or equal number of responses, including the two most
commonly noted factors—the increasing urgency of the salmon problem and growing
public awareness of the issue. There were two factors (change in focus away from
allocation issues and towards habitat restoration/conservation and the structure of the
Pacific Salmon Treaty) that only Americans mentioned. There was only one factor that
was (slightly) more commonly cited by Canadians than Americans—that being the
failure of government efforts to solve the salmon problem to date. This perhaps indicates
a somewhat higher level of dissatisfaction with government efforts among Canadians,
though this assumption is questionable given that the difference is so small between the
number of American and Canadian responses.
EXPLAINING THE DEVELOPMENT OF TRANSTERRITORIAL ACTION

As introduced above, the reasons for increasing transborder efforts have been grouped into three classes. Each is described and explained below.

Class I: Urgency, Awareness and Information Sharing

The primary reasons which emerged from the research to explain the growth of transborder action are a set of three related factors: 1) the heightening sense of urgency about the decline of salmon; 2) increasing public awareness of the issue; and 3) the increase in information sharing occurring across the border. These elements are clearly linked and indeed are mutually constituted. Information sharing about the salmon crisis helps to raise public awareness. Growing concern about the salmon provides the impetus to gather and share more data.

The Salmon Crisis

The growing sense of urgency about the salmon’s decline has been important in precipitating cross-border cooperative work. Statements made by many of the Group representatives made this apparent:

“Around the time that the new treaty was done (1999 PST Agreement), I really felt like there was more of a general recognition of the fact that the bickering was really re-arranging deck chairs on the Titanic and it was really time to stop doing that. For the really hard-nosed people on both sides over the years who have been the ones keeping it a fight—it’s the drop in the fishery that’s really brought them [to the table]” (Interview with Patrick Higgins, July 14, 2000).

“There’s the whole scarcity issue—as salmon become more scarce people tend to work together a lot more” (Interview with Sharon Chow, September 11, 2000).

“Well, there’s an urgency. . . . Time is of the essence here. . . . We have a suite of species that necessitate close cooperation between our two countries, not only in the NGO community, but also in the governmental circles and in the policy arena. And certainly inasmuch as a lot of these critters here are teetering on the brink of extinction there is an impetus that we all have when the building is burning and that is, ‘Think quickly and move your ass!’ Time is short. Nothing more epitomizes that urgency than salmon, not only here, but in Canada” (Interview with Joe Scott, October 13, 2000).

“I think we’ve been just driven to be more cooperative simply by the fact that you have a depleted fish supply” (Interview with Mike Sato, September 26, 2000).
“When things get to a crisis, we are able to work together” (Interview with Lynn Hunter, November 6, 2000).

“It took the fish (getting) to a depleted state—to a point over which there was no longer a lot to argue about on who catches what. It’s ‘Can we keep these stocks viable?’ When the focus changed to that, then there was more cooperation” (Interview with Mike Grayum, September 18, 2000).

As these quotes make clear, the precipitous and continuing decline of salmon populations throughout most of the region figures prominently in the expansion of transboundary cooperation. The requirement that environmental conditions reach a critical stage in order for reform to occur corresponds with an unfortunate trend in the history of the Pacific salmon identified earlier in this research (and also seen regularly in relationship to environmental problems elsewhere). Meaningful change in environmental management only tends to come about when failure to do so will inevitably lead to disastrous consequences. Joe Scott’s comments confirm this unfortunate fact:

“I guess it seems as though we never address these problems until there’s this tremendous urgency, like with the expansion of our territorial waters with regard to fisheries. Driftnets for example. We didn’t get serious about driftnets until the decline of our fisheries became precipitous, became really serious and then we found a way to get driftnets out of the oceans. But, it was after the horse ran out of the barn that we decided to close the door. We need to start those initiatives sooner . . . before our salmon runs are gone” (Interview with Joe Scott, October 13, 2000).

Even the threat of environmental collapse and potentially serious economic hardship are sometimes not enough to engender change as was the experience with the North Atlantic cod fisheries shared by Canada, the U.S. and some European nations. This tendency has deep roots in western capitalist cultural approaches to the environment, in particular the American and Canadian historical tendency to see nature as a storehouse of abundant and even inexhaustible resources. While less prevalent today than in the past, this environmental paradigm still plays a role in preventing a quick response to natural resource depletion as the comments of Joe Scott point out: “. . . People think there’s an endless stream of fish that essentially fall out of the sky and are able to spawn in a stream in which every tree has been removed” (Interview with Joe Scott, October 13, 2000). While this view of nature continues to lose prominence and validity, there are still
those involved in extractive use industries who believe that resources are there for the
taking, regardless of the consequences. There are still “a whole bunch of people making
a whole bunch of money off a public resource and arguing to their last breath that they
shouldn’t be regulated” (Interview with Barbara Cairns, October 12, 2000).

There is a building sense that time is running out for Northwest salmon, even
though some limited successes have been achieved. People have decried the decrease in
salmon abundance for over 150 years, but new pressures are seen to be creating a genuine
emergency. The expansion of salmon aquaculture, worldwide depressions in fisheries\(^9\)
combined with growing global competition for market share, recent ESA listings, and the
failure of stocks to recover from years of abuse despite the countless (American and
Canadian) hours and dollars put towards solving the salmon problem all signal that a true
crisis is upon us.

This crisis threatens the salmon and it also endangers the interests of stakeholders
on both sides of the border. Numerous Native and non-Native communities as well as
individual commercial fishermen face the potential loss of their chief source of income.
Many agree that the loss of the salmon would deprive the region of a cultural icon that
symbolizes a much valued way of life (see Chapter 1). Environmentalists and anglers (as
well as many commercial fishermen) lament the possibility of a Northwest without wild
salmon and the denuded sense of place and loss of environmental quality that loss could
engender. “The salmon . . . is not merely a creature that both countries catch. It’s the
ultimate indicator species for quality of habitat” (Interview with Joe Scott, October 13,
2000).

The bad news, then, is that even in the case of an economically and socially
important natural resource—one imbued with widespread (though not universal) cultural
and regional symbolic value—it may be necessary for that resource to reach the edge of
extinction before people are willing to break out of their territorial enclaves and familiar
patterns to respond to the issue.
There is good news as well. Firstly, the emotive affiliation with salmon may play a positive role in preserving the fish:

"The level of awareness is high. I have friends who work in Maine on Atlantic salmon issues and they really feel almost wistful looking at the Pacific Northwest saying, ‘There’s just no regional identification with fish in Maine and the Maritimes as there is out here.’ The power of people to affiliate emotionally with salmon in this region is a foundation for doing so much" (Interview with Ted Wolf, October 30, 2000).

Secondly, there seems to be some level of degradation—an environmental "bottoming-out point,"—at which people will demand real change be made to conserve natural resources as the further comments of Ted Wolf suggest:

"When does a paradigm shift occur? When all of the existing explanations keep running up against problems that they can’t resolve. You just keep beating your head against a wall and your existing tools no longer work. We’re obviously in that situation. Everything we’ve believed historically, from the very superficial, ‘salmon are too abundant to ever be fished out,’ to the very sophisticated, are all proving to be wrong. So, we have to take a new look and we have to do it together and comprehensively and to fail to do it at the scale of the whole biological range of the species would be ecologically foolish" (Interview with Ted Wolf, October 30, 2000).

Mr. Wolf’s "paradigm shift" seems to be at hand. Thirdly, the opportunity still exists to learn from previous resource management mistakes in order to avoid reaching a point of critical degradation beyond which a return to healthy environmental conditions is not possible.

Public Awareness

Public awareness of the salmon problem and the sharing of information about salmon across the border were recognized as nearly as important as the problem itself in stimulating further cross-border cooperation. “There’s more awareness of salmon now than ever” (Interview with Tim Bristol, November 27, 2000). The availability of “more and better and more digestible information in the debate than there has been historically” (Interview with Ian Gill, November 11, 2000) was observed to be a key factor in building public awareness. Awareness of declining salmon populations, and the implications of
that decline for the quality of life, the economy and environmental quality of the region, are key:

“I think we’re starting to recognize that [the salmon resource] has value not just aesthetically or emotionally, but for all that it indicates. I mean, you start seeing these salmon decline and you wonder, ‘How bad can these rivers be if they don’t support life and what does that mean for the quality of my life and my community?’” (Interview with Barbara Cairns, October 12, 2000).

Xan Augerot of the Wild Salmon Center has observed a growing recognition that:

“. . . salmon have value even if they aren’t harvested by the commercial fishery. Whether it’s value to sportsfishermen, who are very vocal about asserting that value, or value because of the nutrient enrichment of salmon carcasses or value because they feed the bears and the over there stellar sea eagles, over here bald eagles and other critters within the ecosystem” (Interview with Xan Augerot, September 19, 2000).

There is a greater understanding of the causes and consequences of the salmon crisis in large measure due to the work of NGOs and tribal groups. This heightened awareness and understanding stimulates transboundary action (as well as stimulating greater local involvement) in part by making it clear that the salmon problem is multidimensional. It is no longer sufficient or possible to lay the blame for the salmon problem on any single cause, including over harvest by fishermen from the other side of the border. The quote below by Ian Gill clearly illustrates this change in consciousness as one that is not only prevalent among environmentalists, but has become common among fishermen and local fishing community members.

“People have begun to realize that you could take the Alaskan fish boats out of the water tomorrow and things are so dramatically bad in a lot of these places that it really wouldn’t make any difference to British Columbia fishermen. . . . I think increasingly there’s a realization that—certainly in British Columbia by fishermen that I know here—the Alaskans getting a few of their fish first is really not the problem. Y’know, there are a couple fundamental problems, one of which is just shared environmental problems in the specific sense . . . but also habitat degradation writ large in terms of the change of ocean fishing conditions and global warming and those kind of larger pieces. . . . Thoughtful people have already begun to realize that there are some very large environmental drivers here, much more consequential to the fate and the state of the fishery than some guy getting the first whack at Fraser River sockeye” (Interview with Ian Gill, November 11, 2000).
As awareness and understanding of the salmon problem grows, stakeholders are more prone to look for commonalities across borders and less at territorially-based differences. This in turn leads to greater cross-border work: "Once we get doing some work and we start to have some success, people will realize that we have so much more in common than there are differences. I think money and effort and time and energy will follow" (Interview with Tim Bristol, November 27, 2000).

Greater awareness combined with an expanding sense of commonality across the border has localized political effects that tend to spread upward. "People are starting to have more of an interest in the environment and they’re starting to become more knowledgeable and at the same time they start to have more demands . . . That starts to make its way through different levels of government . . ." (Interview with Rob Kirk, October 24, 2000). Eventually, with enough local clamor for attention to the salmon issue, policy changes begin to happen at the state/provincial, federal and international levels.

**CLASS II**

**Political Pressure**

Among the nine responses grouped together in Class II of the factors that contribute to cross-border cooperation, the influence of the nongovernmental sector stands out as the most critical. Political pressure applied by NGOs and tribal organizations was widely recognized as key to generating changes in salmon policy at the domestic level and at the international, state-to-state level. The comments of Jim Heffernan were typical of the responses on this topic: "I have to give some credit to NGOs—environmental groups that are looking at problems across the border and saying, ‘Yeah, y’know, this is something that we think the U.S. and Canada should be working on together’" (Interview, October 30, 2000).

The pressure put on domestic politicians and management agencies by these organizations through court action, advocacy and lobbying, and provision of information was identified as an important progenitor of transboundary cooperation by half of the
Group representatives. According to Patrick Higgins, the representative from the Canadian Consulate, when evaluating the causes for increasing governmental and nongovernmental cooperation across the border, you have to “give credit to the political pressure developed by First Nations and conservationists—that’s definitely been a big part of it . . .” (Interview with Patrick Higgins, July 14, 2000).

In other words, the work done by Groups domestically is seen to have an influence on the potential for cooperation across border lines. This work comes in many forms and may be as simple as asking questions that haven’t been asked before:

“I swear to you—this happened two years ago—I started asking questions about how harvest decisions were made. People call you a racist! People say you need a Ph.D. to understand that. People say it’s none of your concern. You kind of go, ‘Excuse me! This is a public resource (laughter) with a billion dollar impact. I think you should be able to explain to me how it’s managed in a respectful way.’ And that question has not been asked . . . Consequently, the agencies have not developed answers. . . . It forces change” (Interview with Barbara Cairns, October 12, 2000).

First Nations and Native Americans have applied substantial pressure to their respective governments (often with the support of aboriginal groups across the border) in order to secure and maintain harvest and management rights. “The First Nations issues [have] got everyone’s alarm bells going off in British Columbia” (Interview with Xan Augerot, September 19, 2000). Their efforts up the ante, forcing agencies to take a new look at how to deal with the salmon crisis.10 Because of their perspective on colonially-based political boundaries, aboriginal organizations inject an especially transgressive voice into the debates over salmon management, particularly its spatial dimensions.

“In the salmon treaty process, the tribes and the First Nations maintain that this boundary is not their boundary. They never used to recognize this boundary and their peoples used to flow between the different areas on a regular basis for trade and interaction purposes—powwow. So, it’s their view that this boundary is artificial. It’s not one that they need to acknowledge and every now and then, to remind the U.S. and Canada of that, there’s a caucus at the Salmon Commission meetings of the First Nations and of the [U.S.] tribes to discuss common issues.

The transboundary efforts going on now in the Okanagan, I think, are largely the result of First Nations coming to the tribes down here and asking for their help. . . . Some of these newer transboundary efforts I really think are due to
the tribes pushing things forward” (Interview with Jim Heffernan, October 30, 2000).

“The Canadian First Nations are really starting to force some changes and to seek out changes and just demand better deals basically then they’ve had” (Interview with Patrick Higgins, July 14, 2000).

In addition to the impact of political pressure, a third or more of the Group representatives identified the following eight factors as important: 1) improvements in technology (digital communication and GIS); 2) conferences and symposia; 3) an increasingly transborder spatial perspective on the salmon problem and/or the recognition of shared values or interests across the border; 4) the growth of salmon aquaculture and related economic effects; 5) new scientific or management data/information; 6) increasing availability of funds or government support for programs; 7) changes in the border, particularly in relationship to NAFTA; and 8) the need to deal with the salmon issue across borders in order to confront other concerns (such as compliance with ESA listings).

Each of these factors has significance and is discussed below. It is beneficial to keep in mind that the purpose of this work is more than explanatory—I intend it to serve conservationist politics as well. A better understanding of what facilitates successful action on transboundary resource problems can be used to promote such similar ventures in other venues by identifying those strategies, activities and approaches that most expediently advance the interests of stakeholders. Furthermore, an examination of those things that tend to promote cross-border work can be useful in charting the potential trajectory of transborder ecopolitics.

**GIS and Other Technologies**

Improvements in digital communication and other technological advances, have been found to be a source of improved cooperation and a conduit for transboundary work. Since access to computer-based communication is becoming more affordable and commonplace as the ‘wiring’ of the region progresses, it is logical to assume that transborder cooperation will increase in kind. The expense of communicating effectively
across borders and fairly significant distances used to be prohibitive for some groups and limiting for others. With the advent of the internet, that is becoming less of a consideration, particularly in this part of the world:

"I think where the cost comes in is when organizations actually try to undertake activity on the ground, but with the web and the internet there's so many possibilities for collaboration. I think on that score there are fewer impediments either technically or economically [than there used to be]" (Interview with Ted Wolf, October 30, 2000).

In addition to the internet, Geographic Information Systems are being used more widely than ever as a tool for managing (and laying claim to) resources. As data formats grow increasingly compatible, spatialized information will make large-scale management of transboundary resources more feasible. As Glen Spain notes, "... we have some tools, one of them being GIS data collection systems, that are becoming more and more uniform" (Interview November 10, 2000) and therefore more useful for building management and conservation bridges across territorial boundaries.

Conferences

Conferences and symposia also help to build those bridges. They bring together stakeholders with common goals and are an excellent forum for sharing information. For Groups that work at the local level but want to expand the spatial reach of their efforts, conferences offer them that opportunity:

"That's why these conferences are good. They're very important in a different way and maybe at a different scale than what I view as some our local impacts. We're doing very good, important, and I think valued work as representatives of the environmental community down here, but that doesn't really fulfill the broader mandate of our organization which is sustainable fisheries up and down the coast" (Interview with Cleve Steward, October 12, 2000).

A Growing Transborder Perspective

There is an increasingly transborder spatial perspective on the salmon problem and a growing recognition of shared values or interests across the border among Groups and their supporters. This, I believe, is one of the most vitally important factors leading to more transborder work and it has considerable potential to disrupt the discourse of the
sovereign territorial state and to transform (environmental) governance (see Chapter 8). As such, this topic is considered at some length below.

Group representatives very consciously spoke of a growing awareness of the effects of the spatial mismatch and the need to move beyond bounded, territorially-fixed salmon management and policies.

"Well, I think it's the recognition that salmon don't recognize boundaries and also a recognition that... we must work together in spite of our legislative and jurisdictional difficulties" (Interview with Lynn Hunter, November 6, 2000).

"We want to get people to adopt this landscape perspective—an ecological perspective—and to manage the system as a whole rather than as the sum of the parts" (Interview with Cleve Steward, October 12, 2000).

"People are starting to think more about Cascadia in its entirety rather than just [focusing on] political lines on the map. I think those are good, healthy things" (Interview with Tim Bristol, November 27, 2000).

"We are involved in a variety of scales, but everything is leading to realizing our mission statement which is the protection and restoration of biodiversity and ecosystems across the landscape. Now, key to that is understanding and realizing that that work isn't necessarily limited to political boundaries. We've realized that for some time. In order to be effective in our work and in order to reach our goals as embodied in our mission statement that we needed to look at British Columbia and we needed to take a large landscape view... We can't export our problems to another country. We can't consume resources the way we have over the last hundred years and expect to maintain habitat integrity and at-risk species in this country just because what we're doing is in another country. It just doesn't work... Obviously since salmon have a total disregard for whose country (laughter), y'know, what national sovereignty actually controls their spawning streams and nearshore waters, it provides us with a pretty good poster child for the need to cooperate" (Interview with Joe Scott, October 13, 2000).

Recognition of the spatial mismatch and its negative consequences tends to engender a larger-scale perspective on the salmon problem—a sense of shared fortunes with those 'across the line'—and also makes evident the need to cooperate. The comments of Tim Bristol of the Save Our Wild Salmon Coalition make clear that there is a growing appreciation for coastwide similarities and common concerns: "I think people are just starting to realize... that everything really is connected to everything else. To
sort of compartmentalize things based on states and provinces and regions is really not a good way to look at it just from sort of a conservation standpoint” (Interview, November 27, 2000). Recognition of the ecological irrationality of “compartmentalizing” salmon management based on political borders and territorial jurisdictions comes through clearly in this quote as well. Glen Spain agreed with this observation and explained how the PCFFA has responded:

“Our general rule of thumb is: ‘Wherever salmon go, we have to be there, also.’ That means national and state borders are irrelevant. They’re relevant only in that there’s a different set of laws, a different set of decision-makers, often, unfortunately, making inconsistent decisions. We do try to work for some sort of coherence. We try to promote those kinds of multi-interest, cross-jurisdictional line kinds of decision-making bodies” (Interview with Glen Spain, November 10, 2000).

The maps drawn by several representatives also clearly illustrate the trend towards a more “borderless” geographical imagination in their approach to the salmon problem. Take for example the map drawn by Ian Gill of Ecotrust Canada (Figure 18). He described his map as a depiction of his organization’s approach to the salmon:

“What this is trying to represent is there are a lot of trees, there’s a lot of fish, there are no dams and there are no borders. There are no political borders. Those (horizontal lines) are rivers—there are no borders. . . . The whole way down the line is a borderless world of watersheds as opposed to political sheds or economic sheds. . . . I think of it as one collection of watersheds” (Interview, November 11, 2000).

The reference to “political sheds” and “economic sheds” shows that Mr. Gill is well aware of the spatial framing of natural resource management based on criteria other than environmental rationality. The emphasis on a “collection of watersheds” points out the way in which Ecotrust, and other groups, are attempting to re-map salmon management and to network or link across different scales—the watershed, the region, the global and the local. The close collaboration between Ecotrust Canada and Ecotrust and the similar emphasis on re-framing salmon management is obvious when one compares the maps drawn by Mr. Gill and Ted Wolf of Ecotrust (Figure 19).
Figure 19: Map by Ted Wolf, Ecotrust
Mr. Wolf describes his cartographic efforts to illustrate his organization’s approach to the salmon problem this way:

“I would sketch the whole coastline from Alaska south, but then flip the map out of the common frame of reference and look at the river systems this way (horizontally). [This is] because when the map representation is in its familiar north-south orientation, people see things like that border and that border (draws in OR/WA and BC/WA border) and this border (draws Alaska panhandle border). When you turn it back this way, you look at the system of the coast and the landscape and you’re thrown back into a Native American orientation of what’s important is where we are with respect to where the water comes from—an upriver-downriver orientation. Then, these national/state/provincial boundaries look more artificial than they do to us. You jar yourself out of your automatic default orientation. So, by flipping the orientation, what it does is it creates a unity around the coast that doesn’t exist otherwise, so that’s why the switch”

In this case, both the map itself and the explanation make obvious the goal of changing spatial perspective in order to advance the cause of salmon conservation. This, I contend, has great potential as a strategy and represents an important political move away from linking natural resource management tightly to state sovereignty.

The trend towards a regional perspective and the growing sense of commonality felt by stakeholders on either side of the 49th parallel facilitate transborder work and are a result of that work as well. Sharon Chow of the Sierra Club of B.C. made this point when she reported that when working with American organizations on transboundary issues, “you don’t really see the border, you know what I mean? It’s not us and them, it’s we” (Interview, September 11, 2000). Ian Gill of Ecotrust Canada points out the border-destabilizing effect of cross-border networking this way:

“When we can we network people together . . . it is phenomenal how the supposed cultural or geopolitical divide—‘You’re an Alaskan, I’m a British Columbian; you’re a Washingtonian, I’m an Oregonian’—or some version of that, or frankly the sort of more cultural divide along Euro/Native Alaskan and y’know, ‘I’m a white guy from Bellingham’—most of that falls away immediately. Most of that is actually meaningless it turns out because what interests people is the status and the condition of the resource and of their role in that resource and what it’s doing or has done to their communities. And you get people talking about that and a) those sorts of perceptual borders fall away immediately, and b) there’s phenomenal desire and thirst for learning and information exchange and knowledge of the
market and just technical stuff, too. So, when you do get people together, the conditions for learning and the outputs from that learning are extraordinary” (Interview with Ian Gill, November 11, 2000).

Indigenous worldviews and values also need to be considered in this context because they continue to play a role in salmon politics and management. While not untouched by western ideologies (indeed, many indigenous groups suffer from the same problems of self-interest, short-sightedness and competitiveness in the fishery that plague non-native user groups), indigenous cultural views, particularly views of the environment, emphasize unity and connectedness and the value of cooperation. It is an attitude of, “Hey, Brother—you have problems and I want to help solve those problems and likewise, I hope you can help me solve these problems down here” (Interview with Jim Heffernan, October 30, 2000). While conflicts between groups of indigenous stakeholders are common, so too is the desire to work towards mutually agreeable solutions.

The growth in a transborder perspective described above signals a change at the level of ideas and conceptualization of the salmon problem. Since discourse and spatial images and imaginaries have been proven to have a marked impact on political action of all kinds, this change points to the de/reterritorialization of the spatial mismatch and the potential development of new forms of environmental governance that are more inclusive of NGOs and non-state actors.

Aquaculture

The worldwide “blue revolution” (Hannig 1988) in aquaculture, and salmon farming in particular, was without a doubt the single issue that generated the most passionate responses and commentary during the course of the interviews. It is clearly inspiring more transborder work and cooperation as the impact of the industry grows.

Aquaculture has dramatically changed the face of the fishing industry and salmon markets in recent years. During the last decade, aquaculture has more than doubled its production of fish worldwide, becoming the fastest growing supplier of seafood on a global scale (See Figure 20, first printed in The Globe and Mail, 1996).
Figure 20: Aquaculture as a Source of Salmon
During the last decade, salmon aquaculture in British Columbia has mushroomed. Between 1997 and 1998 alone, sales of Canadian farm-raised salmon increased by 14 percent.\textsuperscript{11} In that same year, sales of farm-raised salmon surpassed worldwide sales of wild and hatchery bred salmon for the first time. During the last 20 years, salmon farming has been practiced primarily in Chile,\textsuperscript{12} Norway, and New Zealand.

What began as a very small scale 'cottage' industry has quickly gained market prominence, causing the unit price of salmon to decline precipitously, altering the commercial capture fishery in what experts such as Glavin (1998) believe may be permanent ways. This has occurred despite objections from indigenous groups, commercial and sportfishermen's organizations, fishing communities, coastal residents and environmentalists concerned with the potentially harmful economic, environmental, health, and cultural effects of the industry.\textsuperscript{13} The consistent supply and low-price of net pen salmon has driven the price of wild and hatchery salmon down.\textsuperscript{14} The decline in price points in the capture fishery encourages over-exploitation of the resource and increases the risk of population declines and extinctions. Since the fish are worth less, fishermen are forced to harvest as much salmon as possible in as short a time as possible simply to remain solvent. In many cases, small fishing operations have been driven out of business by the cost of capital investments necessary to sustain a profitable harvest.

Another problem associated with salmon aquaculture is the public's inability to distinguish between wild, hatchery and net pen raised salmon. The widespread availability of salmon creates the false impressions that wild salmon are not truly threatened at all. Consumers ask themselves, "How could salmon be going extinct? There's plenty of canned salmon on the shelves of the supermarkets." They become confused or lulled into complacency and tend to shrug off the warnings of environmentalists as so much hysteria and radical ranting. The perceptions of the public are critical in influencing salmon policy, thus misperceptions of this kind are highly detrimental to wild salmon conservation.
Aquaculture threatens social systems and cultural identity as well, both Native and non-Native. Fishing communities are in danger, their traditional livelihoods and cultures facing destruction by highly capitalized, vertically-integrated, mostly European-based multi-national corporate fish farms. To many people in the region, "... the salmon is a cultural icon. It embodies the identity of a region and yet we are choosing—and by we I don't mean Americans—we globally are choosing to compromise that cultural icon... in favor of... this very inferior product" (Interview with Joe Scott, October 13, 2000). Native and non-Native people alike have protested against the cultural disruption occurring as a result of aquaculture expansion.\textsuperscript{15}

The serious concern over aquaculture links the region together. It threatens all fisheries with the possibility of introduced diseases and exotic species and it massively transforms salmon markets throughout the region, both of which lead to a greater sense of shared fortunes and the need to confront a common. As a result, several respondents echoed the sentiments of Tim Bristol of SOS when he reported that "the issue of salmon aquaculture holds the potential basis for future collaboration" (Interview with Tim Bristol, November 27, 2000).\textsuperscript{16} There is widespread agreement that coordinated action to raise public awareness and shape policy will be required to prevent aquaculture from causing the total collapse of the commercial salmon industry and/or the severe disruption of wild salmon habitats.

\textbf{Scientific Data}

The availability of new scientific data and information of value to establishing more effective and sustainable management regimes contributes to transboundary cooperation. This is in part a situation of leading by example:

"The scientific community is so accustomed to sharing information and to finding ways to exchange data and analysis and objectives that science is really leading on this. Science is way ahead of where policy and economic coordination is yet. There seems to be a much stronger verbal commitment around that on both sides of the border than was true two or three years ago (Interview with Ted Wolf, October 30, 2000)."
The growing commitment to data sharing indicates the likelihood that increasing "policy and economic coordination" on near on the horizon.

**Funding**

More common instances of transboundary work are also related to the increasing availability of financial support for cross-border programs. According to Tim Bristol of SOS, "There's a lot of foundation money out there these days" (Interview November 27, 2000). Six other interview subjects, three Americans and three Canadians, agreed. However, twice as many Group representatives spoke of money as a limiting factor rather than something that is currently adding to transboundary work (see Chapter 7), so this may not be as important a factor as one might intuitively suspect.

**Economic Integration**

Another factor of political economy that emerged as an aid to cooperation was the increasing level of economic integration between Canada and the United States, particularly in relationship to free trade (NAFTA) and perceived changes in the border related to ever closer economic ties. While the U.S. and Canadian economies have always been closely linked, the formalization of these ties through NAFTA especially has led to greater continental integration and an even greater sense of shared economic fortunes over the last 15 years. "One of the drivers behind better cooperation regionally on salmon is the fact that the U.S. and Canadian economies are more and more integrated all the time. . . . [The] overall change in the [international] relationship has been a driving factor in improving this whole climate on salmon" (Interview with Patrick Higgins, July 14, 2000). Ian Angus of the Pacific Salmon Foundation also sees a link between trade agreements and a less formidable international boundary:

"The height of the border is shrinking. Well, y'know, you've got free trade [and] you've got the [Pacific] Salmon Commission. . . . [The border] is still there—you still have to check in, but I think if we could find a project . . . and then get both sides together working on it we can sure shrink that border very quickly" (Interview with Ian Angus, November 11, 2000).

Other interview subjects echoed this sense of the diminishing importance of the border in relationship to NAFTA (and other agreements), and they, too, tended to qualify
their response. Rob Kirk of the BCCF noted that "The ability to move back and forth from a working perspective has increased a lot since NAFTA and things like that, but still it's not really a regular occurrence that goes on" (Interview October 24, 2000). So, while the border is becoming less important, there is no illusion among respondents that the border has been eliminated. Both the change and the continuity in the "height" of the border reflect the status of the sovereign state. While it remains formidable, it is not without its weaknesses. Borders and sovereignty are constantly in flux, expanding and contracting, often simultaneously, in relationship to a host of issues and trends. This multi-faceted character of sovereignty is explored further in Chapter 8.

**Domestic Concerns and Legislation**

There are domestic environmental policy and management issues that were identified as having a positive affect on cross-border cooperation on salmon. By far the most often cited domestic development in either country in regards to its impact on international salmon cooperation is the listing of an increasing number of salmon stocks as endangered under the federal Endangered Species Act. This appears to be one of the unexpected benefits of this much celebrated and frequently maligned legal statute which requires that species in decline be protected and their habitats preserved. An additional benefit according to several Group representatives and articulated best by Patrick Higgins, may be the creation of similar legislation in Canada, which currently lacks such a bill.

"There's clearly a whole bunch of people on the U.S. side who would have never been moved off a dime without the ESA. The ESA is obviously the driver—both the tool for the conservationists who are the activists on the issue, and the ultimate sort of wake up call for people who really wanted to keep ignoring it. You just can't any more. In fact, it's been so important to this, there are Canadians who wish that we had a similar tool on the Canadian side of the border" (Interview with Patrick Higgins, July 14, 2000).

The ESA is a useful tool for conservationists and it also can force the hand of government into undertaking more transborder cooperative actions. For example, the
June 1999 PST Agreement may not have come about without the listing of Puget Sound and Columbia River salmon stocks:

“The U.S. really had to have it (the Pacific Salmon Treaty Agreement of 1999) in place in order to start to clarify Endangered Species Act issues because as Gary Locke and others said repeatedly, there’s no way for Washington and Oregon to deal with their habitat issues without first at least understanding where they are on some of the harvest questions. . . . Those big political forces started to push to make it so that the Treaty just sort of had to be fixed” (Interview with Patrick Higgins, July 14, 2000).

**CLASS III**

Six or fewer Group representatives identified the factors in Class III as important in the interviews. Still, they should not be dismissed out of hand for two reasons. First, there were a total of 30 responses in this class, which is equivalent to 22%, or nearly a quarter of the total. More importantly, since interview subjects were asked to subjectively name contributing factors rather than being read a list of possible contributing factors with which they could agree or disagree, other Group representatives might have agreed with many of these factors had they been asked about them directly. It is apparent from the overall content of the interviews that this would have been the case for factors in Classes I and II as well.

**Networking**

An equal number of Canadian and American Group representatives named making contacts and forming networks as keys to increasing transboundary work. Meeting with individuals and forming relationships is a cornerstone of any cooperative effort. As Lynn Hunter of the David Suzuki Foundation pointed out, “Once you’ve actually met someone face-to-face, it enables you to work with them more effectively” (Interview November 6, 2000). The creation of functioning networks of individuals who communicate well with each other is vital to building additional links across the border and has been precipitated by the governmental failures of the past. “The collapse of the Pacific Salmon Treaty opened a lot of eyes to the need to cooperate much more . . .
(Interview with Glen Spain, November 10, 2000). New cooperative networks are being formed and are having concrete effects, as Ted Wolf of Ecotrust reports:

"There seems to be a really high and positive degree of information sharing among agencies and organizations responsible for, or involved with, salmon. I think one of the things that's propelling that is that there's this sort of cottage industry now of people whose professional work is devoted to implementing the [Endangered Species] Act or managing its local application. As those people migrate through their career ladders from job to job and agency to agency... that kind of cross-pollination that creates really enduring professional and personal connections among people around an issue, allows things to happen or at least allows information to be exchanged at a greater scale than has been true. So if the cottage industry around salmon can sustain itself, those connections are going to facilitate the kind of exchange both of experience and information that should be constructive. It should be helpful. That should provide a kind of a base that's resilient to changes in political administration... I think there's a real grassroots that is very equipped with a lot of information and influence in a very catalytic way and... I think that crosses the border" (Interview with Ted Wolf, October 30, 2000).

**Governmental Management Failure**

The failure of governmental efforts to curb the salmon's slide into extinction has clearly played a role in propelling NGOs to intensify their levels of action domestically and to reach across the border to look for solutions. More and more, "People are beginning to realize that they've been shockingly ill-served by governments as the managers of the resource" (Interview with Ian Gill, November 11, 2000) and their response is often to take matters into their own hands. "Things aren't] happening at the government level [so] I think that the private sector just has to leap in with both feet. I mean, we can't do it any worse, y'know? It'll make them accountable. That's the basic thing. These guys have not been accountable at all except to commercial fisherman" (Interview with Barbara Cairns, October 12, 2000).

There are some signs that government is changing its tune. The new North-South Fund and the abundance-based harvest regimes outlined in the 1999 Amendment to the Pacific Salmon Treaty represent a departure from past (largely failed) approaches to salmon management. These developments are much more cooperative and involve
abdicating some sovereign rights in a new and potentially far-reaching way. Regardless of the potential inherent in these developments, stakeholders remain frustrated and skeptical. While it was not a uniform opinion, there was considerable pessimism among interview subjects regarding the new Agreement’s potential for success. The majority of Group representatives were negative about the prospects for salmon recovery under the new Agreement rather than encouraged.

**Habitat focus**

“They’ve refocused their energy on . . . the big culprit for salmon decline and that’s habitat destruction” (Interview with Tim Bristol, November 27, 2000).

International negotiations about salmon have historically focused on harvest—issues of allocation and equity, who fishes when and where and for which stocks, with what type of gear, and so on. But harvest is only one of the “4 H’s” of salmon management and recovery. Because of the nature of sovereignty and its powerful influence in shaping what kinds of issues make it onto the negotiating table, the other 3 H’s—habitat, hatcheries, and hydropower—have long taken a backseat to questions of harvest. This is true in spite of the fact that the destruction of habitat has been recognized as a key issue in the decline of salmon populations for nearly 150 years. In recent decades, conservationists and some scientists have been stressing the need to refocus attention, energy, money and research on the other 3 H’s, particularly the question of habitat, and it appears that people are beginning to listen. Cleve Steward of the Sustainable Fisheries Foundation offered an interesting analogy in discussing the progress of Canada and U.S. states relative to habitat issues:

“Canada has gotten on board in terms of acknowledging that a lot of the problem lies in the freshwater habitat. It’s not just an overfishing or an ocean productivity issue or a management issue. . . . It’s sort of like a breakthrough at Alcoholics Anonymous—‘Hi! I’m British Columbia and I have a habitat problem!’ (laughter). . . . That’s a first step on the road to recovery, so to speak (Interview with Cleve Steward, October 12, 2000). . . . I think Canada is coming around and has made a lot of progress of late. They’ve started to study the problem. They’ve cataloged the status of their stocks. They’re hopefully resolving some of the federal-provincial differences and devoting some funding to this. But this is all a process
that we've gone through at a much larger scale, even, down here in the lower 48. Now, it's just beginning to dawn on Alaskans that they are in a similar state. It's not just, 'We've done everything right so don't bother talking to us,' which was the attitude even back in 1996. . . . But, it rang kind of hollow when their fisheries crashed and that crash was driven by a combination of the El Nino and La Nina and over fishing" (Interview with Cleve Steward, October 12, 2000).

Refocusing attention onto habitat is hugely important if wild salmon are to recover and thrive in the region. There is near universal agreement on this point among interview subjects, among stakeholders at conferences and meetings I attended, and in publications. The map of the salmon problem drawn by Mike Sato (Figure 21) graphically illustrates the importance of habitat concerns to People for Puget Sound and it is also reflective of the more generalized interest in habitat among stakeholder groups. Mr. Sato represents the salmon migration route as an hourglass, with the young salmon originating in the upper watershed tributaries that feed into the estuaries—the narrow part of the hourglass—from the top, and the adults returning from the marine environment through the estuaries back to the rivers to spawn. The estuaries are, for PPS, "the area that we concentrate on and [it] is the most critical area of the salmon's path that nobody has paid much attention to. This is the area that needs to have habitat restored . . . This is the hourglass and time is running out" (Interview, September 26, 2000).

The shift in focus onto habitat conservation and restoration facilitates cross-border work and by its nature, represents a challenge to the notion of sovereign territory. The idea of working across borders on habitat surveying, research, and conservation breaks one of the foundational "laws" of the sovereign state—the right to control what happens within its territory. This is the main reason why habitat issues have been de-emphasized in the past in international dealings. Neither country wanted to be told what to do within its borders. It was easier to blame fishermen for the loss of salmon then to address habitat destruction. But the rate and degree of decline in wild salmon populations, the failure of harvest-focused management regimes and the political agitation of NGOs (including fishermen's' organizations) and tribal groups has forced a reevaluation of this approach and it is pushing the envelope of sovereign space.
Figure 21: Map by Mike Sato, People for Puget Sound
The refocus on habitat is part of a more general progressive move in conservation and management thinking. In the words of Mike Sato, people are beginning to “think outside the box” of territorial space. Thinking outside the box in this case includes moving away from reliance on old explanations and inadequate solutions. Turning away from the status quo responses of the past opens the door to considering new possibilities, such as developing and enacting joint solutions and the disassembly of the (mismatched) spatial frameworks of salmon conservation and management. These new approaches require a discourse all their own—a new territorial language.

“All of the organizations here in the states—the Forest Service, the U.S. Fish and Wildlife Service, Ducks Unlimited, all the conservation organizations—they’re all talking about setting aside areas as salmon sanctuaries or SEAs (Salmon Emphasis Areas). They don’t want to call them sanctuaries because that scares off land owners and lots of other people. It’s become a part of the ‘speak’ and the agenda of the agencies here in the states. I think it will spread” (Interview with Xan Augerot, September 19, 2000).

The development of a discursive language of transterritorial cooperation that diverse stakeholders can comprehend and work with is an important tool. Creating acceptable terminology for activities that are inherently destabilizing and viscerally threatening to the idea of sovereign territory is key to implementing new spatial approaches to salmon management and conservation.

**International Institutions as Vehicles for Transborder Work**

Some representatives noted the role of more formalized modes of governance, in particular the structure of the Salmon Treaty, as being conducive to cross-border work. Tim Bristol of SOS probably articulated it best:

“Now that we finally got that thing signed (the 1999 PST Agreement)—not that folks here are absolutely happy with it—but it is signed and a deal’s a deal. I think it really lays the groundwork for just sort of average folks out there doing stuff at the grassroots level to start talking more. . . . At least it lays the groundwork for everyone to start thinking that you can’t just isolate yourself. Alaska can’t just say, ‘Ah, the hell with endangered species in the Pacific Northwest! Leave us alone!’ They can’t do that. They have to think a little bit more broad-based, a little bit more globally” (Interview with Tim Bristol, November 27, 2000).
Economics and Conflict Avoidance

Finally, a very few representatives mentioned the last two contributing factors I am considering here—the desire to avoid further cross-border conflict and a strong economy. Rob Kirk observed that, “When the economies are going well, people would rather focus more attention on the environment than when times are bad” (Interview October 24, 2000). It is clear that the salmon fare better when economic conditions encourage or support their conservation. Unfortunately, downturns in the economy and other influences, such as changes in environmental or weather conditions or in the cost and availability of electricity in the region, can have the opposite effect, tending to work against salmon conservation. The worst drought in seventy years in the U.S. Pacific Northwest during the latter part of 2000 and into 2001 is a perfect example of this relationship. The battle between competing interests vying for scarce water was front page news. Representative headlines included “Salmon Must Pay in Power Crunch” (Sorenson, Seattle Times, January 19, 2001) and “Head-on Clash Over Salmon and Power: Not Enough Water Expected for Both” (Mapes, Seattle Times, February 15, 2001). The needs of salmon often (though not uniformly) ended up taking a back seat to energy generation, urban water needs, and recreational and agricultural water use.

Conclusions

There are many types of cross-border work on salmon issues and a wide range of factors that enable or contribute to its expansion. Salmon organizing across borders is increasing in scope and kind, challenging normal, territorial forms of governance. Organizations are beginning to surpass the limitations imposed by the geopolitical discourses that determine the transboundary resource management landscape—the territorial trap. The failed spatial structure of international salmon management that emerges from that discourse—the spatial mismatch—is coming under scrutiny. NGOs are having an affect on international policy even though they lack the traditional requirements necessary to act in this arena—territory and sovereignty. Thus, their actions are examples of governance that disruption and force the renegotiation of the sovereign
state. The solidity of the border and the foundations of territorial sovereignty are challenged by transboundary initiatives. Nevertheless, the borders remain and limits to cooperation based on the territorialization of resources persist. These limits and barriers are the subject of the next chapter.
Notes to Chapter 6

1 Within this chapter and the next, maps drawn by Group representatives during the course of the interviews are included where appropriate to illustrate particular points. These maps were drawn in response to the following request during the interviews with Group representatives: “Please draw a map that graphically depicts the salmon problem, illustrating the critical areas, flash points, or other important markers and movements from the perspective of your organization.” This question often required some explanation or re-wording and was intentionally left rather vague to encourage the respondents to depict what was most important to them. Thus the maps may tend to reflect the individual interview subject’s perspective, rather than their Group’s perspective, more than any other response.

2 SFF also coordinates many smaller conferences, implementation workshops and planning meetings both in Canada and the U.S. that frequently host speakers and presenters from the other country and which include input and assistance from staff in both countries.

3 After 4 successful years, SFF relinquished its role as one of the primary sponsors and organizers after the 1999 Forum for a variety of reasons.

4 Scientific data sharing and technical assistance goes both ways, however. For example, the Canadian CRITFC has provided technical assistance to the Okanagan Nation on the U.S. side of the border.

5 Cooperation has extended recently into Quebec and Alberta over the federal Softwood Lumber Trade Agreement. “So, there’s a lot of work cross-border. I’m only scratching the surface, actually. We do a lot of stuff” (Interview with Joe Scott October 13, 2000).

6 States also ostensibly represent populations, of course, but their sanctioned use of force within a given territory lends them a qualitatively different form of authority which changes the nature of that representation.

7 “In terms of our actual activities, the most so far are with the Russians and we have very active programs there” (Interview with Xan Augerot, September 19, 2000). These include the Kamchatka Steelhead Project and the Rapid Assessment Project aimed at identifying watersheds with the best ecological, economic and temporal conservation potential in Russia to jumpstart the organizations goal of establishing a Pacific Rim protected area network. Cooperation with federal, institutional and university biologists is extensive.

8 There is some debate on this point in reference to Canada. There are commentators, I among them, who view the heavily resource dependent trade economy of Canada as an indication that it is not truly or completely a “core” country, but rather that it exhibits traits of both first and second world nations.

9 “Because 25 of 27 of the world’s major fisheries are in serious to catastrophic decline, if we don’t start trying now, they won’t be savable” according to John Nightingale, executive director of the Vancouver Aquarium Marine Science Centre (Stainsby, Vancouver Sun, February 3, 2000)

10 A federal lawsuit filed in January of 2001 by 20 Treaty tribes against Washington State over highway culverts that block fish passage. The suit was claimed by the Seattle Times to have the potential to be “as far reaching in its effect on fisheries as the Boldt decision of 1974” (Mapes, January 17, 2001) by compelling the state to spend hundreds of millions of dollars to repair culverts that damage fish runs and to consult the tribes about any state-sponsored activities that might impact their ability to make a moderate living from fishing.

11 There are some net pen rearing operations in Puget Sound as well, but as yet, the industry has not taken off in the U.S. as it has in Canada, mostly because of more stringent environmental controls and bureaucratic difficulties. “I don’t know why they do it, but B.C. is pretty lenient on their aquaculture program” (Interview with Jim Heffernan, October 30, 2000). Alaska has taken the precautionary step of prohibiting salmon farming operations altogether, but Alaskan salmon fishermen are still concerned about the industry.

12 “We’re getting the competing product from Chile, Norway and places like that. They are all [from] eggs that were harvested in Oregon and that really pisses our people off. They’re being put out of business by a
policy of marketing eggs to raise a little extra money by our own fish and wildlife agencies. All the Chilean stocks originally came from Oregon hatcheries (Interview with Glen Spain, November 10, 2000).

13 Salmon aquaculture is one of the most dangerous forces for the wild salmon populations and commercial salmon fisheries. For an in-depth analysis of the actual and potential negative impacts of salmon farming in British Columbia, see Net Loss: The Salmon Netcage Industry in British Columbia (Ellis 1996).

14 Rob Morely of the Canadian Fishing Company spoke at length about the "profound impact on the business as a result of farmed salmon," especially the near total collapse of the frozen salmon market because of the year-round availability of fresh net raised fish (Interview, October 23, 2000). There is a tremendous difference between wild and farmed salmon businesses. The former is risky and based on peaks and ebb. The latter is a flow or cash stream business with much less risk involved. The low price of farmed salmon is partially due to a de facto subsidization in that farm operators are not required to cover the cost of the environmental impacts of salmon farming.

15 Efforts by citizen leaders, particularly First Nations representatives, in opposition to aquaculture due to its damaging impacts on the environment, economy, cultures and human health are on-going and intensive. The impassioned pleas of stakeholder spokespersons were a key feature, for example, at the Leggatt Inquiry in B.C., an unofficial inquiry by a former B.C. justice into public opinions of aquaculture sponsored and organized by the David Suzuki Foundation. I attended one day of the inquiry in Vancouver in October of 2001, though there were a total of 10 days of hearing throughout the province.

16 Indeed, the establishment of the Canada-wide AquaNet research project, a collaboration of industry, government and academic researchers conducting over 40 different studies of fish farming on both coasts, demonstrates both the importance of this market segment and the tendency it has to draw many diverse and geographically-distant interests together.
CHAPTER 7: THE LIMITS TO TRANSBOUNDARY ACTION:
MARGINALIZATION, MANAGEMENT, AND IMAGINATION

Introduction
While there is no doubt that transboundary initiatives aimed at improving the conservation and management of wild salmon are growing in number and expanding in scope, serious limits to transborder work remain. In this chapter, I examine and analyze the different types of obstacles stakeholder Groups encounter when they attempt to work across the international border. In my analysis, I emphasize the limiting and enframing affects of sovereignty, highlighting the ways in which the sovereign territorial state remains powerful and mitigates against the potential destabilizing impacts of transboundary environmental governance through the use of discursive and material devices. This analysis is intended to develop a clearer picture of the nature of cross-border environmental conflicts—both their causes and possible solutions—and to generate a better understanding of how the continuing potency of “the principle, institution, and practice of sovereignty” (Walker 1995b) impacts the potential for successful conservation and management of transboundary natural resources.

Links to Theory
My research suggests that the key impediment to transborder cooperation is territorial sovereignty in its many and varied manifestations. Borders, key signifiers of sovereign territory, remain powerful in a material sense as well as in the imagination of many stakeholders as the map drawn by Rob Morely of the Canadian Fishing Company illustrates (Figure 22). The geopolitical organizing principle of territorial (i.e. state) sovereignty prevents or complicates cross-border cooperation by influencing nearly all realms of international interaction as well as by affecting domestic political action.
Figure 22: Map by Rob Morely, Canadian Fishing Company
There are three ways in which sovereignty can be described as preventing or limiting cross-border cooperation. On the ground, they do not operate in isolation from one another, nor are their margins sharply defined. Rather, they are closely linked and interdependent. However, for analytical purposes (and to build on previous discourse analysis studies of sovereignty/territoriality), it is helpful to break down the affects of sovereignty on this particular arena of action into its primary constituent elements. These elemental groupings are briefly introduced below. In the text that follows, these affects of sovereignty are discussed in relationship to the 18 limiting factors identified by interview subjects in this research.

The first and most basic element refers to the political and legal effects of sovereignty. Sovereignty determines access to or exclusion from power, defines constituencies, locates the seat of authority in the state, introduces questions of legal standing and rights, and establishes spatialized units of governance. The needs of some stakeholders are elevated above others creating a condition of marginalization. Stakeholders with similar agendas may be pitted against one another by virtue of their location. For example, indigenous fishermen or conservationists on opposite sides of the international border may find themselves in conflict with each other because of the country in which they live, rather than being able to work as allies based on common goals, struggles, and concerns. Political sovereignty also shapes and even prevents movement and interaction across space. Borders and boundaries (and the territorial arrangements they reflect and reinforce) have material effects—complicating communication and travel, perpetuating different economic systems, and so on.

Secondly, sovereign territory is the basis for designating environmental management areas and the assignment of agencies to oversee operations in those areas. Obviously, this is in many respects a political function, but when considering transboundary resource use and control, the question of management units deserves special consideration. Distinguishing management areas based on sovereign territorial space lays the groundwork for the spatial mismatch between the geography of the
resource and the entities charged with managing that resource. That is, responsibility for the management of the resource is divided based on borders between countries (as well as states, provinces, counties, ridings, cities, towns, etc.). Consequently, disparate goals, measurement models, and operational policies emerge and disunity and fractured management across the range of the resource is the result.

Thirdly, sovereignty discourse creates separation and difference in the minds of stakeholders by defining a “we” and an “other” based on location. The borders of sovereign states are lines of inclusion and exclusion, nationalism and patriotism, and as such they affect perception. They shape our picture of what people, things, and institutions are like “over there.” These notions of difference can play a powerful role in preventing transboundary cooperation just as finding commonality can encourage cooperation as I suggested the previous chapter.

The discussion that follows is an attempt to unpack the ways in which sovereignty limits or prevents cross-border work and cooperation. By identifying and examining the barriers and blockages posed by the political, managerial and perceptual impacts of sovereignty, this analysis suggests potential avenues of disruption available to groups locked out of sovereign power. It also shows the continuing strength of the sovereign state system even in the face of destabilizing influences.

**Organization of the Data**

The interviews I conducted for this research resulted in 18 responses to questions regarding impediments to cross-border work. As with the previous chapter, this data is largely based on answers to direct, open-ended inquiries, but additional responses were culled from other portions of the interviews when appropriate. There were a nearly as many responses from Canadian participants as from Americans (95 versus 108). Unlike the factors that contribute to cooperation, there was general agreement on the importance of most factors among Canadian and American representatives (as determined by the number of responses), with a few exceptions. Because of this high level of agreement, only those responses that were heavily skewed (many more Canadian or American
responses) will be discussed quantitatively. Seven responses were given by less than a third of all Group representatives but are included in my analysis nevertheless because I found them to be revealing or significant in some way.

The responses have been organized into four thematic categories. The first is Organizational Limitations and includes those things that impede transboundary work at the level of the individual Group. This category emphasizes problems encountered by many NGOs in terms of resources (money, expert advice, etc.) on the one hand and issues of marginalization on the other. These two things are related in that marginalization and lack of access to resources often go hand-in-hand. The second category is Political Complexity and refers to political barriers not specifically associated with the international nature of the resource. This category includes questions of domestic politics and the multi-stakeholder nature of the salmon problem. The third category, Concrete Effects of the Border, includes the grounded political, managerial and material barriers created by the practice and institution of sovereignty and makes apparent the entrenchment and intense affects of the spatial mismatch. The fourth and final category, Perceptions Across the Line, includes the limits to cooperation based on ideas about people and institutions in the other country. This category thus highlights the impact of sovereignty discourse at the level of imagination, assumption and perception.

Organizational Limitations

Limitations at the level of the organization preclude transboundary work in some cases. For example, some study Groups are limited in their cross-border work simply by virtue of their mandate or mission statement. Other Groups have chosen a particular domestic initiative, issue or project to focus on in response to financial or other limitations or because they believe that it might be beneficial to their broader agenda. For example, Save Our Wild Salmon is currently focusing on the breaching of 4 Snake River dams. The David Suzuki Foundation is putting most of its organizational energy into researching, publicizing, and working against the negative effects of aquaculture operations in British Columbia as the map drawn by Lynn Hunter (Figure 23) illustrates.
Figure 23: Map by Lynn Hunter, David Suzuki Foundation
The “X’s” in this map are salmon fish farms, mostly on and around Vancouver Island (“the center of the universe!” according to Ms. Hunter). This map was drawn as an illustration of what the DSF sees as the key issue relative to the salmon problem at this time. The focus on Vancouver Island is largely due to the fact that most salmon aquaculture in the region occurs in that area. As one can see from this map, because of the intent or scope of Groups such as the DSF, focus has been placed on dealing with the salmon problem at a smaller scale—local, regional or within a domestic watershed—even though most of these Groups stated that they would like to be doing more transboundary work. The issue, as is so often the case with charitable organizations and NGOs, is one of limited resources—time, energy, staff and money. Statements along the lines of, “We already have our hands full” (Interview with Tim Bristol, November 27, 2000) and “Everybody’s kinda scrambling just to get their own stuff done” (Interview with Rob Kirk, October 24, 2000) were common.

For those organizations that are trying to work across the border, insufficient resources was identified as a barrier by over half of the Groups, but more frequently by Canadian respondents than Americans. This indicates that Canadian Groups may feel somewhat more strapped for money and time than their American counterparts. The U.S. Sustainable Fisheries Foundation representative bore this conclusion out when he reported that, “We’ve gotten funding for a couple of our (initiatives). Don (MacDonald from SFF Canada) more or less struck out” (Interview with Cleve Steward, October 12, 2000). There is even the possibility that SFF will be dissolving or reorganizing because of differences in “available funds and interest by the funders in the two settings. He (Don MacDonald) is working with an entirely different set of cards up there” (Interview with Cleve Steward, October 12, 2000).

While funding might be a more significant problem for Canadian organizations, it is nevertheless still a concern for several of the U.S. Groups. Typical of many environmental NGOs, Joe Scott of NWEA told me that, “There’s never enough money, Jack. There’s never enough money. I could hire a staff of ten just to work on the trade
issue. Certainly that's a constraint. We don't have the money to compete with the timber industry or the aquaculture industry” (Interview with Joe Scott, October 13, 2000). “Money is clearly an issue” (Interview with Ken Johnson, September 19, 2000) and this is especially true for NGOs and other stakeholders that are at a disadvantage relative to more powerful interests, particularly those with close ties to government.

For some Groups, money is an issue because they need to be able to prove the benefits of cross-border initiatives to their funding sources. Group leaders understand that it is important “to be able to show results to people who invest in our activities” (Interview with Barbara Cairns, October 12, 2000) if they want to be able to count on those investors for future support. “They’re not just going to give money away” without proof that that money is being well-spent (Interview with Barbara Cairns, October 12, 2000).

Successful transboundary projects are thought to be harder to pull off than more localized or domestic projects, prompting some Groups to confine their activities to a smaller scale. This is not always a choice. In some cases it is a financial necessity. For example, even though most Groups believe that the salmon problem should be addressed in a transborder fashion, those who support the organizations may not understand the spatiality of the problem in the same way. As Lynn Hunter explained, “It’s a matter of the foundations who are funding us understanding that this is a global situation that we’re up against and that in order to have a solution we’re gonna have to attack it in a less parochial manner” (Interview, November 6, 2000).

Money isn’t the only resource that is in short supply. Time and energy are important factors as well. Time is understood to be a limit both for NGOs and for government agencies that could be partners in transboundary operations. “Certainly on the Canadian side, and I expect it’s the same on the U.S. side, environmental resource management agencies are severely strained [so] dealing with cross-border issues tends to go in the ‘too hard’ box” (Interview with Bill Green, December 21, 2000).
More significant than shortages of money, time or other resources for the Groups in this study was the reported lack of political power. This derives from the principle of sovereignty wherein political power in the international arena is vested in sovereign states to the exclusion of other voices. As previous work has shown, (c.f. Kuehls 1996; Wapner 1996) disruptions of sovereign power in international relations occur at both the supra-state and the sub-state level, but while becoming more prominent on the political landscape, evasions of sovereignty remain the exception rather than the rule. The ability of NGOs and other interest groups to institute projects across the border or to have a seat at the policy-making table is curtailed because they are entities without territorial sovereignty and therefore without political power relative to state agencies and institutions. Again, this lack of power is closely linked to insufficient resources among disenfranchised stakeholder groups.

The primary area of frustration is with the lack of inclusion in policy-making processes rather than with official limits placed on nongovernmental initiatives. The two are related, however, since there would be less need for nongovernmental action if an adequate job of conserving and managing salmon was happening at the level of formal governance. Most of the Groups surveyed specifically pointed to a lack of political power as a barrier to effective policy formation, particularly in regards to the Pacific Salmon Treaty:

“Well, unfortunately that was taken out of all of our hands by the government when they went off and signed their own deal and it’s a done deal at this point. It would have been much better if there was some sort of public process that led up to it. Then it would have had NGOs working together—as it was, we were all just bystanders” (Interview with David Lane, November 27, 2000).

Part of the problem with being relegated to the position of ‘bystander’ rather than being acknowledged as legitimate stakeholders is that the interests that are represented in policy-formation processes are not inclusive. Certain perspectives and needs—those of conservationists, tribal people, sportsfishermen and small fishing communities, among others—tend to be sidelined. According to Xan Augerot of the Wild Salmon Center, “In terms of the institutional arrangements, it’s the entities emphasizing harvest and
supporting it—the scientific organizations—that have a seat at the table internationally” (Interview, September 19, 2000). This claim is echoed by Terry Glavin, an award-winning journalist who grew up fishing the B.C. coast who has written extensively on coastal fisheries issues. He wrote on the salmon issue for the David Suzuki Foundation in a booklet entitled Last Call: The Will to Save Pacific Salmon. In this booklet he says that:

"participation in annual treaty negotiations has been limited almost exclusively to industry ‘stakeholder’ groups, and the long-term public interest of both countries’ citizens, as well as the long-term health of biologically-diverse salmon populations are not reflected by the treaties’ objectives, even in those occasions when the treaty’s objectives are met” (1998: 21).

Moreover, there is little accountability in the process, as Sharon Chow of the Sierra Club of B.C. makes clear:

“One of the ideal things would be that we could get a seat or have input into the Salmon Treaty. If we had an American and Canadian [NGO] presence [at PST meetings], we’d have a better treaty. And that’s why the treaty’s so bad. Even the Americans say ‘You guys got really shafted!’ It’s sort of an old boy’s network and they wouldn’t be doing all that stuff if they knew that somebody was watching them. Who’s there representing conservation? We need to have a conservation component represented at the Treaty—it’s really important. And we’ve said this several times and nothing’s been done” (Interview, September 11, 2000).

The degree of input into policy and management regimes is not uniform across the different types of Groups or across the border within one type of Group. U.S. indigenous Groups, for example, have considerably more political and legal power to affect salmon issues than their Canadian counterparts. Fred Fortiere of the BCAFC believes that “The Pacific Salmon Treaty doesn’t work because First Nations on the Canadian side aren’t involved. We don’t have full and effective participation within the process” (Interview, December 12, 2000). In response to being excluded from having a meaningful voice in a process that has immediate and serious consequences for indigenous people throughout B.C., two First Nations representatives to the PSC (who serve only in advisory role and have no voting power on the Commission) resigned in the last months of 2000.2 In light of the current trajectory of legal decisions concerning
indigenous rights in Canada, the outlook for First Nations in their bid for more fishing rights and a stronger voice in salmon policy and management is promising but will certainly present on-going challenges. The lack of codified commercial fishing rights among Canadian First Nations is also likely to be "a stumbling block for them up there—something they have to work through. I think in the next five or ten years, we're probably going to see a lot more law suits because they're frustrated with where the treaty negotiation board is moving or not moving" (Interview with Jim Heffernan, October 30, 2000).

The question of the right of indigenous people to the participate in the use and management of the fishery as sovereign nations is particularly important to the central themes of this research. This is because of: 1) the economic and related social implications of indigenous sovereign rights to salmon both for Native and non-Native fishermen; 2) the ability of indigenous claims and law suits to affect transboundary negotiations over salmon allocation and protection; 3) the significant political ramifications that could derive from acknowledgement and acceptance of Native sovereignty by the governments of Canada and the U.S.; and 4) the broader geopolitical implications of the way in which indigenous groups appropriate the language and logic of European-style sovereignty, creating new scriptings that disrupt statist discourses of power and control over resources. The issue of indigenous sovereignty is so critical that it inspired the authors of a booklet on salmon fishing communities in B.C. written under the auspices of the David Suzuki Foundation to state that, "Without a lasting reconciliation between Crown sovereignty and aboriginal rights, there can be no hope of establishing sustainable salmon fisheries anywhere west of the Rockies" (Edwards and Glavin 1999: 22).

Because it has the potential for such far-reaching impacts, the question of Native sovereignty/control over fishing and habitat management is also a very volatile issue. Racial prejudice is a common response to Native sovereignty claims, adding yet another element of social complexity to the salmon problem. As was shown in previous chapters,
racist ideology and practice have been features of the salmon problem historically and anti-Native sentiment continues today.

The struggle for the right to participate in salmon policy formation and management is not only a battle against exclusion for Native peoples. In the U.S. and in Canada, NGOs of all stripes struggle against the leverage of governmental, scientific and corporate powers. In Canada, the ability of individuals and interest groups to influence environmental and natural resource decisions is perhaps more limited than in the U.S. by nature of the relationship between the province of B.C. and resource industries. Tim Bristol of Save Our Wild Salmon observed that:

“When conservationists (in Canada) try to negotiate protections of lands and better stream set-asides, for example, and salmon habitat or bull trout habitat, they’re negotiating with industry. They’re not negotiating with the governments. They’re negotiating with industry. Industry controls the land base, for all intents and purposes. I mean, certainly there is government input into a lot of this stuff, but they’re sitting down at the table trying to get industry to protect streamside habitat, things like that. So, it’s a totally different system and one in which citizens have virtually no control except to put their bodies on the line” (Interview, October 13, 2000)

In the U.S., the hubris of science-based government agencies was found to be an obstacle and the same conditions likely exist in the Canadian context. Barbara Cairns of Long Live the Kings mentioned that when her organization first wanted to become involved in hands-on hatchery operations in 1986 to rebuild stocks and stimulate community connection with salmon, the response was far from encouraging: “That was apostasy! I mean, on the part of government folks, they just didn’t think a private citizen should touch a fish. Y’know, that was just—they were aghast at that! And there’s still some who are. I mean, they really resent it enormously” (Interview with Barbara Cairns, October 12, 2000). Experiences of this sort have led many NGOs to believe that the only sensible response to the salmon crisis is to take matters into their own hands.

Political Complexity

“First of all, the complexity of the problem, not just the issues, but all the things that are involved, both human and non-human, sort of defies comprehension. . . .
Just from an operational standpoint and a knowledge standpoint, we’re deficient, ok? But then you overlay on top of that the jurisdictional differences, goals and attitudes, the capacities, the funding, the resources available, the political context—all of that makes this even more complex and more susceptible to derailment, to stopping before it even gets going. This is nothing new. We’re constantly fighting this battle” (Interview with Cleve Steward, October 12, 2000).

As Cleve Steward of the Sustainable Fisheries Foundation so clearly states above, there is no question that the salmon crisis is a complicated, dynamic and vexing problem. Even in the absence of the international dimension, salmon management in its current form involves trying to balance an incredibly wide range of interests over an extensive geographical area divided into distinctive zones of jurisdictional control. Ken Johnson of the Pacific States Marine Fisheries Commission reported that in the Columbia River system alone, “there’s 20. 30 agencies involved in one way or another in the salmon management. It’s a nightmare!” (Interview with Ken Johnson, September 19, 2000). Serious problems of conflicting rights and bureaucratic red tape emerge “... when you have so many jurisdictions, none of which have authority over the other” (Interview with Mike Grayum, September 18, 2000).

The problem of balancing interests is just as intense in the Canadian context, if not more so, particularly in relationship to the indigenous fishing population.

“There’s only nine (U.S.) tribes that fish on Fraser sockeye. That’s a relatively more manageable situation then the Canadian First Nations have where just on the Fraser River alone—not counting the First Nations groups that intercept these fish in marine waters on Vancouver Island and elsewhere—just in the river alone, there’s something in the neighborhood of 96 bands that live on that river!” (Interview with Mike Grayum, September 18, 2000).

The sheer number of stakeholders involved in the salmon problem on the Northwest coast makes addressing the problem a very challenging puzzle. Ian Gill of Ecotrust Canada made an interesting observation that may provide a key to solving that puzzle. He believes that the intransigence of the problem is a function of the way that it is approached—the game of stakeholder-based resource management—rather than being a function of the number of players in that game.
“I think the failing of the stakeholder process as [it has] been conventionally conceived and conducted in resource management issues . . . is that people come, by definition, with a ‘stake,’ which, by definition, they’re trying to ‘hold’ on to and they’ll hold on for grim death. [W]hat they’ll really do, what they perceive as success, is coming away from the stakeholder engagement with as little erosion to their stake as possible. That’s the basic conundrum, or . . . that’s the game that is played in the stakeholder process” (Interview with Ian Gill, November 11, 2000).

I found this to be an insightful, accurate and potentially very useful analysis. If the process of negotiating for allocation, control, and so on were reframed away from the ‘stakeholder’ model, perhaps a more productive approach could be constructed. Ecotrust and other Groups, by seeking holistic and sustainable approaches to transboundary environmental issues, may help to break down the conventional and flawed stakeholder system of resource management.

They have a difficult road ahead of them, however, as other domestic political hurdles loom at least as large as the basic structure of stakeholder politics which currently delimits and configures resource management. “There are institutional blockages, government blockages. Our system of government is not set up either here or in Canada to address these problems” (Interview with Barbara Cairns, October 12, 2000). The most commonly cited reason for failure to make progress on transboundary issues is one of domestic political geography: a lack of cooperation among the U.S. states of Washington, Oregon and Alaska:

“Actually, I think one of the biggest threats to . . . recovering our salmon stocks in Washington is our own internal cooperation amongst ourselves domestically. We have multiple jurisdictions that affect all those things and we don’t have one person in charge who can dictate the solution. More often than not, we find ourselves with conflicting goals and objectives and it’s causing the salmon runs to go downhill” (Interview with Mike Grayum, September 18, 2000).

This lack of cooperation stems from many sources such as discrepancies in state laws, histories and the positioning of indigenous populations, but it is primarily a result of the geographic location of the states, which establishes for each a different set of conditions, pressures and claims relative to salmon resources. The fact that each state is a member of the union does not mitigate against the spatially-driven diversity in goals,
interests and concerns. Ken Johnston of the PSMFC made this point evident when he told me that “just within the U.S. alone, there is clearly a major lack of cooperation. It’s as if Alaska is standing as a separate country, almost, relative to the lower states. And Canada feels the same way. They have an enormous amount of frustration with the Alaskan position” (Interview, September 19, 2000).

As anticipated at the outset of this research and confirmed in previous quote, Alaska is the source of tremendous consternation for the other states that are involved in the PST as well as for the Canadians. The migratory patterns of Pacific salmon bring many more adult fish hatched in the southern reaches of the range into Alaskan waters than vice-versa. As a result, Alaskan fishermen intercept many more of the fish born in B.C. and the PNW in comparison with southern interceptions of Alaskan salmon. Thus, the southern fishermen tend to feel that the Alaskans are stealing ‘their fish’ and that they benefit from habitat protection and fish culture expenditures without contributing to the cost of those programs. In discussing the Alaskans’ displeasure with Canada’s decision to limit the harvest of Fraser upriver brights because of declining populations, Ken Johnson of the PSMFC commented that:

“This is something I really don’t understand. These are all free fish [for the Alaskan fishermen]. They’re not producing a fish that I can see that comes back into the breadbasket down here. It’s a one-way street and yet, why they aren’t more cooperative is beyond me. The reality is, if they were more cooperative, there would be more fish coming north, too. Those fish go north and they get clobbered! So there’s a lot of resentment there” (Interview, September 19, 2000).

The frustration with Alaska is also related to the fact that, for the most part, Alaskan salmon habitats are relatively healthy compared to those in B.C. and most certainly in comparison to those in the Pacific Northwest states. Spawning grounds in Alaska are numerous and comparatively clean and rivers are more often free of barriers to fish passage. As a result, Alaskan stocks are in better shape overall (although there are increasing signs of stress on the system). Therefore, Alaskans feel they shouldn’t have to pay the price for development choices, degradation, and depleted runs in the south by limiting their catch any more than they already have:
"[T]here’s a lot of frustration with Alaska because they’re not very cooperative and yet the Alaskans have a totally different view of it—like they’ve given up a lot. (Interview with Ken Johnson, September 19, 2000).

The frustration is compounded by the domestic political power of Alaskan elected officials. "... As long as Alaskans have as much clout in congress as they do, they will call the tune on a lot of stuff. This is a reality that’s very hard to accept and face sometimes, but it’s definitely part of it" (Interview with Patrick Higgins, July 14, 2000).

The ability of a small number of political figures, representing a fairly narrow set of geographically-based interests, to strongly influence the outcome of international agreements is a source of great consternation for many stakeholders, particularly Canadians whose parliamentary system works to minimize this potential.

Apart from certain well-connected government officials, stakeholder groups that have a voice in the international management regimes have the ability to stall or prevent transborder cooperation on fishery issues. The Treaty tribes are no exception. While generally less short-sighted than non-Native stakeholders, indigenous fishing groups are sometimes focused on a narrow range of personal interests to the point that they impede cooperation across the border.

"At the very end of the Salmon Treaty arrangements (June of 1999), the whole thing almost got blown up before the deadline because of some concerns on the part of one U.S. tribe in the Columbia basin [that was] basically angling to get more chinook. ... This is after years and months of discussion and a lot of buy-in by the tribes into what was going on. But then literally at the last minute—I mean, literally at the last minute—they got cold feet about one particular thing and also were trying to angle to get a little bit more advantage on an internal, U.S. matter of distribution of these fish. ... That kind of thing can nearly blow the Treaty completely up" (Interview with Patrick Higgins, July 14, 2000)

Geopolitical, ethnic, and interest group affiliation aside, conflicts that impede cooperation also develop at smaller scales—the river and the watershed—as a result of the geography of the salmon and salmon fishing. As was demonstrated in previous chapters, since the early days of the commercial fishery, the location at which one fished was a source of commonality with others and also a source of animosity. The problem remains today. Just as Alaskan fishermen are frequently embattled with B.C. and PNW
fishermen, there are also fish fights between upriver, downriver, near shore and deep sea fishermen within nation-state boundaries that influence the potential for larger scale cooperation. For example, “[Upriver Columbia fishermen] feel like everybody has got a shot at their fish and nobody cares. They’re at the end of the line and I agree that they’ve got a real legitimate beef” (Interview with Ken Johnson, September 19, 2000). Conflict within nation-state borders makes it difficult for the states to achieve a unified voice, thus complicating and limiting the potential for transboundary agreements.

The competing territorialized, jurisdictional interests of stakeholders are thus a major factor in the prevention of cross-border cooperation. Even so, according to the individuals interviewed for this research, these limits do not hold a candle to the limits that derive specifically from the framework of sovereign states that shapes international governance. These limits are the subject of the next section.

Concrete Effects of the Border

“Time and distance and money—just the obvious things” (Interview with Ian Gill, November 11, 2000).

Nine concrete barriers to cross-border cooperation were identified in the course of the interviews (in addition to those limits already discussed and the perceptual barriers that are the topic of the next section). There was an overall similarity between Canadian and American Groups in terms of the frequency with which particular responses were given, but there were a few cases in which there was a significant difference. Those cases will be commented on as each of the nine responses is discussed below.

The first concrete impediments to address are the practical problems of trying to cooperate across the divide of an international border. Even with the advent of digital communication, cell phones and the institution of the PACE lane—expedited automobile border-crossing by use of a pass purchased annually (the program postponed after events of September 11, 2001), nearly all of the Group representatives identified one or more limits that can be classified as at least mostly material in nature and caused by the existence and divisive influence of the border. For example, according to several
respondents, an exchange rate that tends to strongly favor the American dollar sometimes impedes transboundary operations regardless of the supposed borderless nature of the global economy. Rules that govern the activities of organizations that are connected to government agencies also impose limitations as indicated by Bill Green of the BCAFC: "...Canadian agencies, both provincial and federal, at a variety of times in the past have continued to have restrictions on transboundary travel that really hamper efforts" (Interview, December 21, 2000).

There are also less bureaucratic sorts of limitations. Tim Bristol of SOS, speaking from Alaska, discussed one such limitation with me: "It's crazy. [W]e don't get any Canadian news over here although we are just over the mountains from British Columbia! We have so much more in common with the Yukon than we do with Washington state, y'know? It's really crazy how isolated we are" (Interview with Tim Bristol, November 27, 2000). Mr. Bristol points out a problem that is familiar to Canadians—Americans tend to know very little about what's going on in Canada. Putting aside the reasons for this for the moment, the fact remains that the border is a line of separation in the transference of news and information (see below). His second point is even more poignant. He notes that the information divide across the border is nonsensical given the similarity of interests between Alaskans and Canadians living in the Yukon. In this instance the boundaries of the sovereign state fail to accurately represent a more or less unified set of interests. Just as nations or resources can exceed and overlap borders, so too can common sociopolitical or economic agendas. The stakeholders that utilize this geographically diverse resource often share common views of management and allocation based on their social and physical relationship to salmon, not their citizenship. Nevertheless, they are prevented from joining forces in many instances by the divisions introduced by state borders.

Groups encounter legal barriers to working together across border lines because, as foreign entities, they are denied the legal status necessary to act in the other country. For example, Glen Spain of the PCFFA complained about the inability to bring suit as a
result of being based in America: “We don’t really have a vehicle because we don’t have standing in Canadian courts” (Interview, November 10, 2000). Rob Kirk claimed that bureaucratic and legal barriers are the primary impediments to cooperation that BCCF is experiencing: “We’re in the process of applying for charitable status [in the U.S.] so if we get over that hurdle, we can start approaching some groups in Washington to do some work down there” (Interview, October 24, 2000). Ecotrust dealt with the issue of legal status by helping to found Ecotrust Canada. The Canadian incarnation of this Group was started in part to allow the organization “to be able to raise funds in Canada which a U.S. nonprofit couldn’t do” (Interview with Ian Gill, November 11, 2000).

Being an American or Canadian organization trying to do any sort of political or managerial work in the other country also presents problems of image. By this I mean something other than what will be discussed in the section on Perceptions Across the Line. What is being referred to here is an awareness on the part of the Group itself that it is a foreign entity and it therefore must be conscious of how its actions may be interpreted. For example, Canfisco works extensively with Canadian governmental agencies making recommendations about length and timing of fishing seasons and similar issues. But, “On the U.S. side, in terms of our operations in Alaska, we have probably taken less of a direct role given that we are a Canadian company operating in the United States” (Interview with Rob Morely, October 23, 2000) and also in part because they are a relatively small employer compared to Alaskan companies. Basically, they refrain from voicing their opinions because they feel it is important to be sensitive to the fact that “that advice may be looked at in a suspect way” (Interview with Rob Morely, October 23, 2000).

Making contacts across the border is harder than forming links with like-minded organizations within national boundaries. Some Group representatives complained that they “don’t know who’s doing stuff on the other side” (Interview with Ian Angus, November 11, 2000). They are aware that “There might be groups (in the U.S.) that are interested in (salmon) fisheries, but we haven’t met them yet” (Interview with Sharon
Chow, September 11, 2000). Meeting stakeholder Group representatives—in-person rather than through email or other media—emerged as rather important in fostering greater cooperation. The border reduces the frequency of those meetings by making travel time longer, scheduling and arrangements more complicated and by increasing costs. One interview subject said that: "... The logistics of communicating and meeting face-to-face make it harder to get something going" (Interview with Xan Augerot, September 19, 2000).

Insufficient or inaccurate information precludes effective cooperation in many cases. It is absolutely vital for organizations to have good information about a whole spectrum of issues related to the salmon in order to be able to work well together. In the words of Ted Wolf, "until there's some common basis of knowledge or understanding about the big pattern relating to salmon, it does seem like everything else is certain to remain contentious" (Interview, October 30, 2000). The border clearly impedes the flow of information and the effects are significant, particularly in regard to the ways in which distance is created between potential allies:

"I don't think people understand how much they share a lot of the problems that transcend the border and actually have nothing to do with the border. The problem is that a lot of people simply are not informed about what's going on in other jurisdictions and have really no idea that there is as much commonality and sense of shared frustration, but also a sense of sort of shared rebellion, if you will, as there is" (Interview with Ian Gill, November 11, 2000).

The best solution for bridging the separation imposed by the border in the eyes of several respondents is "to build more effective informal networks for information sharing across the border" (Interview with Bill Green, December 21, 2000) as opposed to relying on formal organizations, bureaucracies and governments to make vital links.

One of the more important impediments in the opinion of most of the American Group representatives and four of those from Canadian organizations, is the discrepancy that exists between salmon management structures on either side of the 49th parallel. Management structures include data collection formats, management goals, policies, and bureaucratic organization specifically related to the conservation and allocation of
salmon. According to Ian Gill, “The data are gathered very differently here in British Columbia than they are elsewhere. (It) is almost criminally irresponsible that we continue to segregate our information gathering and dissemination” (Interview, November 11, 2000). Other respondents seem to agree, frequently citing data incompatibility (types of data, collection methods, scale, analytical methods applied) as a particularly vexing issue:

“We’re able to collect biological data on this side of the border from the state agencies and the federal agencies so much easier than the Canadians are able to collect biological data from their provincial or their federal agencies. I mean, everybody can say, ‘We really gotta do data sharing.’ But there’s lots of slip between cup and lip” (Interview with Mike Sato, September 26, 2000).

“One of the problems is that the data collection systems are run by states or provinces and as a result, they are often done inconsistently. B.C., for instance, has very little control and very little data on its recreational take of salmon. Alaska does a better job by far of keeping track of its recreational take than B.C. does. B.C. probably does a better job of taking care of collecting data in its commercial salmon fishery than Washington state does. The trouble is all three states (sic) use inconsistent survey protocols . . . so they come up with different numbers in terms of population estimates and their numbers are not comparable—they’re not cross-comparable because their protocols are different” (Interview with Glen Spain, November 10, 2000).  

The segregation of information results from discreet spatial/political units trying to manage a resource that defies jurisdictional borders and thus points to the problem of the spatial mismatch. “They have maps of their areas. We have maps of our areas. . . . Each country has their own management areas and statistical areas by which we manage fisheries which we use all the time, but we don’t have anything joint” (Interview with Mike Grayum, September 18, 2000). The map in Figure 23 produced by the Sierra Club of B.C. illustrates the data-sharing problem in salmon management. The data ends sharply at the U.S. border. While this is partly due to the focus of the SCBC, Sharon Chow also told me that the key reason for this line of demarcation is the lack of available, compatible data.
Figure 24: Limitations in Data Sharing, B.C. Stock Status Map
Even more important than practical management structures in limiting cooperation are the differences in the underlying political and legal structures which require “learning the game all over again on the American (or Canadian) side” (Interview with Daniel Burns, November 6, 2000) if a Group wants to be effective in their transboundary efforts. Included in this category of limitations are incompatible laws and statutes, institutional differences, domestic conflicts over jurisdictional authority and the different levels and areas of resource control exercised by the federal versus the provincial/state governments in the U.S. and Canada.

It is clear, for example, that differences in the power of the two federal governments to influence or set salmon policy, relative to state/provincial authority, impacts negatively on the possibility for transboundary cooperation. The divergent structures create confusion, resentment and frustration both domestically and internationally. “On the other side of the border, there’s a whole different relationship between the provincial government and the federal government and as a result, they don’t line up at the same levels. They don’t quite line up” (Interview with Mike Sato, September 26, 2000). Canadians and Americans—especially Americans according to my interviews—are also frustrated with the domestic (as opposed to international) political structures on the other side the 49th parallel that prevent effective participation in salmon policy-making.

“Our representative government is entirely different than the Canadian parliamentary system. We have a pretty strong democratic process when it comes to resource management particularly on public lands. The Canadian system does not lend itself to strong public participation and input. It’s very undemocratic. So, we in the United States ... have a pretty good system of laws, a pretty good legal framework, within which we can influence policy decisions in the U.S. The biggest block in working cross-border is that Canadians don’t have these things! They don’t have the ability to sue the federal government or the provincial governments. At least their capacity to do so is really, really limited. Even their capacity to provide input is limited and not mandated. So, it’s been extremely frustrating for us that there are not many legal hooks and the Canadians as well because they don’t have any influence” (Interview with Joe Scott, October 13, 2000).
Most commentators, however, didn’t single out either country’s political system or division of authority as being the problem, but rather blamed the state territorial political system writ large. Lynn Hunter, when asked why the DSF does not have more cross-border initiatives, echoed the feelings of many Group representatives when she said that it was “because of the federal and state/provincial jurisdictional issues” (Interview, November 6, 2000). “The structure itself is limiting,” according to Mike Sato. “The people who are representing the concerns (of environmentalists) are limited by the fact that they are working under operable rules and laws and regulations and they happen to be different on either side of the border and they haven’t been able to get outside of that. The barrier to working with the Canadians is that there’s this entirely different set of laws over there” (Interview, September 26, 2000).

Even when there is willingness to work in a transborder fashion, either through established international institutions or extra-governmen tally, legal differences may still be problematic. “The barrier to working with the Canadians is that there’s this entirely different set of laws over there” (Interview, September 26, 2000). As Ted Wolf explains:

“[E]ven where there are legally responsible authorities across the border willing to work together toward a particular objective they’ve defined together, because they’re institutionally so different and governed by such different legal mandates, it gets wickedly complex. . . . It’s partly the impediments created by two dissimilar legal systems that arise in effect from pretty different legal principles. When you bring those systems to bear on a single problem, it’s never that easy to sort it out. Even if there’s good will and intent on both sides, it’s not always easy to resolve” (Interview with Ted Wolf, October 30, 2000).

The lack of a Canadian legal statute equivalent to the Endangered Species Act was specifically noted by several respondents as impeding effective conservation of wild salmon across the border. As such, it creates tension between nongovernmental stakeholders as Americans tend to feel that they are doing more to protect the resource.

“[T]here’s nothing comparable to the Endangered Species Act in Canada yet, though they’re trying to create something like it. As a result, there are often species that are under stringent protection in the U.S.—and a great number of resources go to protect them in U.S. waters—that are just willy-nilly captured in Canadian waters. So, the issue of having some reciprocity in Canada for recognizing our
ESA issues, I think, is a big one and we’ve been pushing for an ESA in Canada—not directly, but indirectly through our allies up there” (Interview with Glen Spain, November 10, 2000).

Another frequently cited legal impediment is the relative positioning of indigenous groups in the U.S. versus Canada in relationship to salmon resources. In reference to the First Nations, Mike Sato’s comment was representative: “They don’t have the same legal standings and I think that has made all the difference” (Interview, September 26, 2000).6

The Pacific Salmon Treaty is another factor that limits effective salmon management and conservation efforts both at the level of government and outside established circuits of power. The PST, pitched at the level of the sovereign territorial state rather than at the spatial scale of the resource, is an inappropriate instrument for the task of conserving salmon stocks in that it fails to acknowledge the need to address both the local specificity and the regional dimensions of the problem. The U.S. and Canada have remained locked into sovereign stakeholder positions through the PST. Establishing this misguided spatial management framework has made it difficult to think or operate outside the box of place-based resource control. The PST has institutionalized the spatial mismatch and enframed the debate over how to conserve and manage salmon the principle of territorial sovereignty and the result has been disastrous for wild salmon. This geographic scripting of salmon management reduces the potential for genuine co-management of the resource.

While the PST is intended to facilitate equitable allocation and conservation of salmon, it has failed at those tasks at least as often as it has succeeded. Rather than contributing to cooperative salmon management and conservation, most Group representative agreed with David Lane of the T. Buck Suzuki Foundation when he said: “It’s a bad treaty. It’s a bad treaty. On paper it looks like there’s some kind of cooperative management, but in reality there’s nothing to keep a fair ball game as far as interception (of salmon stocks is concerned)” (Interview, November 27, 2000).
The most common complaint about the PST, which I already touched on above, regards the inability of American signatories to reach consensus among themselves, thereby delaying or preventing the resolution of conflicts within the Treaty process. Several comments were made in this regard: "I think the U.S.-Canada process will be totally ineffective... until the head of the U.S. section is able to compel the states to reach consensus. [U]ntil the U.S. can get its act together—how can we negotiate (internationally) when we can’t even agree (domestically)?" (Interview with Ken Johnson, September 19, 2000). Xan Augerot voiced her agreement: "It seems that we will always have problems because of the structure of the U.S. delegation and the fact that Washington, Oregon and Alaska all have a voice together and a very dissonant voice" (Interview with Xan Augerot, September 19, 2000). Again, this problem points directly to the way that the PST inappropriately groups Alaskan interests with those of the PNW states based on a geopolitical distinction—membership in the United States. Even though Alaskan interests are more closely aligned with those of Canadians living in the northern reaches of B.C. and in the Yukon, Alaska is allied with the PNW as a function of the dominant geopolitical structures that organize world governance. As Murphy (1996) described, the political boundaries that provide the framework for treaty-making have proven to be a cause of environmental conflict in this case as the comments of Mike Grayum illustrate:

"More often what it looks like is a tri-party treaty instead of a two-party treaty. We not only have big issues between Alaska or Alaskan fisheries and Canada but we have big issues between Alaskan fisheries and Washington fisheries because they’re intercepting our fish, too. So, it really looks a lot like a three party treaty that only has two signatures on it and two votes. (laughter) We can go to treaty negotiation sessions, and we have in the past, where we never get around to talking to Canada. We’re arguing with the Alaskans for a week trying to figure out whether we have a United States position that we can take forward to Canada" (Interview, September 18, 2000).

It may be impossible to define, however, what is the “United States position.” Given the very different circumstances surrounding the fishery and its utilization throughout the range of the fish, it’s no wonder that “There’s no national strategy around
salmon. It just doesn’t make sense to approach the issue of the viability and health of a migratory species that way” (Interview with Ted Wolf, October 30, 2000). What it comes down to is that:

“There are really several different countries represented. One is British Columbia. Another is Alaska—another separate country for all practical purposes—as are the other states in the U.S. That weights all the decision-making in favor of the U.S., but it also means that conflicts within or between states in the U.S. paralyze the process. It shouldn’t be allowed to paralyze the process. The fights between Washington and Alaska over allocations have been serious ones and very debilitating to the PSC process” (Interview with Glen Spain, November 10, 2000).

Stakeholders thus recognize the very divergent needs and interests of the PST signatories, yet the “archaic” framework based on territorial sovereignty remains the only official mechanism for cooperation. A successful approach to the salmon problem must be multi-scalar. It will require a mindset that takes into account the large-scale, region-wide issues as well as the effects of global markets, environments and other influences. It will also need to confront the problem with regulatory and managerial specificity, addressing the very localized variations in salmon ecology and human demands on the environment.

In addition to the spatialized problems inherent in the PST, another key problem is the failure of the Treaty to accurately represent the interests of all stakeholders. “There’s no formal way for those different values to be brought into the decision-making. That’s a particularly important area of expanded cooperation. . . . We need to build new institutional arrangements” (Interview with Bill Green, December 21, 2000). Community and NGO involvement needs to be increased. The interests of ordinary citizens get obscured and conflict is created where there might otherwise be consensus when decisions are left in the hands of high-level bureaucrats without sufficient community input: “I think a lot of the information that’s been exchanged in the past has been done at the governmental level with the Pacific Salmon Treaty, and I think that was sort of a recipe for division” (Interview with Tim Bristol, November 27, 2000). A more inclusive
PST process would facilitate greater governmental success and most likely stimulate more nongovernmental transborder cooperation.

Moving beyond the problems associated with the PST, among the study Groups there is a recognized lack of incentive for undertaking cross-border projects. This is also true for official governing bodies as the following statements reflect:

(Laughing) "Questions of territorial jurisdiction and sovereignty play a fundamentally important and restrictive and largely negative role (in salmon management and policy-making). . . . One of the reasons that there hasn't been more progress in terms of binational cooperation is Canadian agencies are unwilling to participate in U.S. processes under U.S. law because they fundamentally don't have input on the outcome of the legal or political processes and I think the same attitude prevails on the U.S. side" (Interview with Bill Green, December 21, 2000).

The lack of incentive to work across borders, as Mr. Green explained, springs directly from the territorial system and the resulting way that benefits and costs, risks and potential, are assessed. The territorial organization of sovereign states establishes a scenario in which benefits must accrue directly to the spatialized entities providing the monetary resources for a particular project or else they are not deemed to be fair or worthwhile. In other words, U.S. Groups hesitate to undertake salmon restoration projects in Canada because their supporters may feel that Canadians are unfairly receiving the primary benefits of that work even if there are also benefits to American interests. One Canadian Group representative articulated the problem this way: "There's a defeatist attitude that we don't have a long-term stake, or any kind of a stake, in the success of salmon recovery efforts in the U.S. The tribes I work for don't agree with that but that's a fundamental problem" (Interview with Bill Green, December 21, 2000). In this way, the political division of space prevents stakeholders from thinking about the overall welfare of the resource and instead focuses their attention on a much smaller geographic scale. This is not meant to imply that the local is unimportant—indeed, fostering and nurturing local-scale interaction with salmon has proven a very effective force for conservation. However, as has been shown, the salmon problem will have to be
addressed at multiple scales if it is to be confronted successfully and sustainably over the long-term.

The principle of sovereignty is an impediment to cooperation, and a complicated one at that, according to 17 of the 22 Group representatives I interviewed. As an example, when I asked Sharon Chow if the idea of sovereign territory has anything to do with the salmon problem, she replied: “Oh, yeah. It’s a major issue. That’s why we don’t have sustainable fisheries” (Interview, September 11, 2000). Borders are among the most defining features of sovereign territory on the landscape. As such, they exemplify and reflect the power of sovereignty discourses to influence political interactions and to shape (and limit) geographic imagination.

There are many ways that the idea of sovereignty acts to prevent or complicate transboundary cooperation. At the most basic level sovereign territorial borders are

“... just a fact that has to be dealt with. It just is the fact that everybody has territories that they consider to be theirs, whether it be an international territory or a tribal territory. Those exist and are a factor that have to be dealt with. ... It’s a common feeling” (Interview with Mike Grayum, September 18, 2000).

In this quote, the naturalization of the discourse of sovereign territory is obvious. The lines are drawn solidly around political entities in this framework, precluding the possibility of an approach to the salmon problem “outside the box” of the statist model. The territorial framework includes the state-of-origin rule which says that “if [fishermen] can identify [that] the fish come from their area, they have a right to harvest them” (Interview with Ken Johnson, September 19, 2000). This notion of sovereignty over the salmon based on political territory remains central to how many stakeholders’ frame rights to the resource. “When the fish are in my territory, they’re my fish. And of course those that are just passing through somebody else’s territory, they look at them as their fish—they just aren’t here yet. So, stay away from ‘em!” (Interview with Mike Grayum, September 18, 2000). But what would an alternative, non-territorially based model look like? Tim Bristol echoed the sentiments of other respondents when he expressed
recognition of the problems caused by territorialization of the resource, as well as the sense of being at a loss for alternatives:

"They definitely play a big role. Probably, overall, long-term—it’s probably a negative one. Then, you also have to ask yourself, ‘Who would be or what would be the governing body to deal with salmon?’ Do you have some international salmon czar? (Laughing) You can imagine how well that would go over in the United States, especially in Alaska!” (Interview, November 27, 2000)

Sovereignty discourses include the themes of pride in ownership, patriotism and nationalism that perpetuate the dominant system of governance. They provide an idea (of a home territory) around which to rally when a foreign ‘other’ supposedly threatens one’s interests. Speaking about the problematic issue of Fraser River sockeye allocation, one respondent uses language which points out the importance of nationalistic sovereignty discourses in the salmon problem when he says, “That’s been a source of contention with Canada and Canadians. They raise the flag real fast when it comes to the Fraser. That’s their river, those are their fish” (Interview with Mike Grayum, September 18, 2000).

It is not only the sovereignty of Canada or the U.S. that is at issue, but the sovereignty of indigenous peoples as well. Indeed, the representatives of indigenous Groups expressed some of the strongest opinions of sovereignty as a concept, a goal, a problem, or a fact of life. The struggles of indigenous peoples in both countries to regain or improve their rights to the fishery are commonly couched in the language and logic of sovereignty (see quote below). This is a logical and increasingly effective strategy given the political system within which they are waging their battle for self-government. Even so, such efforts can restrict the possibility for transborder work by creating strife among indigenous groups and between tribes and other stakeholders. For example, Native American Treaty tribes are sometimes reluctant to take steps that might threaten their hard-won position as co-managers of the resource, even if that choice means denying First Nations the same consideration they want afforded to them (note the use of the language of sovereignty):

“The U.S. tribes are quite sticky about... forcing transboundary issues because they don’t want to loose their benefits under Boldt on the U.S. side. All we say is
that we have Aboriginal rights, too, which should be respected on the Canadian side. If you’re a sovereign nation, then you have to also have the respect of other sovereign nations and we are sovereign nations in B.C. because we don’t have a treaty with Canada. They don’t seem to understand that sometimes” (Interview with Fred Fortierrre, December 12, 2000).

Group representatives perceived the positioning of indigenous groups in a variety of ways, as is to be expected in this complex case. More often than not, however, non-Native Group representatives agreed with Glen Spain of the PCFFA when he commented that “The tribes have a great deal of political power but they don’t have a lot of money. Because of their unique sovereignty status, they have a lot of power” (Interview, November 10, 2000) particularly in relationship to their population size. Some of that power may not actually be grounded in sovereignty so much as through links with state agencies. Indigenous representatives generally made comments to the contrary, particularly representatives of the Canadian First Nations, emphasizing the disenfranchisement of Native peoples rather than their supposed power.

The issue of sovereignty is raised most often when discussions of habitat conservation and restoration are put on the negotiating table. Each country wants to retain sovereign control over what happens within its borders. “Canada, for example, doesn’t want the United States dictating to them whether or not they build a hydroelectric dam on the Fraser River . . . and vice-versa in the U.S. It’s a little bit more difficult to address habitat in an international agreement” (Interview with Mike Grayum, September 18, 2000). It is in matters of habitat conservation rather than allocation “where jurisdictional issues have become sticking points. . . . We don’t want [the other] country interfering in our management of fish habitat . . . .” (Interview with Bill Green, December 21, 2000). Given that habitat destruction is now widely recognized as the biggest cause of the decline in wild salmon populations, it’s no wonder that the PST has been ineffective as a conservation tool because of it’s emphasis on dividing the harvest. “The focus of the treaty has been on harvest and on allocation. We speak about habitat a little bit, particularly in this most recent 1999 agreement, but the Pacific Salmon Commission is still struggling with what their proper role is in habitat because habitat is more of a
domestic responsibility of each country” (Interview with Mike Grayum, September 18, 2000).

Each country is concerned with maintaining their sovereignty—control of their land and resources—and that concern elides the possibility of many types of coordinated management, including management of information. Using different methods to gather, organize and ultimately use information about the fishery is one way that states protect their sovereign authority over their territory.

“The way information is collected and managed and vulcanized . . . I attribute that to essentially sovereignty issues and sovereignty jealousies. [It] is really destructive and counter-productive and really harms any constructive sort of global or at least bilateral management of salmon issues” (Interview with Ian Gill, November 11, 2000).

In short, if you have “bigger, badder, better information than the next guy, you can come out on top” (Interview with Ian Gill, November 11, 2000). Information is used to lay blame for the failing fishery. “Everybody wants to point and say, ‘You’re not doing it right’” (Interview with Mike Sato, September 26, 2000). Sovereign status implies responsibility as well as rights, opening the door to such accusations and diverting energy from the business of cooperation. “We do work with our U.S. counterparts, but sometimes they can point fingers at Canada and say, ‘Shame, shame on you’” (Interview with Sharon Chow, September 11, 2000). Sometimes this sort of finger-pointing is an exercise in territorial nationalism, designed to refocus attention away from real issues such as habitat restoration and preservation and towards a less problematic target, at least from the perspective of policy-makers: “One thing that you can get everyone to rally around—it’s always someone else who’s at fault. It’s not us, right? So we can point out and say, ‘Americans are catching our fish in B.C. or vice-versa. That’s easier and everyone can rally around that domestically” (Interview with Rob Morely, October 23, 2000).

In all of these “concrete” ways, the principle, institution and practice of sovereignty impedes cross-border salmon cooperation. Now I turn to looking at perceptual blocks to transboundary organizing and transterritorial efforts.
Perceptions Across the Line

It is not only in the relatively "concrete" realm that the discourse of sovereignty behaves as a territorial trap, locking actors into the dominant statist geopolitical model when trying to deal with cross-border environmental problems. Perceptions also limit transboundary cooperation and play a role in perpetuating the spatial mismatch between resource geography and resource management. For the purposes of this research, perceptions include feelings (such as apprehension or camaraderie), thoughts, assumptions and ideas about the people, processes, and institutions across the border, sometimes based on direct experience or facts and other times not. Group representatives expressed these perceptions most often, as a "sense" that they had about "how things work" or what people in "X" location believe. In some instances, perceptions developed as a result of specific experiences or patterns of interaction with individual groups and were generalized to all Canadians or all Americans.

These perceptions are important because they may discourage attempts to work across the border by making it seem as if it will be difficult or unproductive to do so. Understanding the impact of perceptions also informs theories of territoriality and sovereignty by making visible the ways in which spatialized discourses of inside and outside, us and them, Canadian and American, Native and non-Native can override interest-based affinity and thus help to perpetuate the spatial mismatch. I have identified three perceptual blocks to cross-border cooperation. They will be introduced in ascending order of importance according to the frequency with which Group representatives identified them in the interviews.

The First Perceptual Block to Cooperation

The first perceptual block, the one that was cited least frequently, pertains to perceptions of operational differences or divergent approaches to salmon issues. These perceptions can cause Groups to be unsure about their ability to function well in the political or social environment found in the other country. For example, the different ways in which democratic rights are practiced in Canada as compared to the U.S. seems
to be a deterrent to transboundary work. In the context of discussing why more transboundary work is not being attempted by the Sierra Club of B.C., Sharon Chow said that “In the U.S. lobbying is like a profession, for us it’s like an afterthought, you know what I mean?” (Interview, September 11, 2000). In most cases, the perceived operational differences or differences in agenda were expressed in a more general way. For example Tim Bristol said simply that “there are definitely different lingos between the United States and Canada, different ways of doing things” (Interview, November 27, 2000).

**The Second Perceptual Block to Cooperation**

The next type of perceptual limitation addressed here is a more significant form, at least for theories of sovereign territory and borders. Almost half of all respondents felt that there is a degree of institutional entrenchment or border solidity that acts as a deterrent to cross-border cooperation and understanding. These sorts of perceptions directly reflect the naturalized discourse of the sovereign state and prevent actors from being able to think outside the box of territoriality. Because of this apparent entrenchment, stakeholders sometimes find it easier to fall back on outmoded, geographically-based patterns of blame and explanation for the salmon problem than to confront more difficult concerns such as habitat destruction or to challenge the basic structures of governance and resource management that are really at the heart of the issue:

“Cultural and political fixations are hard to move people from. So, to some degree, the British Columbia fishermen, still when they want to blame someone, look around and think of the Alaskans first. It’s just easier, y’know?” (Interview with Ian Gill, November 11, 2000).

The apparent power of governmental institutions and agencies of the sovereign state can seem very daunting: “I think there’s kind of a defeatist attitude in thinking that, well, B.C. Hydro and Bonneville Power Administration and the Corps of Engineers basically run the system and we don’t have much substantial opportunity to effectively change that” (Interview with Bill Green, December 21, 2000). For nongovernmental
groups, just the history of doing things a certain way can seem like an insurmountable barrier. "Both the way that Alaska and B.C. are managing their fisheries, which is quite different, is pretty much into a certain mold at this point" (Interview with David Lane, November 27, 2000). The perceived entrenchment of governance and management structures, and the resulting perpetuation of those structures, illustrates the dynamic social construction of sovereignty. In other words, believing that "That’s the way things are" leads actors to work within sovereign limits rather than pressing for change.9

The "perceptual divide" (in the words of Ted Wolf of Ecotrust) between Canadians and Americans has important implications for the salmon problem as well as other ecopolitical issues. Moreover, it has direct relevance for theories of borders and sovereign territorial states under glocalization. Ted Wolf's comments on the perceptual divide are quite revealing:

“It’s amazing how rigid that border is in most people’s consciousness! Most people even in northern Washington, y’know, most people in Bellingham really don’t follow Canadian news even though it’s eight miles away from them. Most people in Vancouver don’t follow the Seattle papers (or) the Puget Sound news. That’s something really that as a set of organizations we’re dedicated to trying to bridge that gap and say, ‘Look! Think across that border! It’s not that hard to do!’ Once you’ve done it, you don’t go back to your comfortable jurisdictional boundary. People behave as if there’s a Berlin Wall between our countries" (Interview with Ted Wolf, October 30, 2000).

The use of the Berlin Wall analogy reveals the continued strength and divisiveness of the international border between Canada and the U.S., contrary to the claims of some observers, particularly Cascadian boosters (Hamer and Schell, 1993; Artibise 1996).

**THE THIRD PERCEPTUAL BLOCK TO COOPERATION**

The last perceptual block to cooperation that my research revealed has to do with what different stakeholders think and feel about each other and what they believe others think and feel about them. Some representatives relayed experiences of struggling with the perceptions that their cross-border counterparts have of them, their goals and their
interests. In the case of indigenous Groups attempting to work across the boundary, misconceptions (and nationalism) sometime set them at odds:

"They get whipped up by their own people that are raising the flag and saying the U.S. is taking all the Canadian fish. They get their own First Nations people whipped up into that frenzy at times and we have to sit down and explain what we’re doing and why we’re doing it and how Native American’s have aboriginal rights. We have ceremonial and subsistence uses for these fish, too. Usually when we do that, there’s an understanding, more of a coming together, but it takes sitting down and doing that’’ (Interview with Mike Grayum, September 18, 2000).

Most of the comments about perceptions of others were more generalized statements about Canadian or American attitudes, lifestyles and so on and reflect stereotypical images of the character of the people of each nation.

"The Canadians think that we’re horribly materialistic, that we’re very, very short-sighted, and that we’re bullies! It’s very difficult. Even talking to Canadian NGOs, I mean, the perception of what Americans are like! You say, ‘Well, we’re not like that at all.’ But then again, if I describe what Canadians are like, they’ll say, ‘Well, we’re not like that at all’’” (Interview with Mike Sato, September 26, 2000).

Although some of these generalized perceptual statements were more or less positive, many were just the opposite. For example, Sharon Chow told thinks that “Americans don’t understand [the Canadian] situation. I don’t think they necessarily want to” (Interview with Sharon Chow, September 11, 2000).

Perceptions of the Groups in particular can also be barriers to cooperation. For example, in an earlier section I described how the Canadian Fishing Company declines to make fishery management suggestions in Alaska because of the cool reception such advice would likely receive. This is both a perceptual issue and sovereignty issue since the reason that advice would not be well-received is because a foreign entity has no “right” to a voice on domestic concerns under the rules of sovereignty. As another example, consider the comments of Sharon Chow: “I think we need to work more on trans-boundary issues but the Sierra Club in some cases up in Canada isn’t well received because we’re perceived as being an American organization” (Interview, September 11, 2000). In this case, a domestic organization is merely associated with the U.S. in
people's minds and the Group finds that it must struggle with being regarded as an outside interest.  

The topic of Alaskan character seems to illicit some of the strongest feelings, mostly negative, and those feelings hinder efforts to work cooperatively across the border as the following quote suggests: "Alaskans . . . are sort of chest-thumpers. Well, they're chest-thumpers at the best of times, but they're chest-thumpers particularly around having a well-managed fishery" (Interview with Ian Gill, November 11, 2000). David Lane seemed to have an even more negative perception of the Alaskans: "The curious thing is that I've never heard any environmental group in Alaska say anything of concern about (the decline of Fraser River salmon). We've never bothered to make links there 'cuz it's . . . it's like they don't give a damn!" (Interview with David Lane, November 27, 2000).

U.S. Group representatives understand that Canadians "have an enormous amount of frustration with the Alaskan position" (Interview with Ken Johnson, September 19, 2000). There is a shared sense that Alaska is somehow the "main offender" (in the words of David Lane) in the salmon management game. This is just further proof of the folly of territorially-based control of the salmon resource. Even though there is a greater degree of similarity between the interests and positions of stakeholders in B.C. and the PNW than exists between states of the same nation, the artificial political line that divides the region obscures that similarity.

That said, there are other perceived characteristics, unrelated to the salmon problem, which seem to be impediments to coordinated transboundary efforts. Mike Sato points to the different economic conditions in the two countries and related effects on identity as reasons why more cross-border work is not underway:

"I think Canadians are suffering from an inferiority complex. Put it this way, I really appreciate the way Canadians approach things. At the same time, I think that they always feel at a disadvantage to Americans, one, because of the exchange rate and secondly, I think because we have some engine here of economic development and it effects Canada. When you take a look at British Columbia right now, it has gone through such a change with the influx of Hong Kong money. I think they're really, really looking at what their identity is . . . Washington state this side of the mountains has a much clearer idea, for better or worse, about what we stand for,
what we believe in. As a result, I think sociologically, there’s this kind of mismatch right now. We’re at different points in our development” (Interview, September 26, 2000).

Joe Scott’s analysis of the political styles exhibited by Canadian versus U.S. based organizations emphasizes both the political and historical roots of their differences. He clearly sees some of these differences as barriers to effective cooperation:

“... [A]s far as blocks go ... there is a different mindset between Americans and Canadians as to how we approach conservation work. We’re a pretty confrontational lot, Americans are. We’re like a nation full of attack dogs ... We’re very aggressive and we take the gloves off when it comes to going after the government when it’s necessary. The Canadians are ... not as prone to be as confrontational as Americans are. ... There’s a sense, I think, in Canada, that the government is going to take of its people and do what’s in their best interest. Americans are born of revolution. We’re a revolutionary society and we’ve gone through a civil war—we’ve had a series of wars every twenty years or so over our entire history (laughs). The Canadians have had a much more peaceful, idyllic existence, even though of course they’ve participated in a lot of those wars. There hasn’t been that fire and brimstone kind of society that we’ve had in the U.S.” (Interview with Joe Scott, October 13, 2000).

Conclusion

In this chapter, I have described and explained the factors that limit cross-boundary efforts. My analysis shows that these obstacles, which are both numerous and formidable, are in large part products of the discourse of territorial sovereignty. The state clearly retains much of its power in transborder environmental governance as do the powerful profit-based interest groups—timber companies, large agricultural operations, aluminum smelters and energy and water utilities. Borders are real impediments both to cooperative ventures and attempts by Groups working on their own to make an impact on policy across the border.

In the next and final chapter, the lessons of my research are interpreted in relationship to existing theories of borders, geopolitics and the sovereign territorial state. In Chapter 8, I also suggest the most likely trajectory of salmon management and conservation in the region based on my analysis of the interview material discussed thus far.
Notes to Chapter 7

1 Mr. Morely represents the Canadian Fishing Company and thus the interests of his organization are reflected in the features he chose to include on his map. For example, the arrows symbolize adult fish returning from the marine environment (i.e. catchable fish) whereas the maps drawn by the representatives of conservation-focused NGOs tend to emphasize habitat or the complete migration route of the salmon.

2 "Right now, what's happening is all the First Nations are pulling out of the Pacific Salmon Commission. The reasons that these people are putting forward is that we've had some situations where violence was used against First Nations, not only on the East Coast in the 'Lobster Wars' over there, but also in B.C. First Nations won't participate in any of that bullshit. What we've been trying to do is agree as to how we would participate in the Pacific Salmon Treaty. I think that we need to be unified across B.C. and say, 'No, we will no longer participate within this government multi-stakeholder process until we have a functional bilateral process in B.C.'" (Interview with Fred Fortiere, December 12, 2000).

3 Some practical impediments were made more intense by the terrorist attacks on the U.S. on September 11, 2001, which resulted in a tightening of border security and long back-ups at border crossings.

4 Sometimes, however, the stakeholders themselves are reluctant to share information. Ken Johnson of the PSMFC reported that some fishermen have experienced negative impacts associated with sharing information: "I've heard of some of them say, 'Every time we provide data it comes back to hurt us and there's some truth to it. Without the data people are just guessing what's going on. Once you start to know the picture (regarding salmon populations), it doesn't (look) real good most times, so there are restrictions that are imposed" (Interview, September 19, 2000).

5 Note the reference to 3 states—Canada, the U.S. and Alaska. What could be a more powerful testimony to the way in which others perceive the positioning of Alaska in the Salmon Wars? Moreover, this statement highlights the entrenchment of spatialized models of resource control.

6 He goes on to explain the basis for this conclusion: "Even with the Treaty tribes here in Washington state we have the benefit of the Boldt Decision . . . they're partners. They have to be. They're co-managers of the environments that these resources depend on. But then, on a transborder basis, their status vis-à-vis the governments is so much different than the First Nations over there and this I think . . . is a barrier. It clearly is a barrier. If you're talking about catch allocation, you'll have the state and you'll have the tribes sitting down with the Canadians and DFO deciding what the catch allocation is going to be . . . If you're dealing with habitat issues, I think we have enough difficulty on this side of the border to know that you have tribal jurisdiction so far as habitat (is concerned), you have state jurisdiction so far as habitat, local implementation responsibilities so far as habitat . . . and then you have federal jurisdictions . . . Now, try to take all of that and try and find the equivalent on the Canadian side—it's shit all over the place! (Interview with Mike Sato, September 26, 2001)

7 Jim Heffernan of CRITFC explained a related problem. He said that it can be difficult to convince the states and provinces that there's benefit to be gained by restoring salmon to transboundary rivers because of their trepidation about dealing with allocation issues once they are restored. He laughed as he told me that some stakeholders take the position of "If we restore fish up there, how are we going to allocate them? And the tribes are like, "Hey, y'know what? Let's restore the fish. We prefer to fight about real fish as opposed to paper fish!" (Interview with Jim Heffernan, October 30, 2000).

8 This is true in many cases, and extends to the absurd. For example, members of the Seattle City Council wanted to shut down the off-leash dog beach located on Lake Washington at Magnuson Park because of pressure by the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers. These agencies claim that the "high fecal count" in the area is, according to an editorial in the Seattle Times "as detrimental to salmon survival as, say, a gauntlet of fish-killing dams on the Columbia" (Facher, The Seattle Times, April 19, 2001). While this battle is clearly more about the territorial squabbling of testy park neighbors unhappy about the noise the dogs make than about salmon, it nonetheless serves as an example of the desire of government agencies to try to solve the salmon problem without making any real
significant changes to the statues quo. Barbara Cairns of Long Live the Kings expressed this idea when she mentioned that this sort of approach was much easier than going after the real local polluters who have clout such as Boeing and Microsoft.

9 The situation in the Russia Far East and Japan is more challenging still. Among the limitations confronted by the Wild Salmon Center working in Russian locations are federal secrecy (which has worsened since Putin gained power), fear about sharing information that is unpublished which makes some people "extremely jumpy," and the unwillingness of organizational leaders to take risks and be proactive which are "not Russian characteristics—not soviet characteristics for sure. So, we battle that culture. We've been trying to work in Japan and that's very closed" (Interview with Xan Augerot, September 19, 2000).

10 The Wild Salmon Center has a similar set of problems further afield: "Working as an international environmental group, we're based in the United States, we're U.S. citizens and we're definitely viewed with some skepticism by some people in the Russian far east. . . . I haven't tried to work with the folks up in Canada enough yet to know whether or not they'll be receptive or not. I think a lot of that is gonna depend on how we develop partnerships and how we agree to work with organizations that are already active" (Interview with Xan Augerot, September 19, 2000).
CHAPTER 8: TRANSBORDER ECOPOLITICS AND THEORIES OF THE SOVEREIGN TERRITORIAL STATE: LESSONS AND INTERPRETATIONS

Introduction

I have so far focused predominantly on describing and explaining the historical geography of the salmon problem and contemporary cross-border efforts to improve the management and conservation of the resource. However, it is the theoretical applications of my work and the implications for environmental governance that I find most compelling. It is to this area of inquiry that I now turn.

In this chapter, I interpret the empirical research in order to draw some conclusions regarding geopolitical theories of state sovereignty, territoriality and environmental governance. Understanding the theoretical applications of this research is dependent upon first making some basic conclusive statements about: 1) the transboundary efforts discussed in Chapter 6; and 2) the limits to those efforts outlined in Chapter 7. Are transborder efforts really making a difference in salmon management and conservation? Is cross-border work exceeding or reworking regular channels of governance or circuits of power in significant ways or to any significant extent? What is the potential trajectory of transborder salmon management? I address these questions in the first section of this chapter.

My analysis of grounded, cross-border efforts provides the basis for the second part of this chapter in which I discuss the key theoretical questions of my research project. Is transborder work destabilizing or reconfiguring sovereign space? Are the dominant, territorialized discourses of natural resource governance challenged by the cross-border work described in this research? What can be concluded about the "changing status, power and meaning" (O'Tuathail 1998:82) of sovereignty, territoriality and the state as geopolitical principles?
Cross-border Salmon Initiatives: Analysis and Conclusions

CURRENT IMPACTS

The experience of dialoging with representatives of 22 organizations over a six month period revealed some surprises, but most of what I heard about transboundary salmon initiatives confirmed my expectations. Firstly, they are becoming both more numerous and more effective. The political pressure that resulted in the institution of the North-South Fund of the PST is one of the most tangible and potentially far-reaching impacts of cross-border efforts. Other successes include the creation of transboundary stewardship areas, heightened public awareness of the salmon problem (including the impact of aquaculture on fisheries worldwide) and the formation of new networks for communication and cooperation across the international border. Change has been achieved by working through traditional governmental channels as well as through less official means—hands-on projects, public information campaigns, etc.

Indigenous peoples and NGOs are the actors most responsible for placing increasing political and legal pressure for change in salmon management both domestically and internationally. As these Groups gain experience, broaden their base of support, and make more connections with one another across the border, their ability to generate change and stimulate new developments in salmon conservation grows proportionately. While it is happening slowly, these previously marginalized Groups are demanding to be included in salmon policy-making. Their voices interject a re-spatialized, more holistic and unified "gravel-to-gravel" perspective into salmon management negotiations and regime building processes.

Recent successes are due in part to expanding partnerships with large private corporations and grant-making organizations. For example, several well-known U.S. based organizations—Rockefeller, Mead, Patagonia—support Canadian conservation efforts with funding and technical assistance (Interview with Daniel Burns, November 6, 2000). Cooperative links with government agencies and cross-pollination of ideas via the
career movements of activists through the ranks of various organizations are also significant contributors to the growing effectiveness of transboundary work.

**Future Directions**

I anticipate that the quantitative trajectory of cross-border work on salmon issues will be one of increase over time. There are three factors that lead me to this conclusion. First is the interest expressed by Group representatives in expanding transboundary initiatives and cooperative ventures. Nearly every individual noted the desire/goal of their organization to begin transborder work or expand on existing programs based on the belief that heightened cross-boundary cooperation would benefit salmon conservation.\(^1\) Second, the trend in recent years has been towards more transborder work, particularly within the last 2-5 years, and there is little to indicate that that trend will reverse itself. The increase in activity is materially evident in the formation of new organizations and in the expansion seen within many Groups.\(^2\) Moreover, as Cleve Steward of the Sustainable Fisheries Foundation explained to me, the current momentum of ever more knowledgeable and experienced organizations is likely to be self-perpetuating, leading not only to greater levels of activity, but to increased efficiency as well. Finally, my research indicates that most of the factors that are contributing to cross-border work are changing in such a way as to stimulate more such efforts in the future. For example, technology is improving rapidly, accurate scientific data is more widely available than ever and public awareness of the salmon problem is increasing and becoming more sophisticated. While these trends are interesting, their potential affect on cross-border work is also fairly intuitive and so is not detailed here.

While I contend that more transboundary initiatives are on the horizon, I do not anticipate a dramatic increase in their occurrence, nor can I argue that their overall practical impact on conservation and management will necessarily be significant. The impact has so far been rather limited and will likely remain so into the foreseeable future. Even though some initiatives and projects have been able to reach their goals, there are as many instances where cooperative transborder efforts have produced "good ideas, but not
much on the ground has come out of them” (Interview with Bill Green, December 21, 2000). It would be a mistake to be overly optimistic or idealistic about the rate of change or the long-term legacy of the work of these organizations.

These conclusions and predictions paint a rather bleak picture. Why is this the case? As I described in detail in Chapter 7, there are serious obstacles that must be overcome and many conditions that must be met if transboundary efforts are to have any significant and long-lasting impact. I summarize the cumulative effect of these barriers and touch on some of the larger social, political and economic issues that limit the transformative power of transboundary work below. There are conceptual (rather than more strictly material) blockages as well, which I will discuss in the next section.

Firstly, within the context of a profit driven political economy, even legal and political successes that appear momentous can be wiped away by an act of government or nature. One ruling party can enact laws, provide funding and otherwise lend support to salmon conservation only to have the succeeding government overturn the laws and withdraw the support. Periodic and unpredictable changes or events can cast a shadow that limits the influence of NGOs, indigenous organizations and other Groups or restricts the potential for transnational work. For example, the terrorist attacks on the United States on Sept 11, 2001 led to more vigilant policing of the U.S.-Canada boundary making cross-border travel slower and less appealing, thus complicating cooperation across the line. Transborder efforts may also receive less financial support due to the slowing of the economy, in part due to the aftermath of the events of 9.11. Indeed, a slumping economy almost always leads to a decline in environmental spending at the government level as well as decreased revenues for donation or foundation supported NGOs and charitable organizations. Dramatic environmental changes can have a similar effect. Drought conditions in the PNW during 2000 and into 2001 revealed the true positioning of regional priorities and the ease with which non-essential resources can be sacrificed, even those with ESA protection. When push comes to shove, drinking water, farm irrigation, power generation, and other industrial and civic interests of substantial
economic importance, (with some minor exceptions), take precedence over salmon related concerns. Those with the least power and the fewest resources—indigenous subsistence fishermen, small commercial fishing communities, marginalized interest groups, and even the fish—are the most vulnerable in these situations and suffer disproportionately.

For indigenous Groups, racial prejudice and intolerance for their disparate cultural and political systems are serious obstacles to effective transborder work. The colonial history of the region, on-going oppression, and institutionalized denial of indigenous rights have placed Native peoples at a significant disadvantage, politically and otherwise. Many indigenous people lack a voice in salmon policy-making and more often than not, their experiences and localized traditional knowledge are not accepted as useful, valid or meaningful. Others are completely shut out of participating in the fishery for commercial purposes and even for subsistence and ceremonial uses in cases where runs have been destroyed by development. Social conditions tend to be markedly worse for this segment of the population both in the U.S. and Canada. Poverty, rampant unemployment and limited educational opportunities work against the goals of tribal people. These circumstances add to disunity and incidences of conflict within and between tribal groups in each country and across the border that limit cooperation and slow political progress. They divert energy and resources away from environmental concerns towards more immediate problems and may influence resource-related choices as Native people attempt to provide for their needs in the present, perhaps at the expense of the future.

Access to resources is a barrier to effective cross-border work both for indigenous Groups and NGOs. For Native fishing Groups and those NGOs with ties to the government, questions of funding can become complex problems. The money and other support they receive from state agencies sometimes create conditions of conflicted interest or even dependence, though for the most part, judging by what was revealed to me in the interviews and through my literature/newspaper reviews, these Groups do an admirable job of remaining true to their agendas and their constituencies.
Perhaps most critically, the state remains the central pivotal actor in forging and monitoring international agreements related to transboundary resources (see below). Generally speaking, states are unlikely to voluntarily surrender power to NGOs and tribal groups unless they are placed under great pressure to do so, usually from other states. Sovereign territorial states and state sanctioned institutions are still the entities with a primary seat at the table of formal policy-making processes and others only have a voice insofar as they can exert influence through ties to political parties and officials. Large stakeholder corporations must be considered in this context in that they also places limits on the impact of transborder conservation efforts and attempts by marginalized groups to gain a voice in salmon management. Powerful and well-funded corporations including pulp and paper companies, developers and intensive water and energy consumers such as agricultural interests and aluminum smelters employ many citizens in both countries and have tremendous influence in government. Their economic role in the regional political economy gives them the ability to shape the direction of resource policy. Even though some U.S. tribes have a role in the PST and thus in international salmon management regimes, First Nations do not enjoy the same rights, nor do NGOs. There is no one at the bargaining table safeguarding or speaking for the environment, small fishing communities, sportfishers or other stakeholders whose interests are not typically represented in salmon negotiations. As several Group representatives noted, the “old boys club” that oversees international salmon management is harvest-focused, formidable and exclusive.

**Indications for Critical Geopolitical Theory**

Given the interpretations and conclusions I discussed in the previous section, what can be said about sovereignty, territoriality and the state? What has this project contributed to the theoretical literature concerning the discourse of territorial sovereignty and changes in the nation-state at the new millennium? Overall, the picture that emerges is multi-layered and complex. The sovereign state and territoriality seem capable of bending without breaking, validating the claims of many current geopolitical theorists. It
is possible that an argument could be made either for the significance of transborder efforts or for their insignificance in relationship to sovereign space. The discourses that enframe resource management and enscribe the spatial mismatch on the landscape are being challenged by alternative scriptings, but not to the point of radical deterritorialization or destabilization of the trope of the sovereign territorial state—at least not yet. However, there are some aspects of these alternative scriptings that may prove to be more significant over time. To conclude this dissertation, I look more closely at the relevance of my study for geopolitical theories of sovereignty and territoriality and I examine the most potentially disruptive aspects of these alternative scriptings of environmental governance and sovereignty in some detail.

**The Sovereign State: Persistence and Change**

My research clearly demonstrates that the state has retained its “significance and meaning as an actor” (Agnew 1994:55) in cross-border environmental politics. There is no indication of an inevitable or dramatic unraveling of state sovereignty as the state has thus far retained most of its control over transboundary natural resource management. In this, my project supports Paasi’s conclusion that “despite the effects of globalization, changing power relations and the meanings of sovereignty, environmental problems and the post-nationality arguments of postmodern theoreticians, the state will apparently continue to be the ideal form of organization for most nations at the turn of the millennium” (1999a:84 italics added).

It is equally clear, however, that the nature of the sovereign state is undergoing change and is in fact always in a state of flux, reflecting its socially constructed quality. This supports the theories of geographers O’Tuathail, Paasi, Taylor and others who reject the simplistic debate over the singular decomposition or reification of state power in favor of theories of territory, borders and sovereignty that recognize their polymorphous, dynamic and complex constructions in the contemporary world. Concepts and practices of state sovereignty and territoriality are not changing rapidly, at least in relationship to environmental conflicts and interdependencies, nor is it easy for organizations to create,
inspire or speed these developments, if they are so inclined. Still, they are changing in ways that confirm many of the claims of Hirst and Thompson (1999) and O'Tuathail (1998). As an example, instances of states transferring rights of transboundary resource governance up, down, or sideways, or abdicating it outright, such as through the North-South Fund or power-sharing arrangements with indigenous groups, are evident in my study.

**Resistance and Opposition to Discourses of Sovereign Territory**

The transference of sovereignty usually occurs in response to sustained and well-organized pressure campaigns launched by non-governmental stakeholder groups. My research indicates that many NGOs have come to understand the ways in which sovereignty discourse has excluded them from participation in resource management. They recognize sovereignty as a direct cause of the salmon problem and therefore structure their approach to salmon conservation with this fact in mind, in some instances actively working to diffuse or surpass the enframing of salmon management through the discourse of sovereign space. In this and other ways, the hegemonic power of the sovereign state is being resisted and opposed through the transborder work of marginalized stakeholder organizations. This understanding of the role of sovereignty in the conflicts is not uniform among NGOs, however. Bearing witness to the polymorphous and complicated nature of territory and sovereignty, there are those stakeholders, most notably indigenous groups, who consider claims to sovereignty to be the cornerstone of their argument for the right to take part in the fishery and in policy-making processes.³

Territorial boundaries, both actual and perceived, establish normative patterns that influence all areas of cross-border interaction. While they remain powerful, borders and the rules of international interaction can be, and are being, crossed and transgressed. By working across borders to influence policy, transgressions of this type challenge the notion of the static impermeability of borders, lending credence to the theories of social constructivists (such as Litfin 1998 and Biersteker and Weber 1996) and others who
argue against the normalized and naturalized conceptualization of the sovereign territorial state.

As described in this research, this challenge occurs at the level of grounded action, policy, and material processes but with only limited impact so far. However, I believe that it is within the realm of geographic imagination—the cognitive re-mapping of resource access, control, management and conservation—that the greatest potential for disruption resides. In this, I concur with Schreurs’s conclusion that “[s]overeignty as it pertains to natural resources is being challenged by a more global perspective on the environment” (Schreurs 1997:190 italics added).

**RE-MAPPING PERSPECTIVES ON ENVIRONMENTAL GOVERNANCE**

**Networks and links at the Local/Global Interface**

“The rescaling of the state and the production of new articulations between scales of governance in turn redefines and reworks the relationship between state and civil society . . .” (Swyngedouw 1997:172).

The dominant discourse of territorial sovereignty that divides space into mutually exclusive entities is being opposed (albeit to marginal effect) by the cross-scale, cross-border, and cross-sector approaches to the salmon problem used by many of the Groups in this study. Groups actively address salmon conservation at the scale of the state as it would be foolish to ignore this still dominant mode of political interaction. However, they are also committed in many cases to focusing more attention both on larger scales (global, pacific rim, watershed, bioregional), and on distinctly local level efforts that “problematizes the very geopolitical structure of international politics” (O’Tuathail 1998:85). In this way, the changing spatial perspective on the salmon problem mirrors broader patterns of glocalization in which the nation-state is losing some of its political dominance relative to both larger and smaller scales of governance.

Beyond this somewhat simplistic re-orientation where attention is either scaled up or down, Groups are also forming new, more multi-layered networks of actors across borders and scales—linking global, regional, and local interests (as well as interests from many different sectors that share some common concerns). These new networks go
hand-in-hand with the “borderless” approach to salmon management that some organizations are working towards—an approach that does not take sovereign territorial rights as its starting point but instead operates at the multiple and overlapping scales of the resource.

The map in Figure 25 drawn by Daniel Burns of the Steelhead Society of B.C. is emblematic of the trend towards more globalized geographical imaginations and visions of salmon management. As he drew this map, Mr. Burns had this commentary to offer: “Whenever I think of salmon issues all I see is a map of the globe with these two large concentric circles that sort of flow in either direction on both sides. That’s what I see. I’ve seen too many of these migration maps. That’s the first vision that comes to mind” (Interview, November 6, 2000).

Apart from the obvious global perspective portrayed in this map, there are three other interesting features that I would like to point out. First, two features of this map illustrate the links between the Steelhead Society of B.C and the Wild Salmon Center. The Wild Salmon Center currently focuses on issues in the Kamchatka Peninsula in Russia, which is clearly depicted on Mr. Burns’s map and the overall scale of the map is larger than that of all the other map’s drawn for this project—all except the one drawn by Xan Augerot of the Wild Salmon Center (Figure 26) (The “loops” drawn in Ms. Augerot’s map are watersheds that are now, or may soon be, candidates for WSS protection efforts). This cartographic connection graphically demonstrates the impact of that cooperation between organizations across the border can have on spatial perspective and scale.

Second, Mr. Burns comment about having seen too many migration maps is testament to the importance of cartographic images in the formation of perspective on the environment and natural resources. This is not a new idea by any means, but bears repeating in this context since I am arguing that spatial perspective is one of the keys to unlocking the current mismatched territorialization of salmon resources.
Figure 25: Map by Daniel Burns, Steelhead Society of B.C.
Figure 26: Map by Xan Augerot, Wild Salmon Center
Finally, I would point out the use of the Canadian Flag on the map. While it was drawn as a marker to help make this rather rough map intelligible, the choice of a symbol of the sovereign state is interesting. It reminds us that the global focus is still emerging and that it is doing so alongside of, not in place of, a state-centric political discourse.

The spatial re-framing of the salmon problem by stakeholders and stakeholder organizations described in this study breaks the conceptual chain linking sovereignty, territory and the state. As was demonstrated in Chapter 2, these links are fundamental elements in the creation of environmental conflicts and mismanagement. Agnew (1994) explained that the territorial trap locks political and managerial thinking about the environment into spatial models focused on the nation-state. In many cases, including this one, that spatial model does not adequately conform to the geography of the resource, creating a spatial mismatch in management. Group representatives were often aware of the territorial trap and its consequences for environmental governance. For example, in our discussions, Mike Sato of People for Puget Sound talked at length about the problems associated with what he termed "thinking inside the box"—the belief that governmental institutions, laws and other formal structures of policy-making and management are inevitably and strictly confining forces in the arena of environmental governance. His language is different, but the reference to the territorial trap and the power of traditional state-centered sovereignty discourse to shape political action is blatantly apparent. His comments confirm the arguments of Agnew (1994), Taylor (1996) and Walker (1995) regarding the intense and often negative impact of this discourse.

The discourse of sovereignty and its association with the territorial state are strongly implicated in the creation and perpetuation of transborder resource problems. Thus, alternative discourses, particularly ones which are made material through political action or organizing, are a critical early step on the road to a paradigmatic shift in the conceptualization of territorial resource control. Mike Sato acknowledges that stakeholders could try to force change through traditional channels, but recognizes the power of state sovereignty discourses and thus recommends that organizations try to
"... break through and try to establish something that is outside the box, [such as] creating a transborder stewardship area ... [This sort of initiative] allows us to concentrate and do away with the border for a little while. ... But you have to take that kind of outside-the-box initiative because it could never be generated out of existing institutions. You'd have to leap frog in that way" (Interview with Mike Sato, September 26, 2000).

This, I argue, is an area of collaboration that offers significant promise and the arena in which dominant discourses of territorial governance are most challenged by transborder initiatives. By thinking outside the territorial box, stakeholder organizations begin to create the conditions of political imagination and mental cartography that permit new networks and forms of governance to emerge. This concept is echoed in the comments of Rutgers geographer Kevin St. Martin in his discussion of East Coast fisheries:

"Re-mapping can be both a metaphoric reunderstanding and a literal cartographic exercise that reveals previously unseen social, economic, or environmental processes. New 'maps' can create the space within which new subjects, economic processes, or understandings of the environment can exist" (2001:123).

Practices that reveal previously obfuscated environmental and social processes and create the space for "new understandings" of governance, borders and the environment are directly linked to the potential for material change. Indeed, developing new forms of natural resource governance, particularly in cases where disempowered segments of the population are acquiring or re-gaining managerial control, often relies heavily on "counter-mapping" and the development of "new spatial scales of understanding of environmental and social spaces" (St. Martin 2001:123; see also Peluso 1995; Sparke 1995). Cartography and GIS applications are the most literal re-mapping efforts of the study Groups. As scholarship by geographers Gregory (1994), Sparke (2000), Willems-Braun (1997), Wood (1992), and many others make clear, space is made through complex sets of practices including mapping—undeniably one of the key instruments in the creation of space. Other discursive processes, however,—imaginative, anticipatory and metaphorical—are equally implicated in the creation of space, be it political, social, cultural or environmental. The borderless vision of salmon governance
expressed in words and in the hand-drawn maps of Group representatives signifies an important move to re-imagine the space of natural resource control on the part of marginalized stakeholders. In both deed and imagination, study Groups are rejecting the borders drawn around salmon management and conservation by the dominant disciplinary mappings of resource control, even if in most cases they are still restrained by those borders. If, in fact, “[g]eographical imaginations . . . [are] often used to guide action in the world at large” (Sparke 2000:6), then alternatives to hegemonic geopolitical constructions may form the basis for actions that supersede the power of the sovereign state.

**Territorialization: Political and Discursive Tension**

Is it then accurate to say that a change is occurring in the territorialization of the salmon problem? I would argue that the answer is a qualified “yes.” “Yes” because the research indicates that transborder organizing is breaking down some of the “rules” governing transborder interaction, as well as some of the assumptions and structures related to salmon management. “Qualified” because the processes of deterritorialization are so far occurring predominantly at the level of ideas and only to a moderate degree at the level of materiality. In other words, the mental images of Groups doing transborder work are more disruptive, more destabilizing and more trans-formative than their concrete action has been so far. Territoriality continues to rule the roost in international environmental politics in that it is states—the primary “containers” of sovereignty—that have the most power. The border still resembles the Berlin Wall, in the words of Ian Gill of Ecotrust Canada, in some significant ways, even if there are ways in which it is becoming less of an obstacle to cross-border collaboration.

It is true that some Groups have already begun to articulate, if not to act on, an emergent geographical imagination and a model of environmental governance based on what Paasi has described as the “more vague, overlapping spaces of dependencies and constellations of power” (1999:86) characteristic of the modern geopolitical landscape. However, the map drawn by Joe Scott of the Northwest Ecosystem Alliance (Figure 27)
and his accompanying commentary provide a good example of the on-going tension between this new geographical imagination and barriers to change in the territorialization of the salmon resource.

"We talk about the Puget Sound trough as kind of a collection point for our region in terms of water and species and culture—the center of our global village, as it were. I look at greater Cascadia as a basin. I look at everyplace a salmon can reach as our basin.

... Oregon is crawling with ... all of these ‘friendlies’ here (laughter). We have friendlies here (in B.C.), too, but by and large they are outnumbered by the Darth Vadian forces of evil. You know, it’s Mac Blo (MacMillan Bloedel) and Interfore. It’s like they (the timber companies) have this kind of a fort. These guys have a big fort, like a castle, within which they do their bad deeds.

I refer to salmon as a connective tissue. They are indeed—they’re the ligaments. The Cascadia bioregion’s an ecosystem ... the watersheds are the skeleton, the salmon are the tendons and ligaments of that system. And if you think about it en toto, it’s huge! If you had a map that showed water, you’d see a skeleton, would you not? That’s the way I look at the landscape" (Interview, October 13, 2000)

Mr. Scott’s map and his comments illustrate the continuing spatialization of salmon conflicts. For example, he talks about “friendlies”—organizations in Oregon and B.C. with a coast wide conservationist perspective—and forces of “evil”—the timber companies in their “fort” in Canada. Yet his choice of words also highlights a changing spatial perspective. He uses the language of the “global village” and “Cascadia” to articulate the multiple scales at which his organization approaches salmon issues. He articulates a unified vision of the region based on an imaginative embodiment in which the salmon are the “connective tissue” and the “ligaments” that hold the landscape together. After listening to his explanation, I asked Mr. Scott if the horizontal line at the bottom of the map represented the 49th parallel. He responded, “Just barely (laughs), just for perspective. I don’t consider those boundaries” (Interview, October 13, 2000). Again, the tension between actually existing geography and the imaginary geography of a borderless region is apparent.
Figure 27: Map by Joe Scott, Northwest Ecosystem Alliance
TRANSTERRITORIALITY

Transterritoriality as I conceive of it can best be described as those forms of action, cooperation, networking, and community-building across boundaries that reconfigure, shift, influence or eliminate the territorial/spatial basis of authority. At the outset of my research I had anticipated, and indeed hoped, that I might find transterritoriality occurring in relationship to the Northwest salmon problem. Transterritoriality, I surmised, is a logical geographical solution to a problem that has important geographical aspects. I thought that the notion of transterritoriality might be a new “conceptualization by which to comprehend” (Paasi 1999b:22) transborder environmental activity when that activity has a destabilizing affect on sovereign state territoriality without replacing it with some other territorialized form of control.

What I found is that there is not enough evidence to support an argument for the existence of truly transformative transterritorial governance in this case—yet. This does not mean, however, that I have abandoned the possibility for it emerging in the future. O’Tuathail advised that the problematic of deterritorialization is also the problematic of reterritorialization (1998). Even though my project does not speak directly to the veracity of this claim, my research nonetheless leads me to believe that this is not necessarily the case. The emergence of a new geographic imagination among stakeholder Groups suggests that deterritorialization need not lead naturally and inevitably into the emergence of some other “spatial strategy to affect, influence, or control resources and people, by controlling area” (Sack 1986:1). By promoting an environmental vision of the region that ignores the political borders inscribed on the landscape and focuses instead on the ecological geography of the resource, new modes of governance are encouraged and more readily reproduced. The dominant discourse of state sovereignty—the uncompromising and impermeable visage of the territorial state—is overridden at the level of geographic imagination and the effect is one of creative destruction, clearing the space for action, policy, and decision-making to take new forms.
Some Lessons and Suggested Future Directions

Since early colonial times, territoriality has been used to allocate rights and responsibilities to the salmon resource. This spatialized basis of control, in combination with numerous other (related) factors led directly to the simultaneous de/re-territorialization processes outlined in Chapters 4 and 5. Territorial sovereignty and the establishment of the international border were instrumental in the creation of the spatial mismatch between the salmon resource and salmon management and conservation structures. The link between continuing transborder environmental degradation and traditional notions of territoriality, sovereignty and the boundaries that define sovereign entities, particularly the nation-state, is clear.

One of my primary purposes with this project has been to contribute to, and build on, the critical theoretical scholarship in this area of inquiry using concrete, cross-border empirical research. Part of what has been shown is that it is wrong to assume that ‘state’ and ‘governance’ are synonymous or territorially co-terminus” (Anderson and O’Dowd 1999:602). But, at least in this case, the state remains the principle actor in governing transborder natural resource management and that that power to govern has a strong territorial basis, spatial application and geographic effect.

I did not find an example of transterritorial ecopolitical governance in action, only nascent elements thereof. Nevertheless, it may now be easier to visualize the variety of forms that ecopolitical action must take and the many levels at which change must occur for transterritoriality to take hold. Cartographic representations, new geographical imaginations, and destabilizing domestic and cross-border efforts must combine with the right mix of socioeconomic and political factors for such radical re-mappings to emerge. Still, it remains difficult to conceptualize transterritorial solutions to environmental problems as long as the state system remains the primary geopolitical organizing principle. Can transterritorial visions of resource management be moved from the realm of imagination into truly transformative material change? What would transterritoriality look like in a world still dominated by sovereign states? These are some of the questions that remain to be answered.
More empirical examinations of the effects of environmental conflict on sovereignty and territoriality need to be undertaken within the purview of political geography. The dearth of studies in this area, particularly in comparison with the amount of literature that addresses these questions from the standpoint of economics, culture, safety or technology, is hard to explain and even harder to defend. With 23 of the world’s 25 commercial fisheries on the verge of collapse and countless other natural resource problems intensifying, exploring all avenues that lead to greater understanding of environmental problems and the political remediation thereof is not just our job—it is our responsibility.

I conclude this dissertation with a map drawn by Barbara Cairns of Long Live the Kings (Figure 28). Her enthusiasm for her work, which is apparent in the language she used when she explained her map to me, is typical among the people I encountered during this project. I found the research participants’ excitement for salmon conservation inspiring. In particular, Ms. Cairns “rubber band theory of the world” stirred my geographical imagination:

“I am just so turned on by the notion of a migratory species because one way to think about the world is as a place that is knit together by the migration patterns of wild creatures. Y’know, it’s almost like those rubber band balls that you put together as a kid? I sometimes think of the geese going around and the caribou goin’ up here and the salmon doing their loop—they’re all bands that hold us together in some ways. They’re kind of this overlay that keeps us from just flying apart. That’s kind of how I, in my mind, envision it... There’s something about the power of a migratory species—something that operates outside of ourselves that completely blurs these boundaries so that what becomes the most powerful thing on the map is the migration route and not the boundaries. That really appeals to someplace deep in people. They respond to it. I think its part of the reason for the tremendous feeling of goodwill toward this creature.

I just think it would be an amazing thing if you had a map of the world that was not boundaries but was a map of migrations routes. Wouldn’t that be cool? It’s my rubber band theory of the world (laughter)!” (Interview, October 12, 2000).
Figure 28: Map by Barbara Cairns, Long Live the Kings
Notes to Chapter 8

1 Xan Augerot reported, for example, that the Wild Salmon Center is looking forward to expanding operations north into Alaska and British Columbia while Sharon Chow reported that the Sierra Club of B.C. is interested in integrating management of the entire North American west coast and has raised that prospect at meetings in California and elsewhere. Similarly, the Steelhead Society of B.C. is now making concrete plans for co-publication of the Pacific Journal of Salmon Conservation with the Wild Salmon Center, which is based in Portland. SSBC and WSC have also discussed jointly sponsoring a conference to discuss the salmon problem and to generate cross-border policy statements. Such an event is likely to happen in the next two or three years.

2 For example, the staff of the Pacific Salmon Foundation has doubled recently because the PSF has been “so overwhelmed by the work.” This Group has a budget of $1.5 million Canadian and it is growing. The number of projects funded has ballooned from 16 ten years ago, to 28 projects five years ago, to the current level of more than 60 (Interview with Ian Angus, November 11, 2000). This type of expansion has occurred in other Groups as well.

3 It must be remembered, however, that 1) indigenous use of the language of sovereign space is predominantly a political/legal tool rather than a reflection of cultural understandings, and that 2) Native concepts of sovereignty are different from those of the non-Native majority: “Well, the tribal governments that I work for believe that they have fundamental rights of access and management which arise from their aboriginal jurisdiction. At the same time, I think native perceptions of jurisdiction are very different than governmental ones and native perceptions of jurisdiction and authority spring from, I think, concepts of stewardship and responsibility rather than control. I think that a jurisdictional framework that springs from control is not helpful to resolving the salmon restoration crisis. But a concept of jurisdiction that springs more from the First Nations’ perspective of stewardship and responsibility and nurturing, ah, and the sharing of that. . . . throughout the habitats of Columbia river salmon is an appropriate type of expression of jurisdiction” (Interview with Bill Green, December 21, 2000). Additionally, inasmuch as their claims seem to reify the idea of sovereignty, the actual daily practices of indigenous people in the region are a countervailing force to the practice of state sovereignty: “This border is a real artificial thing to them and they have as many family relations that live in Canada as they do that live in the U.S. They go back and forth across that border like it doesn’t exist, fishing on both sides of the border often, because to them, y’know, they’re all one group. They run their boats back and forth all the time. The Canadian natives who are catching these sockeye are driving them in pick-up trucks back down south across the border and selling them to a lot of their brothers and sisters and aunts and uncles. There’s a lot of that that goes on” (Interview with Mike Grayum, September 18, 2000).

4 Not all Group representative expressed an interest in taking a larger scale view of the issue. In some cases, the geographic scope or primary purpose of an organization can effect their opinion of the proper scale at which to confront the salmon problem. For example, when asked whether the salmon issue should be addressed locally, regionally, globally or some combination thereof, one representative responded: “Some combination. I don’t know about global. I think it has to be definitely very local and at least regional. I have to admit I am very, very myopic in certain respects. I mean, part of it is just my organization. I deal with Puget Sound . . . If you tell me about ocean warming or global warming, or the foreign fleet out on the other side of the border, I can take that into consideration, but it is not something that I can effect” (Interview with Mike Sato, September 26, 2000). Mike Sato represents PPS, an organization that is more focused on a particular geographic area rather than a set of issues, thus such a response is to be expected.

5 Paying attention to all relevant scales is important but challenging. Daniel Burns made the point that “it’s obvious that [the salmon problem] can’t just be [addressed] locally . . .” but at the same time, the local scale cannot be overlooked. “A globalized strategy is absolutely essential. That’s the really confounding thing about salmon management” (Interview, November 6, 2000). Ian Gill sees some similar problems: “I think there’s a great desire and a great need to have information shared and expressed at a sort of bioregional
level. On the other hand, I would say we need far more examples of very localized decision-making and resource management taking place" (Interview with Ian Gill, November 11, 2000).

6 This is not to argue that such a shift is looming on the horizon; quite the contrary. I believe that both the inertial force and the deeply rooted power associated with the "principle, institution and practice" of the sovereignty vested in the territorial state work in opposition to a paradigm shift.
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APPENDIX A: REFERENCE LIST

Groups and Representatives

Canadian Organizations

Organization: B.C. Aboriginal Fisheries Commission (BCAFC)
Representative: Fred Fortiere, Chairman
Category: IND

Organization: British Columbia Conservation Foundation (BCCF)
Representative: Rob Kirk, Lower Mainland Regional Manager
Category: ENV

Organization: Canadian Consulate General (Consulate)
Representative: Patrick Higgins, Political, Economic and Natural Resources Officer
Category: GOVT

Organization: Canadian Fishing Company (Canfisco)
Representative: Rob Morely, Director, Human Resources and Corporate Development
Category: CF

Organization: Canadian Columbia River Inter-Tribal Fisheries Commission (CCRITFC)
Representative: William (Bill) Green, Executive Director
Category: IND

Organization: David Suzuki Foundation (DSF)
Representative: Lynn Hunter, Fisheries and Aquaculture Specialist (and former MP)
Category: ENV

Organization: Ecotrust Canada (EcoCan)
Representative: Ian Gill, President
Category: ENV

Organization: Pacific Salmon Foundation (PSF)
Representative: Ian Angus, CEO
Category: ENV

Organization: Sierra Club of British Columbia (SCBC)
Representative: Sharon Chow, Marine Campaigner
Category: ENV

Organization: The Steelhead Society of British Columbia (SSBC)
Representative: Daniel Burns, President (primary speaker); John Hamilton, Operations Manager; Chad Brealey, Communications Director
Category: ENV
Organization: T. Buck Suzuki Foundation (TBSF)  
Representative: David Lane, Executive Director  
Category: ENV

United States Organizations

Organization: Columbia River Inter-Tribal Fish Commission (CRITFC)  
Representative: James (Jim) Heffernan, Policy Assistant  
Category: IND

Organization: Ecotrust (Ecotrust)  
Representative: Edward (Ted) Wolf, Director of Communications  
Category: ENV

Organization: Long Live the Kings (LLTK)  
Representative: Barbara Cairns, Executive Director  
Category: ENV

Organization: Northwest Ecosystem Alliance (NWEA)  
Representative: Joe Scott, Conservation Director  
Category: ENV

Organization: Northwest Indian Fisheries Commission (NWIFC)  
Representative: Michael Grayum, Director of Fisheries Services  
Category: IND

Organization: Pacific Coast Federation of Fishermen’s Associations (PCFFA)  
Representative: Glen Spain, Northwest Regional Director  
Category: CF

Organization: People for Puget Sound (PPS)  
Representative: Mike Sato, North Sound Director  
Category: ENV

Organization: Pacific States Marine Fisheries Commission (PSMFC)  
Representative: J. Kenneth (Ken) Johnson, Ph.D., Coordinator/Data Manager Regional  
Mark Processing Center  
Category: GOVT

Organization: Save Our Wild Salmon (SOS)  
Representative: Tim Bristol, Alaska Field Organizer  
Category: ENV

Organization: Sustainable Fisheries Foundation (SFF)  
Representative: Cleveland (Cleve) Steward, Director, U.S. Branch  
Category: ENV

Organization: Wild Salmon Center (WSC)  
Representative: Xanthippe (Xan) Augerot, Director of Conservation Programs  
Category: ENV
Groups by Category

Environmental

Canada
- British Columbia Conservation Foundation (BCCF)
- David Suzuki Foundation (DSF)
- Ecotrust Canada (EcoCan)
- Pacific Salmon Foundation (PSF)
- Sierra Club of British Columbia (SCBC)
- The Steelhead Society of British Columbia (SSBC)
- T. Buck Suzuki Foundation (TBSF)

U.S.
- Ecotrust (Ecotrust)
- Long Live the Kings (LLTK)
- Northwest Ecosystem Alliance (NWEA)
- People for Puget Sound (PPS)
- Save Our Wild Salmon (SOS)
- Sustainable Fisheries Foundation (SFF)
- Wild Salmon Center (WSC)

Indigenous

Canada
- B.C. Aboriginal Fisheries Commission (BCAFC)
- Canadian Columbia River Inter-Tribal Fisheries Commission (CCRITFC)

United States
- Columbia River Inter-Tribal Fish Commission (CRITFC)
- Northwest Indian Fisheries Commission (NWIFC)

Government

Canada
- Canadian Consulate General (Consulate)

United States
- Pacific States Marine Fisheries Commission (PSMFC)

Commercial Fishing

Canada
- Canadian Fishing Company (Canfisco)

United States
- Pacific Coast Federation of Fishermen's Associations (PCFFA)

Alphabetical Listing of Group Representatives

Ian Angus, Pacific Salmon Foundation (PSF)
Xan Augerot, Wild Salmon Center (WSC)
Tim Bristol, Save Our Wild Salmon (SOS)
Daniel Burns, The Steelhead Society of British Columbia (SSBC)
Barbara Cairns, Long Live the Kings (LLTK)
Sharon Chow, Sierra Club of British Columbia (SCBC)
Fred Fortiere, B.C. Aboriginal Fisheries Commission (BCAFC)
Ian Gill, Ecotrust Canada (EcoCan)
Michael Grayum, Northwest Indian Fisheries Commission (NWIFC)
Bill Green, Canadian Columbia River Inter-Tribal Fisheries Commission (CCRITFC)
Jim Heffernan, Columbia River Inter-Tribal Fish Commission (CRITFC)
Patrick Higgins, Canadian Consulate General (Consulate)
Lynn Hunter, David Suzuki Foundation (DSF)
Ken Johnson, Pacific States Marine Fisheries Commission (PSMFC)
Rob Kirk, British Columbia Conservation Foundation (BCCF)
David Lane, T. Buck Suzuki Foundation (TBSF)
Rob Morely, Canadian Fishing Company (Canfisco)
Mike Sato, People for Puget Sound (PPS)
Joe Scott, Northwest Ecosystem Alliance (NWEA)
Glen Spain, Pacific Coast Federation of Fishermen’s Associations (PCFFA)
Cleve Steward, Sustainable Fisheries Foundation (SFF)
Ted Wolf, Ecotrust (Ecotrust)
APPENDIX B: INTERVIEW QUESTIONS

Subject, Location and Date:

Introduction:
I'm researching cross-border cooperative efforts between Canadian and U.S. organizations concerned with issues relating to the Pacific Salmon. The larger goals are to 1) find out more about emerging trends in transboundary salmon resource management and politics and from there to 2) develop a richer understanding of the relationship between transboundary cooperation and changes in territorial sovereignty, the nation-state, and political boundaries.

I would like to record our conversation for my own use if you agree. The tapes are completely confidential and will be destroyed upon completion of the project. I will only use the recorded material in accordance with your wishes.
- Please withhold identity in writing/presentations.
- Wants to review before publication if anonymous/if named.
- Use name and material at will if not published/if published.

Section One—General Organizational ID
- Please briefly describe your organization. What is its purpose and goals? Who are the members of your organization or whom do you represent?

- How is your organization funded and what is your budget?

- What is your title and job with the organization? What do you do?

- What is your personal experience/history with the salmon issue, especially internationally?

- What kinds of work does your organization do (in general) (related to the Pacific Salmon)? (Organizing and lobbying, publishing, education, technical support, conservation projects, promotion of products, etc.)

- Are you affiliated with any other organizations in your salmon work (Gov’t., Native/First Nations, commercial fishing industry, and environmental especially but also recreational fishing, academic, scientific, consumer, utilities, etc.) and in what capacity (consultative, funding, info sharing, etc.?)

- Is there a branch of your organization in the other country? Is your organization affiliated with any groups across the border in your salmon work and in what capacity?

Section Two: Transborder Cooperative Organizing
- What, if any, types of cooperative projects or initiatives has your organization been involved with or have planned across the national border? Please describe in detail.
- Are they new? What makes these transboundary activities possible now? What has changed to allow or encourage this sort of cooperation?

- If none, why not? Would you like to be working across the border? What prevents such cooperation? Why doesn’t your organization work across the border?

- Is it important for organizations that are concerned with the salmon to (begin to) work transnationally? Why or why not?

**Section Three: Scale, Territory, Boundaries and Sovereignty**

- At what spatial scale(s) do you think the salmon problem should be addressed—i.e. is it a local, regional, national, transnational or global problem? All or some of these spatial scales?

- Is the salmon problem being addressed at that/those spatial scale(s)? If not, why isn’t it? If yes, is it new?

- Do you see the scale of salmon management and policy or organizational cooperation changing right now or is it likely to change in the future? Why?

- Are territorial/sovereignty claims and political boundaries related to the salmon problem? How so? Do questions of territory, sovereignty or borders play a big role in the management of the fishery and is it a positive or a negative role?

- Does your organization believe that control and access to the salmon should depend upon rights of territory or sovereignty?

- Imagine that you have to explain what you do/your organization’s role or goals/your position or view of the salmon management issues/problems to someone who’s first language is different than yours and you decide to draw a map or maps to explain the situation and make your points. Would you be willing to draw such a map or maps for me? (A graphic depiction of the salmon problem with key movements, flashpoints, critical areas, and important markers).

**Section Four: Management and Policy**

- Do you think the PST can work?

- Can the salmon can be managed effectively and fairly for all stakeholders? Can this be done using the current (spatial, political and management) frameworks?
What are the key points that need to be considered or things that need to change in order to better manage or protect the salmon resource?

Section Five: Economics and Contacts/Materials

Are world markets and salmon farming impacting salmon issues in this region? How so?

Info on where I could get figures about this?

Are economics an important factor in limiting or encouraging transboundary cooperation among stakeholders?

Do you know anything about cross-border investment in fisheries such as U.S. companies investing in the Canadian fishing fleet, Canadian processors serving U.S. fishing boats, informal or unofficial trade in salmon, etc? Info on where I could get figures about this?

Do you have any maps, publications, information sheets, or other materials that your organization works from that I can have or copy?

Can you suggest any contacts or other resources, events, web sites, books, etc.?

Conclusion:
Thanks: time, info, cooperation, help. Any questions?

If something else comes to mind that you want to tell me about or there are any particularly interesting new (transborder, project, policy) developments during the next few months, please contact me. I would appreciate hearing from you.

Don’t hesitate to call with questions or inquiries. If I can be of assistance to you in any way, please ask. My hope is that this project will help to foster greater understanding of some of the challenges faced by organizations working on the salmon problem and that it will facilitate greater transboundary cooperation for the benefit of all those involved. So, I’m open to suggestions on ways to further this goal.

Follow-up: I may need to follow up with you on some of these questions or on other things that come up when I’m looking over the material. This would be a shorter session and may be possible to do over the phone. Might you be willing to speak with me or to meet a second time to tie up any loose ends?
APPENDIX C: SAMPLE INTRODUCTION LETTER

Hello!

I am a Ph.D. student working on my dissertation in the Department of Geography at the University of Washington in Seattle. My research is concerned with emerging trends in transboundary resource management and politics. More specifically, I am examining cross-border cooperative efforts between Canadian and U.S. organizations concerned with the Pacific Salmon and exploring the links between these initiatives and questions of territorial sovereignty. I am conducting interviews with Canadian and U.S. government officials, representatives of First Nations and Native American organizations, and representatives of environmental groups and commercial fishing interests.

Since your organization is deeply involved in the salmon issue, I would like to talk to you about what you see as the possibilities and limitations for transboundary cooperation regarding the salmon. Of special interest are any cross-border initiatives of which your organization has been, or would like to be, a part.

My hope is that this project will help to foster greater understanding of some of the challenges faced by organizations working on the salmon problem and that it will facilitate greater transboundary cooperation for the benefit of all those involved.

If you’re willing, I would like to meet with you for approximately 1 to 1.5 hours at your earliest convenience to discuss these issues. Please be assured that any information shared during this interview will only be used in accordance with your wishes. My schedule is very flexible and I can arrange my travel to accommodate your needs.

I’ll contact your office soon to be sure that you received this letter and to try to schedule an appointment. Please feel free to contact me if you have questions about the project or me. The best ways to reach me is at the e-mail address listed below. I look forward to speaking with you!

Sincerely,

Jack Zimmerman
Department of Geography
University of Washington
Box 353550
Seattle, WA 98195-3550
(206) 517-4746
jacksonz@u.washington.edu
APPENDIX D: GROUP PROFILES

Canadian Groups

Organization: B.C. Aboriginal Fisheries Commission (BCAFC)
Representative: Fred Fortiere, Chairman
Category: IND
Interview Info: December 12, 2000 by phone between Seattle, WA and Kamloops, B.C.

Formed in 1984 as a product of the Aboriginal Council of B.C., the B.C. Aboriginal Fisheries Commission is dedicated to protecting and enhancing Aboriginal fishing rights of B.C. First Nations, developing consensus, and providing a united voice on Aboriginal fishing issues. The BCAFC mission includes working for the recognition of the rights of Aboriginal people to fish for their own uses and to use the resource for commercial or livelihood purposes. The conservation of fishery resources and habitat, the protection and enhancement of employment opportunities for all First Nations communities, and the development of a forum to work in conjunction with one another while recognizing “each First Nation’s sovereignty” are among the key BCAFC objectives.

BCAFC is made up of individual First Nations, tribal councils, and fisheries commissions from around the province. New agreements and memoranda of understanding (MOUs) currently being forged with a Native commercial organization and with environmental NGOs in B.C. on issues that they can agree on such as salmon aquaculture. This Group represents the common concerns of both coastal and interior First Nations who have had difficulties coming together on fisheries issues in the past due to different circumstances including government willingness to share power with the tribes.

The BCAFC is funded through the Aboriginal Fisheries Strategy which was created in response to the 1992 Supreme Court of Canada ‘Sparrow’ decision which established the ‘first priority’ rights of access to fish once conservation requirements have been met. The Aboriginal Fisheries Strategy is designed to involve First Nations in fisheries decision-making processes, economic development and management issues. Funding is approximately $850,000 CAN per year.

BCAFC does not work directly on restoration or management, but rather focuses on coordinating First Nations policy and management initiatives, lobbying, negotiating for larger-scale special projects that individual First Nations cannot do on their own such as water use planning, and education of the wider public through, for example, presentations at several universities on Aboriginal rights and fish management. While coordination is province-wide, emphasis has been placed on funneling monies to improve the capacity of tribes to manage projects at the local level.
The BCCF is a not-for-profit environmental consulting company which secures funds, provides managerial and administrative support, and supplies field expertise to a variety of clients undertaking conservation projects. Founded in 1969 as an offshoot of the B.C. Wildlife Federation, this Group has no members but rather has a board of directors and operates very much like a business. The provincial government is the primary client, but BCCF will partner with any organization—private, federal, etc. The lower mainland office was involved in approximately 45 projects at the time of the interview representing about $2.5 million CAN in total revenue. Salmon related efforts include habitat and watershed research/inventory and restoration projects. Emphasis on fisheries is increasing relative to wildlife at this time.

The majority of BCCF's work involves field restoration and conservation projects. Education projects and mapping are also significant components of the Group's efforts. For example, BCCF provides support for (processing data for GIS, computerized modeling, training, resource matching—i.e. connecting experts with clients), and is a proponent of, sensitive habitat mapping, a concept/project which includes as a goal the standardization of (geographic) data throughout the province. BCCF has completed projects with First Nations groups, community groups, and academic institutions. Funding comes primarily through partnerships with clients and grants from government, industry and other sources.

Patrick Higgins of the Canadian Consulate General is the chief officer responsible for managing Pacific Salmon political issues between the U.S. and Canada. His office is located in the Department of Foreign Affairs and International Trade, section on Political Economic Relations and Public Affairs (PERPA). The office has two main activities in which it is engaged. First, officers report in detail to Ottawa about their territory, which in this case includes Oregon, Alaska, Washington and Idaho, on issues that they believe should be of interest or concern. Officers also serve as liaisons between the federal government of Canada, the U.S. states in their territory, and the U.S. federal government with B.C. and Alberta on issues of mutual interest. Secondly, they are charged with promoting Canadian positions on various issues to U.S. government agencies and legislators, they support the consul general, and are increasingly involved in public relations campaigns.
**Organization:** Canadian Fishing Company (Canfisco)  
**Representative:** Rob Morely, Director, Human Resources and Corporate Development  
**Category:** CF  
**Interview Info:** October 23, 2000 in Vancouver, B.C.

The Canadian Fishing Company is the largest fish processing company in British Columbia with plants in Vancouver, two in Prince Rupert and smaller satellite operations elsewhere. It is primarily a salmon and herring business with a United States subsidiary—Alaska General Seafoods—with head offices in Kenmore, Washington and plants in Ketchikan and Bristol Bay Alaska. Nevertheless, Alaska General Seafoods employs only Americans and Canfisco is not involved with any salmon fisheries south of B.C. Canfisco has a fleet of boats in Canada that it owns, others that are joint ventures with fishermen, and the company buys from a large number of independent private fishermen. Processors cannot own boats or licenses in Alaska, but the company buys from many Alaskan fishermen and process mainly canned and frozen salmon. Canfisco sells domestically under their brand name of Goldseal and exports to over forty different countries worldwide including to the U.S., though the biggest markets are Japan, the U.K., Australia and New Zealand, and Europe. Canfisco entered into a joint venture with B.C. Packers, formerly the largest fish processor in the province, in 1996 to combine shoreside facilities in an attempt to rationalize production in response to a downturn in the industry. Canfisco later bought out B.C. Packers. In terms of employment and catch levels, Canfisco is a “big player and comprises a significant proportion of the total volume of the salmon catch.”

Canfisco provides advice to the federal government regarding management issues to ensure that the proper steps are being taken to conserve stocks and to make certain that when there is a surplus, the commercial fishermen are allowed to utilize it “in the best way possible” (by advising on fisheries openings, closings, etc.). Several company staff members have served on the Northern and Southern Panels of the Pacific Salmon Commission advising the Canadian federal government regarding “positions to take in negotiations and in setting annual fishing plans under the terms of the [Pacific Salmon] Treaty.” Canfisco is thus heavily involved in lobbying activities domestically and watches similar proceedings in the U.S. with great attention.

Canfisco employs sixty people as full-time staff in the head office in Vancouver, 12 in the Prince Rupert office, and 20 in Washington. In addition, the company hires fairly large seasonal crews—400 in Vancouver, 300–400 in Bristol Bay, 250 in Ketchikan, and in Prince Rupert, the biggest salmon cannery in the world, up to 1000 people working in two shifts during peak season. There are no similar U.S. companies in the salmon business processing Canadian-caught fish. This is partly due to geography in that the main market is south of B.C. and processing tends to flow in the direction of the final market.
The Canadian Columbia River Inter-Tribal Fisheries Commission was created by three tribal organizations that have fisheries interests within the Columbia Basin in Canada—the Ktunaxa/Kinbasket, Shuswap, and the Okanagan. In the early 1990s, tribal representatives “recognized that it was fairly pointless arguing about territorial boundaries within the Columbia Basin in Canada and that a much more urgent task was to work to restore fisheries resources and particularly the long term goal of restoring salmon to the Canadian part of the basin.” They therefore created the CCRITFC in 1993, which was further solidified with the signing of a Memorandum of Understanding (MOU) among 10 bands in early 1995. This group is the lead/administrative partner in a broader-scale partnership called the Columbia-Kootenay Fisheries Renewal Partnership.

This Group coordinates, facilitates and provides technical support for streamside fisheries restoration and protection projects undertaken by First Nations communities. CCRITFC is involved in policy and operations decision-making processes that affect fish habitat including those related to hydroelectric projects and is also involved in political and legal development and strategizing. This includes a current bid to gain compensation from the American government through the International Joint Commission pursuant to the order of approval of Grand Coulee Dam in 1942 for loss of salmon. This Group manages a fisheries restoration program in partnership with tribal and non-tribal organizations, with activities being centered mostly at the community level.

The principal source of funds is the federal Department of Fisheries and Oceans, though additional monies come from a variety of other sources such as the Columbia Basin Trust (an organization somewhat analogous to the Northwest Power Planning Council), Environment Canada, B.C. Hydro, Fisheries Renewal, B.C. and other provincial agencies. Total yearly budget for this organization is approximately $1.5 million CAN. Conflicts over plans and policies between CCRITFC and financial backers often arise. In addition to these organizations, the Group also works with the B.C. Aboriginal Fisheries Commission, select professional organizations, the East Kootenay Environmental Society (a local ENGO) and other smaller environmental groups and local governments. Most of the engagement with these other organizations is on the level of information sharing and field restoration projects.
The David Suzuki Foundation is a non-partisan NGO "whose mandate is to find solutions to the environmental problems that are facing the world." DSF, a well-known and very active Canadian environmental charity, has over 30,000 Canadian and international members, the majority of whom reside in British Columbia. Monies are provided through dues and donations and also come from Canadian and U.S. funding organizations. DSF works closely with other NGOs, First Nations organizations, commercial fishing groups such as the United Fishermen and Allied Workers Union, and government agencies. Budget for fisheries-related projects is approximately $90,000 CAN. Salmon conservation efforts are being focused on issues of aquaculture at this time.

**Organization:** Ecotrust Canada (EcoCan)  
**Representative:** Ian Gill, President  
**Category:** ENV  
**Interview Info:** November 11, 2000 in Vancouver, B.C.

"Ecotrust Canada is a private, nonprofit organization promoting the emergence of a conservation economy in the coastal temperate rain forests of British Columbia" (from Ecotrust brochure). The area of interest for this Group currently includes all of the bioregion (the coastal temperate rain forest "start[ing] around San Francisco and end[ing] around Kodiak Island"). Ecotrust Canada "offer(s) tools and resources to the people and organizations who promote positive change at the intersection of ecosystem conservation, economic opportunity and community vitality."

Ecotrust Canada was formed in 1994 as an offshoot of Ecotrust, a U.S. NGO profiled below. Ecotrust Canada is a wholly independent charitable Canadian organization, but remains closely allied with Ecotrust, sharing "the same mission and values and strategies" which have been co-developed over the years. However, each "branch" raises its own funds, has its own staff and board, though there is some crossover in board membership, staff and project work (see below). Ecotrust Canada is not a membership organization. It has a staff of 18 and nine board members.

The promotion of a conservation economy is undertaken primarily through project support such as training and managerial assistance, public education, advocacy, publishing of books and maps, and financial support/lending for community level projects that meet the objectives of the Group. Emphasis is placed on encouraging and helping to capitalize conservation-based enterprises in sectors of interest—forestry, fisheries including aquaculture, ecotourism, and to a lesser degree, agriculture. Ecotrust Canada and the Gitxsan and Ahousaht First Nations started the Aboriginal Mapping Project in 1998 after five years of support for aboriginal cartographic efforts in order "to provide tools, case studies, and an opportunity to share information with mappers around the world working to balance traditional cultural values with current economic pressures" (from Ecotrust Canada literature). Other projects include conducting research on issues related to salmon in the marketplace.
Funding for projects comes primarily through affiliation with Shorebank Pacific and Shorebank Enterprise Pacific and from the dividends from investing in projects. Ecotrust Canada in cooperation with Shorebank Enterprise Pacific established the Natural Capital Fund in 2000 to loan money to entrepreneurs committed to sustainability, including fish processors, whose operations will help support social, financial and conservation goals. The Group raised more than $3 million CAN in either grants or low-interest loans in the first year of the Natural Capital Fund and closed on $1.5 million in loans. The fund is targeted to reach $6 million by the end of 2001.

**Organization:** Pacific Salmon Foundation (PSF)
**Representative:** Ian Angus, CEO
**Category:** ENV
**Interview Info:** November 11, 2000 (By phone in Seattle)

The Pacific Salmon Foundation was founded in 1987. PSF has no members but is a registered charitable organization with a staff of four and a volunteer board of 20 directors divided into committees providing multisectoral representation. Two PSF directors are from Seattle and all take part because they “care about the decline of salmon.” The staff has doubled recently because the PSF has been “so overwhelmed by the work.”

The approach of the PSF is apolitical (i.e. this Group does not become involved in any allocation issues). PSF focuses on solutions to the decline in salmon populations by building community and engaging public support for the Group’s two primary goals. The first is “to promote conservation, restoration and enhancement for all salmonids for the benefit of future and present generations of Canadians” and the second is to develop a framework to provide for the funding of the same. Key activities of the organization include: 1) supporting community, environmental and educational projects based on bi-annual application and selection rounds; and 2) a newer activity, begun in 2000, which involves searching for projects that PSF itself can initiate, particularly watershed restoration, with funding secured from local businesses or other sources. The number of projects funded has grown from 16 ten years ago, to 28 projects five years ago, to the current level of more than 60. PSF supports mapping projects through the purchase and distribution of plotters and funding for actual stream mapping.

PSF engages with groups from most sectors—environmental, academic, government, First Nations, utilities such as B.C. Hydro, and some of the resource industries such as forestry—chiefly through work with small community groups and through information sharing.

The Group has a budget of $1.5 million CAN and growing. Primary funding came from government sources in the past, especially the Department of Fisheries and Oceans via a portion of the surcharge paid by the purchase of salmon fishing licenses. Monies still come through this venue but it is no longer the prime source of income since fewer licenses are being sold. Most funding now comes from five
large annual charity fundraising dinners in different locations in Canada, mostly in B.C. Additional annual dinner events are being planned. The rest of the Group's funds come from on-going partnerships with the private industry mainly in the form of agreements to receive a portion of the revenue from sales of, for example, gasoline, Chinook Pale Ale, production from a sawmill, and boat launch ramp fees.

Organization: Sierra Club of British Columbia (SCBC)  
Representative: Sharon Chow, Marine Campaigner  
Category: ENV  
Interview Info: Seattle, WA September 11, 2000

The Sierra Club of British Columbia is "dedicated to environmental protection and improved stewardship of British Columbia's ecological richness" (SCBC brochure). Relative to salmon, the key areas of emphasis include better habitat conservation, more stringent fishing restrictions, better enforcement of regulations, improved scientific data, increasing public awareness and the phasing out of open net-cage salmon farms. The Canadian Sierra Club used to be part of the U.S. Sierra Club but split off in 1990. The Canadian Sierra Club, and thus the subsidiary chapter SCBC, remains affiliated with the U.S. Sierra Club, but the two organizations are incorporated separately.

Based in Victoria, SCBC is one of the most active Sierra Club chapters in Canada. Donations come from individuals, member groups, and government. SCBC activities are organized around large-scale campaigns such as protection of temperate rainforests and the primary focus is on B.C. issues. The annual budget is approximately $1 million CAN and the chapter employs a staff of 18 to promote the conservation interests of its 1000 members. The chapter has been growing and continues to expand.

Advocacy and lobbying are important activities, as are public information and education, and involvement in a major GIS mapping project of salmon stream status and an assessment of the suitability of aquaculture sites in B.C. SCBC tries to work with government to create solutions to environmental problems including developing the idea of marine protected areas (MPAs) in the province. This Group works with many other organizations, especially NGOs (including Ecotrust and Ecotrust Canada, People for Puget Sound and other Groups) at all scales from the local to the international with a particular emphasis on working with their U.S. counterpart.

Organization: The Steelhead Society of British Columbia (SSBC)  
Representative: Daniel Burns, President (primary speaker); John Hamilton, Operations Manager; Chad Brealey, Communications Director  
Category: ENV  
Interview Info: November 6, 2000 in Vancouver, B.C.

Anglers founded the Steelhead Society of British Columbia in 1970 as an organization committed to the conservation of all wild salmonid species and the preservation of habitats critical to their survival.
This is not a sportfishing organization promoting the interests of anglers, however. SSBC is an “apolitical environmental custodian” in that it is not “stakeholder oriented,” meaning it does not get involved in allocation and ownership issues. Rather, this non-profit Group brings together diverse interests including communities, unions, First Nations, multinational corporations, foundations, small businesses, foundations, governments and individual environmentalists “in a joint effort to protect, restore and fight for the wild fish.” This Group has over a thousand members organized into branches. There are twelve branches located in Canada, plus branches in the state of Washington, and in Japan and Germany. Twenty to twenty-five percent of the members are American.

SSBC engages in a wide range of activities related to their mission of restoring “wild salmon, wild rivers.” The two primary activities are advocacy and restoration, the latter of which is currently being undertaken on 17 B.C. rivers by the SSBC’s subsidiary, the Steelhead Society Restoration Corporation. Between 50 and 60 restoration projects have been completed and financial expenditure for the last five years alone has been $8 million CAN. Advocacy work touches on many issues, but includes a focus on the decommissioning of dams, and involves alliances with affected First Nations groups and many NGOs. Other activities include, but are not limited to: advising and technical support for fisheries management and conservation projects; research and environmental assessment in cooperation with government agencies; public education and advertising; publication of a newsletter as well as educational and advocacy literature including films, posters, and children’s educational materials; reports to government agencies; training habitat restoration professionals; and legal action. In the case of legal action, one notable suit was brought against the Canadian Department of Fisheries in the NAFTA Tribunal for failure to enforce the Fisheries Act. On-line publication of a variety of materials is expected to start in the near future.

Donations are the primary source of operating funds. The cost of maintaining the advocacy and communications activities of SSBC is $100,000-$250,000 per year CAN, plus about $1 million CAN is earmarked for restoration efforts. SSBC is affiliated with many different types of organizations in its work including domestic ENGOs, community groups and First Nations as well as international affiliates in the business community such as Patagonia and International Forest Products. The owner of the Patagonia clothing company, based in the U.S., is Vice-President of the SSBC.

Organization: T. Buck Suzuki Foundation (TBSF)
Representative: David Lane, Executive Director
Category: ENV
Interview: November 27, 2000 by phone (Seattle to Vancouver)

TBSF in a non-profit organization founded in 1981 that has a total staff of 3 and is associated with the United Fishermen and Allied Workers Union. The membership of the UFAWU founded the organization in order to be assured that there would be “salmon for the future” and because they wanted “a
group that was dedicated to working on salmon habitat.” Membership is approximately 3000 individuals throughout B.C., plus the UFAWU is a member group. The main goal of this organization has been salmon habitat protection, but with the current shift in commercial fishing in British Columbia away from salmon and towards other species, they are starting to look more towards marine protection in general.

Principal activity is in the area of advocacy. This primarily involves pushing for new laws that are relevant to salmon conservation, including those that deal with forestry, pollution and other issues as well as trying to convince the government to improve management by enforcing and improving existing laws. TBSF uses “whatever works,” be it litigation, lobbying, etc. to achieve its goals. A small set of key issues (such as pulp mill and sewage pollution) is selected each year for special attention and a campaign is launched around this set of issues. TBSF joins in coalitions on most issues with other NGOs in B.C. that are doing “on-the-ground” work on marine concerns—the Georgia Strait Alliance, Living Ocean Society, Sierra Club of B.C., Sierra Legal Defense Fund, David Suzuki Foundation—but does not work with other types of organizations. Funding comes from grants, individual donations, and fundraising events, with the bulk of monies coming either directly from fishermen or as a result of their fund-raising efforts.

United States Groups

Organization: Columbia River Inter-Tribal Fish Commission (CRITFC)
Representative: James (Jim) Hefferman, Policy Assistant
Category: IND
Interview Info: October 30, 2000 in Portland, Oregon

The Columbia River Inter-Tribal Fish Commission was formed in 1977 and is made up of representatives from the fish and wildlife committees of the four member tribes—the Yakama, Nez Perce, Warm Springs and Umatilla. It is a technical/support agency and a coordination forum for policy on issues related to reserved treaty fishing rights for the tribes, two of whom are based in Oregon, one in Washington and the fourth in Idaho. All policy decisions are made by consensus. CRITFC also works on fisheries enforcement and protection as well as public education and information. Technical and support work includes efforts to improve water quality, stock assessment research and fish passage activities, harvest management and fish production reform, publication and the coordination of information.

CRITFC was created by a “638 contract” with the federal government, which refers to an act of congress whereby tribes are permitted to take over functions that were previously carried out on their behalf by the government/Bureau of Indian Affairs (BIA), provided that they are prepared to assume responsibility for those functions. The four tribes pooled their resources and developed CRITFC to exercise greater sovereignty and self-determination in this area and to more effectively and efficiently manage fisheries resources in which they share an interest. For legal purposes, the tribes are co-managers
of the resource with the states, although the tribes and the states have different rights. The tribes are guaranteed the right to fish as the original “owners” of the resource and because their treaties with the federal government provide for continued access.

Funding comes from a variety of sources and combines to provide a budget of roughly $6 million dollars annually. Instead of being distributed to the BIA, federal monies allocated for the PST are distributed to the 24 Treaty tribes, including the CRITFC member tribes and 638 contract funds from the federal government for management of Columbia River fisheries go directly to CRITFC as well. Funding is provided by the BPA through the Fish and Wildlife Program developed under the Northwest Power Planning Act. Most these funds go towards sponsoring local recovery and enhancement projects as well as projects undertaken by the tribes in partnership with state and local government. Funding also comes from the National Marine Fisheries Service and NOAA for the Pacific Salmon Recovery Act (intended to provide funds to protect and conserve salmon habitat, provide for salmon enhancement activities and research, and implement the PST agreement of 1999), from state and county agencies, the tribes themselves and other occasional contributors such as the Oregon State University.

This Group is not involved in lobbying but does provide information or testimony regarding policy and management operations relative to the fishery. The bulk of the organization’s budget is dedicated to on-the-ground projects of enhancement, management, and habitat recovery. Other activities include: 1) analysis of Canadian and U.S. policy positions; 2) communicating with other stakeholders on technical and implementation issues regarding the PST, partly through cooperation with the Southern Caucus (the Fraser River and Southern Panel) and the U.S. Caucus which includes the Alaskans; 3) ensuring that tribal interests are being represented and adequately met through policy analysis and meetings with the Tribal Caucus (made up of all 24 Treaty tribes); and 4) scientific research.

CRITFC works closely with domestic indigenous organizations including individual tribes and the NWIFC (see below), state level fisheries agencies, and federal government offices on management and policy and implementation issues.

Organization: Ecotrust (Ecotrust)
Representative: Edward (Ted) Wolf, Director of Communications
Category: ENV
Interview Info: October 30, 2000 in Portland, Oregon

"The mission of Ecotrust is to support the emergence of a conservation economy in the coastal temperate rain forest region of North America. We envision a region in which the economy results in social and ecological improvement rather than degradation” (Ecotrust 1999 Annual Report). Founded in 1991, this non-profit Group and its affiliates strive to create a regional economy in which “every transaction—whether of energy, knowledge, goods, services, art, language, or simple acts of
neighborliness—builds natural, social and financial capital.” Ecotrust believes the region from Anchorage, Alaska to the California Bay Area—the range of the coastal temperate rain forest—“can be an example to the world,” in establishing the perspective of the “triple bottom line” of economy, environment and equity.

Ecotrust funds and supports a wide variety of entrepreneurial business development and restoration projects with loans and other advisory services. This Group is concerned with media outreach and public information and awareness, publishing newsletters and books such as Salmon Nation: People and Fish at the Edge, which includes numerous full-color GIS maps of salmon habitat and populations. Ecotrust is one of the primary sponsors of both INFORAIN and Tidepool, which are on-line sources of (bio)regional news and information relevant to Ecotrust’s issues of concern. Ecotrust has produced the Pacific Salmon of North America print available for sale to the public.

Funding is supplied primarily by foundations and individual donors. There are no members. Ecotrust maintains a close institutional relationship with Shorebank and Shorebank Pacific as well as Shorebank Enterprise (a non-profit organization working primarily to support rural, small-scale business) through which projects are funded. The Natural Capital Fund is an investment vehicle that most closely resembles an institutional endowment, though it is used for riskier enterprises than most funds it resembles.

Ecotrust does not have a formal salmon conservation/restoration program, but the publication of Salmon Nation is one example of the organization’s involvement in cross-border information analysis and mapping as part of its public information goal. This Group also has initiated an anchor habitat strategy for salmon conservation. This involves looking at watersheds from the perspective of salmon productivity, identifying crucial sites relative to survival and abundance of salmon populations and then finding protection strategies uniquely suited to that site.

Ecotrust works with numerous individuals and groups including government agencies on both sides of the border, research and scientific collaborators, Native American and First Nations tribes, other environmental NGOs and sportfishing groups, cooperatively sharing data and combining their efforts to achieve common goals. This group is the parent organization of Ecotrust Canada (see above).

Organization: Long Live the Kings (LLTK)
Representative: Barbara Cairns, Executive Director
Category: ENV
Interview Info: October 12, 2000 in Seattle, Washington

Long Live the Kings is a private, non-profit organization devoted to wild salmon recovery in the Pacific Northwest. LLTK was founded in 1986 as an organization dedicated to hatchery reform. This Group focuses on “developing and demonstrating innovative fish rearing techniques, empowering local communities to establish watershed recovery plans, and creating community-based project partnerships between tribal, business, government and non-profit leaders.” It has “created on-the-ground and in-the-
river recovery projects designed to rescue and rebuild imperiled salmon runs." Projects fall into one of four categories: 1) The Endangered Species Act and the Private Sector; 2) Hatchery Reform; 3) Wild Salmon Rearing and Habitat; and 4) Community Building. One of the guiding philosophies for LLTK is that stimulation and fostering of community/local/private sector leadership in salmon recovery is essential to success and projects are selected with this idea in mind. This Group is heavily involved in salmon recovery planning boards and committees in the region. LLTK provides extensive support including leadership and organizing, publication, public information and outreach services, and funding for restoration projects and related concerns.

This Group, which is not a membership organization, has a budget of approximately $2 million dollars per year. Due to its limited financial means, efforts have been concentrated in the Puget Sound/Western Washington region so as to increase the likelihood of making a substantial contribution to salmon recovery. Funding partners includes individuals, businesses, corporations, and government agencies and all projects are funded by a combination of federal, state, and private grants and contributions. Relationships have been developed with state, tribal, and federal agencies, the private sector including business and community leaders, and scientists. LLTK is not affiliated with any Canadian organizations nor do they work with any at this time, largely due to the scope of the organization.

Organization: Northwest Ecosystem Alliance (NWEA)  
Representative: Joe Scott, Conservation Director  
Category: ENV  
Interview Info: October 13, 2000 in Seattle, WA

The Northwest Ecosystem Alliance is a regional conservation group headquartered in Bellingham, WA and founded in 1989. This Group draws its perspective from conservation biology, applying a "large landscape view" in its efforts to preserve biodiversity, protect ecosystems and restore wildlands in the Pacific Northwest and support similar initiatives in British Columbia.

NWEA is a campaign-oriented organization working at all scales. The Group focuses on activities that are fairly limited in scope temporally, works to achieve a goal, and when it is achieved, moves on to the next campaign. There is always a synergistic relationship between campaigns or a "higher plan," however, with emphasis on protecting biodiversity in the "Cascadia bioregion." Important campaigns include those to preserve lynx and grizzly bear, to create a transboundary Cascades International Park straddling the Washington-B.C. border, forest protection, environmental trade reform and an Endangered Species Act program. Activities range from grassroots organizing, public information, legal actions and advocacy to scientific study and purchase of critical habitats for conservation purposes.

NWEA has approximately 7,500 members who, along with foundation grants, provide the funding for the organization's projects. Membership has tripled in the last 2 years and thus the proportion of money
coming from foundation grants has decreased. The yearly budget depends on whether a capital campaign (an attempt to raise funds to purchase land for conservation such as the Loomis Forest) is being launched in any given year, with the range extending from $750,000 to $1.5 million dollars per year.

NWEA works "intimately with people across the border," and with "just about everyone who's involved in a specific issue" including fishing organizations, state and federal agencies, and other environmental NGOs. There are "elements and periods of cooperation with many groups in British Columbia" such as B.C. Spaces for Nature, B.C. Environmental Network, Defenders of Wildlife Canada, David Suzuki Foundation, Sierra Legal Defense Fund Canada, the First Nation organization called Interior Alliance in B.C. and several other tribal groups and bands (including some that straddle the border with members in both the U.S. and Canada). Cooperation has extended recently into Quebec and Alberta over the federal Softwood Lumber Trade Agreement.

Organization: Northwest Indian Fisheries Commission (NWIFC)
Representative: Michael Grayum, Director of Fisheries Services
Category: IND
Interview Info: September 18, 2000 in Olympia, WA

The Northwest Indian Fisheries Commission was created in 1974 by the 20 Treaty tribes of western Washington as a result of litigation that affirmed the fishing rights reserved by the tribes in treaties signed with the federal government in the 1850s (U.S. v. Washington i.e. the Boldt Decision). The role of the NWIFC is to provide the member tribes with a unified voice on conservation and fisheries management issues, including implementation of the PST, and to assist them in "conducting biologically-sound fisheries." Commissioners are selected by and work for the tribes and approximately 60 people are full-time staff members, including policy analysts, scientists and technical personnel. Commissioners develop policy and provide direction for the staff, which is divided into administrative, fishery services and habitat services divisions. The primary activities of the NWIFC include supporting and promoting tribal fishery programs (management, enhancement, habitat restoration, etc.) and providing coordination, representation and technical and policy assistance to member tribes on fisheries issues. Thus, this Group is involved in information and education, negotiation and consultation and a variety of other activities related to tribal fishing rights and practices.

Funding comes primarily through contracts with the federal government (see CRITFC for further explanation). As co-managers of fishery resources with various government agencies, NWIFC works with a wide variety of organizations. Because of the participation of the Treaty tribes in the PSC, this includes working with Canadian agencies and organizations like the DFO, Canadian First Nations (both individual bands and representative organizations) and others. This Group is currently developing GIS for use in a habitat inventory assessment in Washington in cooperation with the state.
Organization: Pacific Coast Federation of Fishermen’s Associations (PCFFA)
Representative: Glen Spain, Northwest Regional Director
Category: CF
Interview Info: November 10, 2000 by phone from Seattle to Eugene, Oregon

Founded in 1975, the Pacific Coast Federation of Fishermen’s Associations is the largest organization of commercial fishing families on the west coast, comprised of a federation of 26 different commercial fishing organizations (some of which are large umbrella groups in their own right) representing almost all gear types and species, and small to mid-size boats. The Association was formed in response to concerns for environmental issues effecting fisheries, particularly the threats posed by offshore oil drilling.

Collectively, PCFFA represents approximately 3000 boat owners from San Diego north to Alaska whose investment in commercial fishing operations totals well over one billion dollars. Factory trollers, processors and recreational interests (apart from one charter boat group in California) are not represented by this Group. As a grassroots organization, PCFFA’s board is made up of the presidents of each member association. This Group is unique in that it is “a trade organization composed of economic competitors” who are held together by “some common interests and some common enemies [and] common threats—off shore oil pollution, environmental degradation in our watersheds, ocean pollution generally.” It is not technically a union because federal law prevents it from being one, but it serves much the same function and is the closest thing to a union available to the fishermen involved. There are currently no member organizations from British Columbia, though there may be “very soon” as there is “nothing to prevent it.” The West Coast Fishermen’s Association, representing Vancouver area trollers for the most part, is likely to become a member in 2001.

This Group is primarily a “support and policy organization” working on “fish politics rather than the ‘hip-boot stuff.’” PCFFA represents the interests of its member organizations in several ways. Relative to salmon conservation and salmon habitat protection, which are the primary interests of the northwest office, work includes: 1) advocacy and lobbying at the state legislative level for protection of the resource in the region; 2) work on policy and appropriations at the federal level through lobbying and testimony; 3) extensive litigation proceedings against federal and state agencies and private landowners for failure to conserve habitat according to law; 4) analysis of conservation options such as dam removal on the Snake River; and 5) by handling conflicts between those organizations (such as between Alaskan and PNW fishermen) when they occur by attempting to move them towards science-based decision-making processes that focus on conserving the resource for the long-term sustainability of both the resource and fishing families.

Funding from the harvest of fish (a ‘poundage fee’ allocated to PCFFA based on the weight of fish landed) accounts for 98 percent of the organization’s operating budget with the remainder coming from
donors. This Group’s yearly budget recently slid from approximately $1 million dollars per year to about $100,000 dollars per year as a result of the “collapse of salmon . . . a major source of income.” It has recovered somewhat to approximately $250,000 dollars per year. PCFFA has a ‘sister institution,’ the Institute for Fisheries Resources, with a budget of $500,000 per year “that does a lot of [PCFFA’s] conservation programs, so there is a synergistic effect between the two organizations. Many of our conservation efforts are actually done through IFR, so that pays the bills. Whereas the political and outreach activities are done by PCFFA.” These two organizations are legally and financially separate. Monitoring of issues and conditions and publication of findings is another major activity, especially through the bulletin of fisheries and habitat related news via the Fishlink New Service email list. PCFFA also produces a monthly column in the Fishermen’s News which is the oldest and most widely read publication in the west coast commercial fishing industry dealing with policy, co-management issues and environmental issues including marine reserves.

PCFFA “works a lot with environmental groups, particularly on [their] salmon conservation efforts.” Work with indigenous people happens “all the time,” particularly the Klamath and the Columbia River tribes represented by CRITFC. Less work is done with Native coastal peoples but a “very cooperative relationship exists with them on habitat issues.” Most of these interactions involve cooperative advocating of common positions and related political work. Relations with the Native Brotherhood (representing First Nations fishermen) are friendly, each keeping the other informed of their activities through mail communication, though the two organizations do not work together “a whole lot.”

Organization: People for Puget Sound (PPS)
Representative: Mike Sato, North Sound Director
Category: ENV
Interview Info: September 26, 2000 in Seattle, WA

People for Puget Sound (PPS) is a not-for-profit environmental organization founded in 1991 whose mission is to protect and restore the land and waters of Puget Sound and Northwest Straits. Thus, the geographic scope of this Group’s work is the 12 counties around the Puget Sound Basin. The “bread and butter” issues for PPS have been water quality, habitat inventories and restoration along the shorelines (which is the avenue through which the salmon issue has become important to this Group), and more recently, marine protected areas and marine fish depletion. This Group is largely interested in “volunteer, bottom-up, citizen-driven approaches to marine resource protection, primarily establishing marine protected areas on a voluntary basis.”

PPS is involved in extensive education programs as well as facilitating public involvement in marine and estuarine environments but does not undertake projects further up the watershed unless there is a direct effect on these target environments. This organization has about 10,000 members and works with
over 50 endorsing organizations from the local to larger scale environmental NGOs, as well as fishing and recreational groups. PPS has an alliance or "working relationship" with the Treaty tribes in the U.S. as well as several First Nations in B.C.

Although this organization's "territory is within the Puget Sound Basin, (it) also has a very active partnership with Canadian nongovernmental organizations in terms of transborder issues" on a variety of concerns including marine resource protection. Maintenance of an office in Mount Vernon, Washington is important to PPS because it allows close proximity for work with the organization's Canadian allies. Among the Canadian organizations that PPS works with are the Georgia Strait Alliance, Canadian Parks and Wilderness Society and the Living Oceans Society.

PPS deals with salmon "in terms of the habitat needs" of the fish (as opposed to dealing with issues of allocation), including an extensive program of nearshore habitat inventory as well as identification of estuarine restoration sites using cartographic tools such as GIS. PPS has created a methodology using a GIS framework for dealing with nearshore landforms as well as biological data, incorporating various governmental and citizen collected data. This data is then used in lobbying and litigation efforts as well as in management planning and is shared with Canadian groups (though "it's more prevalent on this side of the border"). This organization works at several levels—grassroots, county, state, and national—which includes having a full-time lobbyist in Olympia, WA, and a full-time biologist on staff to provide technical assistance on restoration projects.

This Group has a budget of approximately $1 million dollars per year of which foundations supply 75 percent and the balance comes from membership dues and major individual donors.

Organization: Pacific States Marine Fisheries Commission (PSMFC)
Representative: J. Kenneth (Ken) Johnson, Ph.D., Coordinator/Data Manager Regional
Mark Processing Center
Category: GOVT
Interview Info: September 19, 2000 in Gladstone, Oregon

The Pacific States Marine Fisheries Commission, one of three such regional Commissions in the U.S. created by an act of Congress in 1947 with the others covering the Atlantic states and the Gulf Coast, has two major functions. It is an interstate commission which: 1) represents the interests of Alaska, Idaho and the PNW states in intergovernmental lobbying; and 2) serves as the primary agency responsible for the acquisition, management and sharing of various types of scientific fisheries data, including information gathered on salmon interceptions through large-scale coded-wire tag (CWT) operations used in harvest allocation. Data is analyzed and filtered and then made publicly available through reports and web publication. This information is mainly used in cross-boundary (state and international) fisheries management. Canada participates fully with the PSMFC on data sharing and analyzation operations.
PSMFC establishes and coordinates regional data exchange formats on CWT and serves as an information clearinghouse. The PSMFC offices in Oregon serve as the U.S. site for exchanging all salmon data while a site in Nanaimo, BC serves the same purpose on the other side of the border. The data from each country is distributed from these sites to all the relevant agencies. This Group does not have a regulatory role.

Funding is provided primarily by federal money, although some funds do come directly from the states involved. PSMFC works with all relevant fisheries management agencies and commissions, be they state, tribal, or federal.

Organization: Save Our Wild Salmon (SOS)
Representative: Tim Bristol, Alaska Field Organizer
Category: ENV
Interview Info: November 27, 2000 by phone between Anchorage, AK and Seattle, WA

Save Our Wild Salmon is a coalition of private citizens, scientists, commercial fishing associations, sportfishing groups, fishing-related businesses and conservation groups from across the Northwest and Alaska working to restore wild salmon to the region and sustainably preserve harvestable runs for the long term. This coalition, formed in 1995, brings together interests that had been, and sometimes still are, at odds with one another over fishery issues. SOS has offices in Seattle, Portland and Boise and recently opened an office in Washington, D.C. that it shares with American Rivers, a large national environmental NGO. This Group is currently focused on the campaign to remove the four lower Snake River dams, though other habitat issues remain important. The focus on habitat is key to maintaining political peace among coalition members.

SOS is broad-based and diversified, thus it has many different modes of operation. The key activities right now are advocacy, public policy and public education. SOS maintains a website and an email network through which it disseminates action alerts. SOS publishes white papers and a great variety of other publications plus bumper stickers, posters and other information/advocacy materials. There is a strong litigation component to this Group’s work as well, particularly among the member organizations, including bringing suit based on the Clean Water Act.

SOS is not affiliated with any government agencies but “has a pretty darn good working relationship with the tribes,” particularly the Treaty tribes of the PNW. This Group is not currently affiliated with any Canadian organizations, though the issue of salmon aquaculture holds the potential basis for future collaboration due to the level of concern over the possible environmental impacts of exotic Atlantic salmon being introduced into the region through Canadian net-pen operations.

Funding for SOS is provided by grants, membership dues and contributions from philanthropic organizations and totals “many hundreds of thousands of dollars at this point.”
Organization: **Sustainable Fisheries Foundation (SFF)**  
Representative: Cleveland (Cleve) Steward, Director, U.S. Branch  
Category: ENV  
Interview Info: October 12, 2000 in Edmonds, WA

The Sustainable Fisheries Foundation is a federally registered nonprofit organization in Canada and the United States, dedicated to the protection, enhancement and wise use of fisheries resources in the Pacific Northwest. The organization's Canadian branch (also called the Sustainable Fisheries Foundation) is headquartered in Ladysmith, B.C. and the co-director, in partnership with Cleve Steward on the U.S. side, is Don MacDonald. SFF's mission is to promote a balanced approach to fisheries management—one based on sound ecological and economic principles—to ensure that fish populations remain viable, productive and accessible to future generations. SFF works extensively with domestic and Canadian organizations including all levels of government, the business community, other environmental groups, academic institutions, fishing interests, indigenous peoples (particularly the Quileute Tribe), scientists and others. This organization is best known for putting together and sponsoring large transboundary scientific symposia and conferences. The first of these took place in 1996 in Victoria, B.C.

SFF takes part in domestic salmon strategies by providing technical assistance and management recommendations in support of planning for ESA compliance for regional WRJAs (Water Resource Inventory Areas). As part of its goal of disseminating information, publishing is one of this organizations primary activities and includes reports aimed at providing a blueprint for protecting and restoring Pacific salmon in the northwest, articles and scientific papers, and a large, peer-reviewed, edited volume (produced in cooperation with Canadian and American organizations) entitled *Sustainable Fisheries Management: Pacific Salmon*.

SFF receives funds primarily through foundation grants, attendance dues for workshops and conferences, as well as some public sources such as the National Marine Fisheries Service.

Organization: **Wild Salmon Center (WSC)**  
Representative: Xanthippe (Xan) Augerot, Director of Conservation Programs  
Category: ENV  
Interview Info: September 19, 2000 in Portland, OR

The Wild Salmon Center's mission is to create a network of salmon sanctuaries or protected areas all around the Pacific Rim to preserve biological diversity in wild salmon, with the underlying concept being that it is much easier, cheaper and more effective to preserve habitat than it is to restore it once it has been degraded. This Group's work is very focused on research efforts in un-degraded watersheds to aid in the understanding of how salmon utilize their environment in order to generate knowledge useful to management, preservation and restoration efforts elsewhere.
To date, WSC is working primarily in the Russian Far East in cooperation with Moscow State University and in the PNW of the U.S. This organization arose out of the work of a group of people working on the preservation of steelhead on the Kamchatka Peninsula of Russia—an area of relatively pristine conditions and strong salmon runs—and then expanded in spatial scale from that point. The organization was founded in 1992, did not become active until 1994, and only expanded beyond the Kamchatka Steelhead Project in 1998. So far, WSC does not have any programs in Alaska or British Columbia, but work in these regions is a desired goal. Staff members have “had discussions with people in both areas and people are eager to get going.”

This organization has a full-time staff of 5 in Portland, 2 in Washington state and 2 in Russia. Funding was initially provided by angler organizations interested in participating in both research and the Kamchatka sport fishery, but foundation grants have also become a significant source of funds. Some individual donors provide money as does the UNDP because of the Group’s interest in supporting the growth of a local economy that benefits from recreational fisheries on the Peninsula.

In addition to extensive research operations and fundraising efforts (both for research and for communities adjacent to the areas WSC hopes to protect), this Group organizes conferences and produces publications for public education and scientific purposes, which include the quarterly *International Journal of Salmon Conservation* and *Salmon Stock Status* reports. The creation of conservation programs is not yet a grounded reality, but it is a key mid-range goal.

Affiliated organizations include Ecotrust (with whom WSC shares a common organizational “mind set” and which does GIS work for WSC), Conservation International (an important mentor organization), Oregon Trout, Washington Trout, American Rivers, BC Steelheaders (the closest Canadian contact at this time), the Canadian DFO and Russian state agencies, and government offices and universities in the U.S. The ties with many of these organizations are based on personal relationships forged by staff through previous work affiliation. Cooperative efforts also include joint research efforts and joint funding proposals, data sharing and overlap among Board of Directors members (The president of the WSC board is also on the board of BC Steelheaders).
VITA

Jackson Tyler Zimmerman

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