AN ABSTRACT OF THE THESIS OF

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The Pacific Salmon Treaty was established by Canada and the United States to secure sustainability of salmon harvests within the Pacific Northwest. Renewed in June 1999, the treaty functions to legitimize and empower the Pacific Salmon Commission as the agent of fishery sustainability. The Pacific Salmon Commission serves as a bilateral recommendation-making body. Through its formal and informal communications, the commission suggests action and defines regional salmon policy. Over the past decade pressures related to overharvest, changing oceanic conditions, and an increasing demand for production have challenged the commission and the fishery as never before.

The Pacific Salmon Treaty was officially signed into existence in 1985. It was supposed to be re-ratified in 1992. This did not occur. From 1992 until 1999 numerous ratification processes were attempted, all but one failed. During this time tensions mounted and expressed frustrations nearly prompted overt violence. In August 1997 Canadian fishermen angered at the lack of a solution blockaded a U.S. passenger ferry thrusting the issue onto the world stage. In response to the

crisis Canada and the U.S. empowered a joint commission to find resolution. While the resultant Strangway-Ruckelshaus Initiative proved to be a failure, its findings paved the way for eventual re-ratification.

The Pacific Salmon Treaty exists because salmon within the Pacific Northwest represent different but simultaneous values within rooted world view orientations. The respective political cultures of Canada and the U.S. have sustained administrative regimes consistent with their dominant understanding of salmon and its values. Divergent cultural expectations and shared economic pressures have sustained conflict over the fishery and led to political and economic uncertainty. The Pacific Salmon Treaty is a work in progress. Understanding the treaty's context, historical development and function is vital for the sustainability of the fishery.

The recent ratification of the Pacific Salmon Treaty represents an evolution in shared resource management. Based upon an "abundance-based management" regime the 1999 agreement provides the Pacific Salmon Commission with more discretionary capacity. However, the new pact may prove to be incomplete in form and function because of contradictory world view orientations. This research suggests that an emphasis on struggle management instead of conflict avoidance coupled with an enhanced bilateral commitment to the sustainability of the fishery may prove most helpful for the long-term outlook of the salmon. It also suggests that it is simply too early to tell whether this most recent attempt can or will "save the salmon."

Treaty Past, Treaty Present: An Interdisciplinary Analysis of the Pacific Salmon Treaty Through Examination of the Values, Culture and Political Structures that Provide Definition

by

Paul L. Evans

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Paul L. Evans, Author

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DEDICATION

This thesis is dedicated in loving memory to my mother Chloe Lynn (Burns) Evans. Without her spirit this project would never have been attempted.

TREATY PAST, TREATY PRESENT: AN INTERDISCIPLINARY ANALYSIS OF THE PACIFIC SALMON TREATY THROUGH EXAMINATION OF THE VALUES, CULTURE AND POLITICAL STRUCTURES THAT PROVIDE DEFINITION

INTRODUCTION

In early June 1999, Canadian Foreign Affairs Minister Lloyd Axworthy and United States Secretary of State Madeleine Albright jointly declared, "U.S. and Canadian negotiators have reached an historic agreement on the elements of a ten-year accord to conserve and manage Pacific Salmon" (Axworthy and Albright 1999). After eight hard years of diplomatic wrangling, Canada and the U.S. had found compromise – at least momentarily. The respective chief diplomats went on to conclude, "The agreement represents a victory for all those on both sides of the border interested in salmon conservation and the long-term viability of our salmon industries" (Axworthy and Albright 1999).

The 1999 "cease-fire" declaration gave relief to a long-standing strain on the Canadian – U.S. relationship and brought a sense of certainty to a situation that had been boiling since 1992. The 1985 treaty was established to manage the Pacific Salmon fishery for sustainable harvest. Through its construct, the Pacific Salmon Commission, the fishery was to be managed cooperatively until 1992 when a reassessment was to be accomplished. Unfortunately, its failures led to its "non-renewal" in1992 and subsequent years. The political schism over the fishery challenged the leaders in Ottawa and Washington as few issues ever have. After a

period of intense political frustration an agreement was forged. The new document and the management techniques contained within it potentially offer more than just the possibility of a long-term cessation of regional hostilities. This new document may well solve the problems that had spawned a bitter rhetorical war, but this has yet to be proven. Most likely, we will not know whether the treaty was a success or failure for some time.

The Central Questions of this Analysis

This thesis is an interdisciplinary study of the 1999 Canadian – U.S. Pacific Salmon Treaty. It is an analysis of the document and the context within which the document was developed. This study is an evaluation of the values, culture and political structures that gave it life and the truths that may or may not sustain it. At issue are five specified research questions: 1) Why are salmon important – what makes salmon valuable? 2) How do we know salmon, and how have we governed salmon policy based upon that knowledge? 3) What is political culture and how does it shape the context that produces salmon policies? 4) How does the Pacific Salmon Treaty explain our relationship with salmon, with our neighbors, and with the world around us? 5) What does our recent experience, in terms of the treaty and its formulation, suggest for environmental policy development in the future?

The answers to these questions do not provide a comprehensive understanding of salmon. However, they do provide groundwork for discerning some larger truths. This analysis is offered to provide background for the

conversations of the future – for the decisions we will have to make about our environment and our place within it. The following overview of the new agreement, its context and the framework used for this study should provide a useful foundation for the larger discussion on the complexities of salmon policy as revealed through the formation, reaffirmation and function of the Pacific Salmon Treaty.

The New Agreement – An Overview

The new agreement is an evolution of the 1985 treaty. In truth, the 1999 "joint agreement" is a rededication of the 1985 treaty. The agreement is founded upon the core principles and organizational structures previously established. It binds Canada and the U.S. to the active prevention of overfishing, to optimum production of a shared resource, and to providing "benefits equivalent to the production of salmon originating" in respective territorial waters (Pacific Salmon Treaty: Article III). The new treaty employs the organizational and administrative policies empowered by the original language. The Pacific Salmon Commission and its respective scientific working groups, its geographically apportioned policy panels and its technical dispute committees have been renewed and strengthened.

The new treaty is intended to provide an assessment and response management approach for salmon production that is based upon changing technologies as well as a significant investment in "endowment funds" that should help find lasting solutions to habitat and harvest problems. The U.S. committed to

provide an eventual total of $140 million dollars in four one-year allotments ($20 million, $40 million, $40 million, and $40 million). These funds are earmarked for investment in the development and implementation of new technologies aimed at stabilizing the fishery (Kowal July 31, 2000). The agreement is grounded in an expressed faith in scientific measurement, cooperative policy implementation and a "better science" philosophy commonly referred to as "abundance based management."

The 1999 agreement also amended the internal mechanisms of the Pacific Salmon Commission in terms of "respective party" decision-making. In essence, the new agreement ends the necessity for unanimous consent of individual commission members within the U.S. contingent. These modifications will probably allow for timely and more representative decision-making (Kowal July 31, 2000). It is important to note that the agreement did not advance enforcement powers. The Pacific Salmon Commission is still a recommendation-making body and not a policy enforcement bureaucracy. Canada and the U.S. did not delegate fisheries management enforcement powers to the Pacific Salmon Commission. While the 1999 agreement might appear to be a minor "adjustment" to the previously determined bilateral approach to the fishery, it is not. The new agreement will have a major impact upon the fishery and those that are dependent upon its health. Later in this study I will provide a more in-depth analysis of the new agreement and its evolved processes. However, for now it is sufficient to recognize that an agreement was found, that the agreement stands on the shoulders

of the previously established principles and governance structure, and that the evolution may have significant impact upon the whole of the fishery.

A Contextual Background

When assessing the past decade it is helpful to recognize that uncertainty and desperation clouded choices. Many people saw events through particular perspectives and then acted upon incomplete assessments. In the end, interests on all sides were frustrated, even with a signed pact. The evidence presented in later chapters will suggest that local, regional and national relationships have been pushed beyond comfort. From 1992 until 1999, the struggle for agreement seemed to many the elusive quest, something known but never quite realized. During the interim, many attempts involving different methods of consensus building were tried. An explanation of the history of the treaty provided in chapter two, will describe how succeeding initiatives were implemented, promptly declared a failure and nearly always ceremoniously replaced by another – failure. For several years Alaskan trawlers enjoyed record harvests, quite likely at the expense of Canadian stocks. While negotiations lingered, tension mounted. In late summer of 1997, a group of Canadian fishing boat operators frustrated with the apparent lack of progress in the salmon talks responded by blockading an American ferry (Wood 1997).

There was for a brief but intense period of time, the previously unimaginable possibility of a small-scale armed confrontation between vested

interests over salmon harvests. Overt violence between Canada and the U.S. became a legitimate concern (Wood 1997). The rhetoric of frustration was replaced by the rhetoric of war, and while war, direct and open armed conflict between nation-states, probably was not a realistic possibility, a short bloody clash between regional interests was very much a possibility. Put another way, the agreement brought relief to a situation in desperate need of resolution. In response to the bilateral accord, The Oregonian Editorial Staff concluded, "On paper, this deal is a major breakthrough because it represents a fundamental shift in the way both nations have always looked at managing the resource" (Oregonian June 4, 1999). The article further suggested that the agreement was a breakthrough on two levels: putting words into motion as envisioned and agreed upon, as well as transforming the management of a shared resource. This multi-level perspective is a critical point.

The expectations associated with the cessation of the so-called "salmon war" and the new "abundance based management processes" must not be discounted. While there will undoubtedly be change, much remains unknown about the basic mechanics of the new approach in terms of stock abundance data and the data gathering processes. This suggests that the new treaty may yet prove to be another hollow rhetorical victory at the expense of the fishery. At present, the respective parties' capacity to dramatically alter the industrial economic entanglements carried by the respective fishing fleets is an open question. While there is little doubt that most involved in the process were and remain sincere in

their attempt, the underlying conflict over contradictory goals and values is the real war: the war that probably has not yet been fought.

The evidence that will be presented in chapter one on the economics of the fishery suggest that even though the hostilities and harsh words have receded, a lasting peace may be far from at hand until the underlying structural issues are confronted and resolved. It is important to recognize how the ambiguity that surrounds and sustains the Pacific Salmon Treaty has played a role in the crisis. The Pacific Salmon Treaty is the source document for a specific recovery strategy developed upon a shared set of principles. As such it must be understood by those engaged in seeking real progress in terms of the ecological and economic challenges inherent to the fishery. This thesis should serve that function. At the end of this study, readers should be familiar with the treaty, reasonably knowledgeable about its context and aware of the organization the treaty empowers. These are important things to know because the governance mechanisms empowered by the renewal of this treaty as well as the underlying principles that sustain it are significant indicators of a particular set of conservation strategies for the fishery and its enduring health.

A Framework

When approaching this subject it becomes obvious that a systematic analysis is needed. Salmon policy is complex. It is a combination of environmental, economic, international and cultural relationships. The major

research questions previously identified can only be answered through an examination emphasizing an interdisciplinary framework. This is so because salmon policy is a subject that can quickly swallow one up. After all, any attempt to explain our ongoing bilateral management of "an anadromous fishery that ranges between inland and open ocean – within the sovereign territory of two nations, four states, two territories, and over thirteen tribal boundaries. . . is no easy task to be sure" (Munro, McDorman, & McKelvey 17-28). However, after evaluating the research problem a process revealed itself. To achieve the stated objectives of this study, I will limit my analysis to a brief but necessary description of salmon the species, as well as the symbol. Then I will attempt to put the history of the Pacific Salmon Treaty into summary form so that the inherent elements of this conservation oriented, science-constructed/science policy driven protocol are more readily understood. Following this, I will explain how political culture is formed, compare the development of Canadian and U.S. political culture and assess its impact upon their respective governance structures.

This study includes an in-depth discussion of political culture because of its direct and enduring impact upon policy determination. It should be noted that I pay special attention to Oregon in chapter three because of its unique role as the first identifiable Euro-American political culture in the U.S. Northwest and its associated effect upon the formation of past and present environmental policy initiatives. Once the values, history and culture pieces are in place I believe it is possible to showcase how and why political culture defines the relative reach of

salmon policy. Finally, I will evaluate the administrative function and organizational mission of the Pacific Salmon Commission and suggest strategies for future conceptual approaches to the problems that have yet to be addressed by the on-going processes. Precisely because of the size and scope of the task at hand, I have structured the framework of analysis to answer each of the five major research questions in turn, with the last chapter serving both summary and conclusion functions.

CHAPTER ONE: SALMON & VALUE

Even though it is tempting to begin this discussion of the Pacific Salmon Treaty with a plunge into the socio-political clashes over salmon, its habitat, its harvest, and its fundamental value – prudence demands a more calibrated course. A thoughtful study of the Pacific Salmon Treaty must first describe salmon and the interconnectedness of the economic, political and social constructions related to its existence before moving on to the larger, more complex tapestry of conflict. I contend that salmon policy is hard stuff. It demands of us a systematic approach and a thoughtful ascent. To do this, I want to take a step back – back some 55 million years, possibly even 100 million years, to a time and place that gave birth to the salmonidae species; the region now known as the Pacific Northwest (Lichatowich 10). I argue that this is an important sidebar because one cannot understand the full dimension of the conflict over salmon without at least a cursory understanding of salmon the species.

Salmon 101: The Basics

Although the exact point in time salmon evolved into the species we "know" is an intriguing mystery, the exactness is relatively unimportant. That salmon did evolve – is extremely important. It is vital that we recognize salmon evolution as the result of production, production itself sustained by a specific environment. In the case of salmon, a place produced origin. According to Jim

Lichatowich, fisheries biologist and author of Salmon Without Rivers, "No other region in North America has been as geologically active as the Pacific Northwest, which means that no other region has experienced the same degree of habitat and environmental transformation" (Lichatowich 11). Other species did not survive the geologic "trip" but salmon did survive, and the species defined a region through the acts. Political scientist Charles Horner, in his study "Habitat Preservation and Restoration under the Pacific Salmon Treaty" argues that, "Salmon stocks are, therefore, closely identified with specific locations within national territories regardless of where they migrate" (Horner 45). In other words, salmon are connected to the environment that produces them in a symbiotic relationship. Unlike other flora and fauna, salmon are not refugees from other ecosystems, but rather partners in the regional evolution of the Pacific Northwest. Thus, salmon exist as an interwoven but transitory essence and it is upon this central thread that the larger story rests.

What does "Anadromous" mean? Why is it important?

Most people in the Pacific Northwest are aware to some degree that salmon are an anadromous species of fish. By definition, salmon (as anadromous fish) are both fresh and saltwater fish. However, to fully recognize the value of salmon it is absolutely critical to understand exactly what the term "anadromous" means. Anadromous fish are born in fresh water rivers, mature into adulthood in the open sea, and return to spawn in fresh water. Pacific Salmon spawn to reproduce. They

spawn once because shortly after they lay their eggs, they die. In death, the decomposition of the adult salmon provides energy for the riparian areas young salmon are born into. This cycle is representative of what Lichatowich and others have termed, "a natural economy." It suggests that energy is constantly re-invested in the long-term continuance of the species and its interdependent ecosystem. It also suggests that anadromous fish are mobile links between the ocean and its rivers. Salmon are links produced by the needs of an interdependent bio-system. Energy is transferred by the very act of a salmon's birth, life and death. Thus, anadromous fish fulfill a critical role within the ecosystems they exist.

Salmon Lifecycles

When considering the lifecycle of salmon, it is helpful to envision a marathon of interconnected, individually contested "sprints." Instinctively, salmon race against time facing a gauntlet of upstream adversities just to continue the species through a last mortal act of reproduction – itself an act of rebirth. Generation produces generation and over time the marathon is won. Each salmon fights to finish because collectively the line between survival and extinction is razor thin. Inherent in this effort is the passing of "institutional memory" and the secrets of survival that are nothing less than a virtual warehouse of genetic information millions of years in the collecting. When eggs hatch, juveniles develop within the stock specific freshwater rivers where they were laid. For some stocks this stage lasts weeks, for others this lasts years. The development time is species

and stock dependent, based solely upon the genetic blueprint passed on from generation to generation through the act of survival. During this time, young salmon must find food, survive predation, and ready themselves for the trip to sea. Now, they often must do these things within a weakened or polluted river ecosystem (Lichatowich 11). During this stage of the salmon lifecycle a healthy wooded riparian zone is crucial; young salmon with no food, no cover, and water too polluted to provide the levels of oxygen they need cannot survive to make the trip to sea.

Once juveniles migrate to saltwater and the open sea, they spend a few months to several years maturing. While at sea salmon soak up energy and store it as flesh so they will be able to return to the stream of their origin to repeat the cycle and simultaneously renew their habitat through decomposition and decay (Groot and Margolis 1991). This is a critical point. Salmon uncaught are not wasted; energy is transported back into the riparian area for sustenance of the organic material that can sustain salmon (Groot and Margolis 1991). The plants and insects that consume the materials the carcass provides become new energy for the food chain that in turn supports salmon development. While scientists have debated (and continue to do so) about the original "source" for salmon, whether freshwater or saltwater, most agree that the lifecycle of salmon is special. The fact that the species exercises dual-citizenship in fresh and sea worlds, while simultaneously providing sustenance for both is itself something extraordinary, something that often strikes a chord within the human imagination.

How People Developed Knowledge of Salmon

Since the beginning of human occupation of the region we know as the Pacific Northwest, the relationship between salmon and humans has been as complex as it has been enduring. Lichatowich suggests that people were, "radiating out through the ice-free areas of North America" at least 12,000 years ago. (Lichatowich 25) The place they found was shaped through a multi-millennial glaciation process and the violent transformation that was its fruit. The landscape of the land is the evidence of the work glaciers performed over time; the continual give and take of an evolving ecosystem produced the foundation of the region's natural economy. Interestingly, anthropologists believe that salmon were relatively unimportant to the early Pacific Northwesterners (Lichatowich 27). The difficulty associated with trapping, processing and storing salmon was most likely recognized as a "last choice" when other, (easier) food sources were readily available. This suggests that the salmon-based economies among aboriginal peoples that eventually formed did so over years, with significant amounts of investment in terms of time, energy and trial (Lichatowich 27). In other words, salmon economies evolved within the context of an evolving ecosystem; they were connected to the changing nature of the region itself.

Fortunately, anthropologists agree that human activities are determined at least to some degree by their biological and physical world. While there is an on-going debate over whether salmon became a central food supply when salmon stocks themselves became overly productive, or human need forced the decision –

whatever the case, the point is that salmon became the central figure in the evolving human cultures of the Pacific Northwest (Lichatowich 11-15). As such salmon became a critical component to religious, cultural and identity threads woven throughout the fabric of native life. This suggests that the relationship between salmon and people had (and continues to have) depth as well as spread. Salmon exist as simultaneous values. However, these concurrent values are not necessarily in competition. This phenomenon, the existence of salmon within simultaneous value systems, is an extraordinarily important concept. To understand salmon policy, we must understand how and why humans "know" salmon.

How We "Know" Salmon

The Pacific Northwesterners of the present, much like their predecessors, "know" salmon through experience. Noted environmental historian Richard White, in his book The Organic Machine suggests that people know the Columbia River through labor. He contends that people know nature through a personal interaction with it. The harvest of salmon defines the person engaged as well as the relationship between (White 91). His conclusion is that knowing salmon and the world they represent is an interdependent process, that true knowledge of salmon can only come from a personal investment of time, energy and focus. This is a compelling point. If knowledge is the result of investment, then the relationship must have value. Thus, salmon the species have value – value beyond the sum of their genetic biomass. Salmon have value because of the relationships that the

various forms of human contact provide. This sense of varying depth in terms of value reinforces the essence of the work done by George Lakeoff and Mark Johnson in their collaboration Metaphors We Live By. In it they imply that metaphor reinforces the relationship between the conceptual utility of a value and its practical place in human activity.

Lakeoff and Johnson's theories define a world of attached values. Through metaphor, the purposeful figurative comparison of unlike things through the operator "is" we compare abstractions and then "know" things. Lakeoff and Johnson view metaphor in terms of a "conceptual understanding" that "govern our everyday functioning. . . concepts [that] structure what we perceive, how we get around the world, and how we relate to other people" (Lakeoff and Johnson 3). People learn to value the world in which they live based upon the assumptions and connections that metaphors provide. By extension, their research supports the notion that salmon have been valued in specific conceptual understandings for so long and in so many different ways that it would be nearly impossible to separate the incomplete abstract tools from the meaning they provide. Lakeoff and Johnson might further argue that it would be folly to try.

Salmon exist as species, as a vital agent within an evolving ecosystem but they exist metaphorically as well. Human constructed values have been attached to salmon and their function. Later in this study there is a more fully developed assessment of the role of myth, the function of political culture and the power of metaphor within the context of salmon policy. For now, it is enough to suggest that

we know salmon as simultaneous values. For instance, we know salmon as consumable/producible resource, as cultural icon, as religious and/or mythic symbol and more recently as endangered species. On the surface, these value systems have little in common except having an impact upon on salmon policy. However, it is precisely because of this impact that we must explore each in turn.

Salmon as Resource

Pacific Salmon are harvested for profit. This suggests salmon have value as a harvestable resource and that they exist as "product." This concept, salmon as producible material industrial input has saturated the regional understanding of its existence. Professors Gordon Munro, Ted McDorman and Robert McKelvey in their 1998 political-economic assessment "Transboundary fishery resources and the Canada-United States Pacific Salmon Treaty" claim, "While the harvests of the Pacific Salmon are subject to substantial fluctuation, historically the resource has played a major role in the fishing industries of Washington, Oregon, Alaska, and British Columbia" (Munro et al. 3). This is stated with an open understanding that salmon has played that major role largely in spite of our best efforts to "manage" it. Not surprisingly, they conclude that finding enduring strategies for the health of the fishery are in the region's economic self-interest (Munro et al. 33).

Their finding is not news: salmon harvests have long played a major role in the region's industrial economic development, especially since 1864 when Hapgood, Hume and Company founded their first cannery on the Sacramento River

(Schwantes 202). After the introduction of canned salmon and the associated human activities that arose to support it, the "harvest" model became the dominant paradigm. It gave rise to mass investments in full development of the industry that in turn spawned artificial propagation of fish through constructed hatcheries. This approach to salmon management is the enduring legacy of former U.S. Fish Commissioner Spencer Baird (Lichatowich 122). His understanding of the "harvest model" cast a long shadow. Within the model, seed (salmon fry) can be planted at will, harvested efficiently and managed for future planting/production needs. In the spirit of the times, Baird saw a situation where all variable factors of the process could be known, controlled and maximized for "optimum production."

Salmon as Industrial Product

Within this context, salmon became less a natural partner and more of an industrial servant. Put another way, salmon once stripped from the "natural order" became known as a resource that could be created at will through human intervention. In theory, salmon could be created in such numbers that escalating harvest and its associated profits were limitless. Unfortunately, things were not what they seemed. In an attempt to encapsulate the irony that is salmon, biologist Lichatowich uses the phrase "free wealth" to explain the meaning of salmon within the resource value system. Salmon, produced by nature and supplemented by human activity, exist in an open and accessible public fishery where wealth is

available for any that seek it. By extension the fishery's health has been similarly, openly entrusted (Lichatowich 81).

From the earliest days of human settlement of the region until the present, the utility of salmon has been known as a ready source of food and profit. Although the "first" inhabitants may have sought other food before they accepted salmon as their mainstay; eventually they constructed an entire culture surrounding the constant bounty salmon provided. The salmon cultures had immense relative wealth and dwelt within a sustainable ecology. Ironically, this constant essence, and its perceived everlasting perpetuation, allowed the resource to be expanded in utility from personal consumption for sustenance, into an exploitative resource for the taking. Salmon became, at least to some, nothing more or less than a necessary input for the continued evolution of an industrial economy (Lichatowich 1999). This is an important value when considering the macroeconomics of emerging nations.

This transformation of the salmon through the harvest or "garden" filter, and its subsequent devaluation as "just another crop" that can be controlled through human management, secured a series of assumptions about salmon that have proven incomplete. Hatcheries have achieved much, but they may have simultaneously put the entire ecosystem and its future at risk (Lichatowich 124-145). Over time, the Pacific Salmon fishery and its industrial economy helped promote Euro-American settlement of the area. This in turn provided the infrastructure and cultural foundation for industrial valued development. However,

the fishery economy and the market forces that compel its decision-making are not value-free. Profit and not sustainability, are its most significant value. While other values clearly exist within the market model, they are not an equal variable.

Resource Economics: The Logic of Overfishing – Rational Advantage

The exploitation and over-exploitation of salmon through harvests based upon incomplete assumptions has caused harm. The contending values of salmon have been misunderstood. People often inaccurately assign the natural value of salmon to the industrial value of salmon. This superimposition of conflicting meanings is not helpful; it clouds the issues and quite likely impedes discussion. When people confuse values they may accept truths that simply do not exist. To the natural economy, a salmon is an actor with a role to play; to the industrial economy, a salmon is $X dollars per pound. The decision matrices of fishing interests are bound by the industrial economic rules of the day. Economic theory doesn't consider non-economic values – this is neither good nor bad, but reality. Any attempt to compare the different and largely incompatible value systems of the natural economy and the industrial economy is a risky proposition. This practice is especially interesting given the undisputed prominence of "profit motive" within our constructed industrial economy.

The market theory clearly assigns primary value to profit based upon rational, context-bound decisions about availability of material, production cost and perceived near-term benefit. The market theory holds only those values

enumerated in terms of tangible, predictable industrial economic gain. Future opportunities and "valueless" goals are simply irrelevant to the capitalist model. Oddly, some people have forgotten that economic profit incentives that maintain the marketplace are just that: interconnected incentives for distinct economic advantage. If a fish is an economic instrument solely, then it will be managed as such for the best profit. A fish caught today by this standard is worth limitless fish tomorrow because tomorrow's fish by definition have an uncertain availability. To more clearly understand what this means in terms of how we know the salmon as resource, we must examine the tenets of fishing and industry.

In their highly regarded work Fish, Markets, and Fishermen: The Economics of Overfishing Susan Iudicello, Michael Weber and Robert Wieland argue that, "when marine fish stocks are treated as free goods in an open-access regime, they will be overfished if it is feasible to do so" (Iudicello et al. 41). At first, this statement seems counter-intuitive. Why would fishing interests overfish their own product? The answer lies within the open-access or ambiguity of access to continued materials for production. In other words, if the economics of the situation present high profit and low production costs through over-harvest protocols, they will continue. Taken further, if a better profit can be gained through unsustainable long-term practices, they must be continued for best short-term/tangible return.

Garrett Hardin's groundbreaking commentary, "The Tragedy of the Commons" is a useful theoretical explanation of this type of phenomena. His

illustration shows how and why people that are knowledgeable about the diminishing capacity of their commons, are driven to over-exploit. The public "race" to gain advantage through focused harvest of ungoverned (accessible) natural resources wealth is a powerful force. It compels short-term thinking because of the recognized ambiguity of long-term accessibility (Hardin 1968). This in turn serves to further expedite the destruction of the root resource and increases relative pressure for over-exploitation and unsustainable harvest behaviors by competing interests. Within this context, over-harvest is a rational choice. It is rational so long as uncertainty of future access to a natural resource exists. Ambiguity in terms of availability within the industrial economy promotes a winner-less race for over-development of a shared resource – it cannot help but do so. Simply stated, natural resources are by definition difficult to manage because of uncertainties resulting from natural processes. This promotes short-term thinking that is both rational and destructive.

The Pacific Salmon Fishery & the Specific Value of the Resource

Pacific Salmon are transitory fish by nature and dependent on fresh and saltwater ecosystems. Ownership and control of stocks within the fishery is highly difficult to establish and nearly impossible to maintain. Lack of clear ownership provides ambiguity in terms of future access to low cost material. Even with an aggressive, well-constructed management regime – access to future materials is difficult to ensure. As previously mentioned this stress in turn presents a dilemma

for fishing interests. In a highly capitalized industry, competitors can deplete resources for profit in rapid fashion; they are compelled to do so. This explains why, "Once the stocks show some signs of recovery, the pressure to ease up on limitations will increase, fishers will seek ways to avoid restrictions and improve their catching power, and the reproductive capacity of the fish will again be overcome by excessive fishing mortality" (Iudicello et al. 42). In their study fisheries around the world have witnessed the same cycle. Open access promotes a "race for the fish." The rush for development of the fishery leads to resource depletion and habitat degradation (Iudicello et al. 40). This cycle is only magnified in the Pacific Salmon fishery where other variables provide even more ambiguity and complexity for management. In other words, the experience of every major fishery in the world proves that capital intensive fishing interests will use every power at their disposal to ensure the catch even if it proves to be their last.

In his book, Dead Reckoning: Confronting the Crisis in Pacific Fisheries, Terry Glavin concludes, "The increased fishing efficiency produced by overcapitalization results in increased public expenditures for fisheries management. . . regimes must become far more elaborate and far more precise in order to come to terms with increased catching power" (Glavin 49). The process of fish management is difficult enough in the abstract. However, the realities of the Pacific Salmon fishery suggest that success is even more so. In truth, long-term sustainability may be nearly impossible, at least on a predictable basis because the fishery has so many uncontrollable variables. Factors concerning such prediction

include: oceanic climate shift, hatchery effects, incomplete assessment techniques, technological efficiencies in harvest methodology, riparian deterioration, dams and riverine blockages, and other political, social and economic constraints. These are the issues that define the Pacific Salmon fishery; that suggest success is similar to "trying to put a person on the moon every year" (Glavin 44). This analogy, for those familiar with the complex processes and razor thin margins for error associated with the Apollo Project, reveals at least a sense of the multi-faceted complexity of the situation. Expectations for perpetual success may be more than can be assumed.

Management of the Resource

To begin with, management strategies require consistent and accurate data so that rational choices can be made and sustainable policies implemented. Within this context, "fixed" variables are the ideal. However, how can long-term solutions based upon abundance, if that can be fully derived, be attempted given the nature of a transitory species? An anonymous fisheries biologist once said, "Counting salmon is like counting rocks, except that the salmon are constantly moving, they are invisible, and the rock may have already been counted before." This comment is offered to illustrate the difficulties associated with determining certainty in relation to the fishery. Even though well-intentioned scientists measure statistics with the newest technology at their disposal, the results are imprecise by definition – even on good days. This imprecision fuels the crisis. Production and harvest of

natural resources can be complex enough with precise data but is nearly impossible (in terms of certainty) for salmon. Glavin further argues, "The consequences of this treadmill are massive private investment, massive public investment, diminishing social benefits, increased rates of error, and often the collapse of entire fisheries" (Glavin 41).

This assessment suggests that the efficiency of modern fishing technologies added to the power of the demand-price relationships compel industries to over-harvest because there is no assurance of future accessibility. In a competitive world, businesses must take available opportunities for profit or risk other businesses profiting "at their expense." This behavior is rational given the particular characteristics of the dilemma. Harvest interests often act without regard for changes in climate, product availability through alternative sourcing and the health of the fishery because they are oriented toward today and not the possibility of tomorrow. The economics underlying the way we know salmon demand short-term profitability over long-term potential. Resource availability in the present is more significant, in economic sense, than the potential for resource availability in the future. Precisely because salmon are a shared commodity (Canadian, U.S., Native American Tribes) – no one owns the fish and their value has been readily accessible by any/all seeking to make profit from its availability. This knowledge reaffirms Hardin's haunting prophecy. It allows irresponsibility to continue under the cloak of anonymity. It appears that how the people of the Pacific Northwest

know salmon, in terms of an ever-present accessible resource, is as problematic as it is enduring.

Salmon as Cultural Icon

Salmon as resource and/or available wealth is not the only way people of the Pacific Northwest know salmon. Salmon are also recognized as a cultural icon throughout the region. Author Timothy Egan claims,

> The secret of life in the Northwest runs in packs of silver; as with most mysteries, it lies just below the surface, evident to anyone who thinks it important enough to look. At Willamette Falls, this secret reveals itself in rare flashes amidst the industrial clutter of Oregon City. The river here is a beast of burden, powering the street lights of nearby Portland, grinding wood pulp to paper, settling into locks that lift ships on their way. Against this metallic frenzy a few Chinook salmon hurry upstream, driven by a singular impulse to pass on the baton of life and then die. . . (Egan 180).

The genetic predisposition of the salmon's journey to renew the region with its life force has defined and still reaffirms a particular cultural identification for the people of the Pacific Northwest. Regional investment in the notion of salmon has created shared identity. Many people within the Pacific Northwest take no small measure of pride in their "lifestyle" that as a matter of course includes a relationship with salmon in some form or fashion. The salmon has been framed as a robust embodiment of the regional psyche – it personifies the metaphorical challenges of life, purpose and meaningful death. We find its image everywhere because nearly everyone finds at least some margin of solace within its shadow.

This is no small thing when considering the connections between salmon and the people that derive cultural self-worth from its continued existence.

White contends that, "Salmon are not so much a means of making a good living as symbols of the good life itself" (White 92). He recognizes that making a living – the traditional economic relationship of life within the industrial economy – is one but not the only significant value. I contend that this is especially true when the society at large becomes increasingly disconnected from the resource exploitative industries that spawned its development. The theory of cognitive dissonance would suggest that when people recognize a drastic alteration to the world they know and were defined by they would be compelled to seek corrective action; a return, at least to some degree, of the world they know. Icons are representative and recognizable symbols that humans construct identify upon. Icons are anchors on which people can understand and organize their world through. This may be why the cultural value of the symbol of salmon has endured, and even grown over time. To prove the point, we need look no further than a recent speech by Oregon Governor John Kitzhaber at Oregon State University on January 6, 2000. In it he said,

> There is a growing sense that what has defined us is slipping away. In particular, salmon – one of our great icons here in the Northwest is in trouble. If as Norman Maclean says, 'eventually all things merge into one and a river runs through it,' then salmon swim through it – twice (Kitzhaber January 6, 2000).

Salmon as Religious/Mythic Symbol

Salmon exist as more than industrial input, more than cultural icon. Salmon exist as religious and mythic symbols of the "natural world" as well. By function, the symbol of salmon can evoke specific attitudes and impressions associated through time, space, logic or imagination (Edelman 1964). Over time, the symbolic value of salmon has been sustained through myth. However, too often myth is confused with fiction. Anthropologist Zdizislaw Mach argues that myth "is a symbolic text which presents a story which in turn transmits values, norms, and patterns essential and fundamental or a given culture" (Mach 58). Political scientist Lee McDonald in his essay "Myth, Politics, and Political Science" suggests that, "myth does not tell truths, but does tell the truth; a myth is something that never was, but always is" (McDonald 141). Stories that are told through narrative myth can emphasize a particular societal experience and ground a people to place. McDonald concludes that, "myth is uniquely able to bridge old and new, to absorb new meanings, to give structure to the inchoate" (McDonald 143). In other words, the story of salmon can help describe the indescribable. The drive to continue the species despite the obstacles of life is a powerful and enduring story that provides humans with a sense of meaning and a context of place that they need. In the Pacific Northwest, catching a salmon for personal consumption is, at least for native peoples, nothing short of a religious act; it reifies identity in a way few things can (Egan 185).

Political scientist Michael McGinnis in the introduction to his study "On the Verge of Collapse: the Columbia River System, Wild Salmon and the Northwest Power Planning Council" claims, "The vision of wild salmon swimming and spawning is an essential feature of the wild Pacific Northwest" (McGinnis 64). His article focused mostly on the Columbia River and its dams and hatcheries, but asserts that; "respect for natural values requires that human beings recognize their duty as citizens of diverse ecological communities" (McGinnis 74). Although the "Great God Salmon" has long ago been discarded as a deity to be worshipped, his mythic presence and the truths his story reveal endure (Egan 185). We know now that salmon really are not "people" at least in human terms but yet we recognize that salmon have a distinct place within our consciousness. Inherent in the myth are the fundamentals of balance; keys to a natural economy that exists, parallel to the industrial economy we see the world we live in through.

Timothy Egan's words express the connective nature of salmon within the region. He wrote, "In the Northwest, a river without salmon is a body without a soul" (Egan 182). For many reasons salmon have a place, an undeniable, essential and distinct place and associated valuation within the human constructed world of the Pacific Northwest. And while the natural economic value of salmon may not be the most important it is significant nonetheless. The solar transformation process that is the life cycle of the salmon lends itself to mythic association. Salmon are born, seek out the ocean and soak up energy created by the power of the sun and atmosphere and then return that power to the riparian areas of their birth – it is an

undeniably noble existence and it permeates the region's conscience. Any attempt to deny or ignore this value would cheapen the experience of living in the Pacific Northwest as well as hinder the possibilities for the success of long-term strategies for regional economic and ecological health.

Salmon as Endangered Species

Salmon have recently been identified as an "endangered species." This distinction as an eco-system health "at-risk indicator" is a new value for salmon. It is symbolic of the consequences of human activity – it is an illustration of the clash between the natural and industrial economies. As explained later in this study, endangered status is a political value often associated with cultural root metaphors in conflict. Salmon as an endangered species fuels political strife because of deeply held but contradictory political orientations. For many, this new metaphorical existence is a hard pill indeed. Long recognized as an "indicator species", the listing of salmon stocks by the federal government was an epiphany of the first order. To better understand the issue it is helpful to look to the work of communication scholar Mark Moore and his essay "Constructing Irreconcilable Conflict: The Function of Synecdoche in the Spotted Owl Controversy." In his study Moore argues that the spotted owl in Oregon was by its mere existence in time and place, a symbol of a greater whole. He finds that the spotted owl represented simultaneous yet, "competing social realities about life and liberty, with opposing rhetorical tropes" (Moore 1993). Moore recognized that the owl

simultaneously meant contradictory values – root values that defined particular world view orientations and policy preferences. In his study he found that the confusion only served to further entrench instead of ease the opportunities for compromise as tensions grew.

Moore's research suggests that divergent social constructions over accepted symbols promotes a political situation that is irreconcilable by design and helped escalate the timber crisis of the late 1980s and early 1990s as a matter of function. He argues that representational ideographs (one-term summations of a political orientation in synecdochic form), "can also limit discourse to a part of the problem that does not resolve the conflict" (Moore 146). Through his research, Moore discerns the interconnectedness between the natural world and conflicting core values held by the inhabitants of a natural resource economy. He claims that the value systems find within the respective rhetorical tropes could be reduced to root values: "life" meaning a cluster of orientations fixed upon ecosystem health and species protection, and "liberty" meaning a cluster of orientations fixed upon human freedoms to use nature for wealth and sustenance (Moore 1993). For those knowing the owl as indicator species, it exists as the embodiment of the values associated with life itself. By contrast, for those dependent upon the timber as resource for a "way of life", the legal issues surrounding it exist as obstacles in the path of accessing material needed for tangible gain and as such, a control on individual liberty. The dual nature of the owl was itself the fuel for continued

political conflict because ultimately, "we want our environment and our economy" (Moore 158).

It is important to understand that these values are core values – they are elementary pieces of particular world views. The attached values are so solidly connected to the "thing" in question that they become the "thing" itself. This is especially challenging when considering the salmon. For if the spotted owl, a relatively unknown and minor species simultaneously means "life" and "liberty" to respective "sides" in conflict over forest management, then what happens when the value in play is salmon? It is an interesting question because our relationship with salmon is even more complex than our relationship with spotted owls. Spotted owls have not traditionally been a regionally significant species, at least compared to salmon. Salmon and our multiple relationships with its harvest and consumption help define the Pacific Northwest and its people.

While it may be possible to reduce the dispute over salmon to a life versus liberty clash, I am uncertain whether salmon can be properly classified as a representational ideograph and/or synecdoche. While the attempt is worthy of future study, that assessment is not the purpose of this thesis. For now it is sufficient to say that our relationship with salmon is complex and interwoven throughout the fabric of this place and its people. It is a relationship based upon different but simultaneous salmon values – now including endangered species. The ambiguity added by this new status will likely serve to add fuel to the already emotional discourse over present and future recovery strategies.

Added Complexities

We know some truths about the mechanics of the fishery and its current status. We know that habitat degradation, hydropower (dams) and the associated constrains imposed by it, over-harvesting of declining at-risk stocks and the impact of hatcheries have played significant roles in the demise of wild salmon stocks. All are recognized agents of harm. Together, these issues compose the so-called "**Four H's**" and have constituencies that prioritize and rationalize their own role in widely varying degrees (Lichatowich). In simple terms, agricultural use, increasing urbanization and our recreational choices impact habitat. Hydropower impacts temperature, riparian health and fish transit to and from riparian areas. Harvest severely impacts bio-diversity as well as the obvious theft of energy from dependent ecosystems. Finally, hatcheries produce fish through artificial propagation techniques that have proven unsustainable in the wild and are believed to promote disease.

The Four-H's affect how we know salmon because we are connected to the activities related to each. All of these factors are significant pieces of the larger puzzle. Every knowledgeable person engaged in activities related to these endeavors knows that they are a part of a larger tragedy. Interestingly, nobody accepts responsibility for the tragedy even though all recognize their inability to successfully deny involvement. In the case of the salmon fishery, the iceberg appears to be as unavoidable as it is undeniable. Unfortunately, knowing a problem is only part of the process. Finding solutions is quite another. When the National

Marine Fisheries Service proposed rules for the management of Pacific Northwest salmon stocks through the powers of enforcement granted agencies through the Endangered Species Act (ESA), the people of the region came to value salmon in yet another way, salmon as ecological domino.

Salmon as Problem

With the listing of salmon as endangered, salmon became a problem in need of a solution. This value: salmon as endangered species in need of political solution is itself an interesting development. Noted political scientist Murray Edelman in his book Constructing the Political Spectacle concludes that, "The language that constructs a problem and provides an origin for it is also a rationale for vesting authority in people who claim some kind of competence" (Edelman 20). Edelman's claim was validated by the language and arrangement employed by Commerce Secretary William Daley during his formal announcement, "After careful study, and consultation with state and tribal scientists, the Commerce Department's National Oceanic and Atmospheric Administration is today listing as threatened or endangered several groups of Pacific northwest salmon" (Daley 1999). With this introduction, he couched the problem as a scientific construct – with solvency found only through trust that NOAA in consultation with other experts can make things better. Science in this context is the cure for a disease; if science detects a "problem" then science must be the logical, competent agent for solution.

Salmon as Scientific Problem: In Need of Scientific Solutions

In the case of salmon, science has played a major role since the very beginning. In truth, we have remade the ecological landscape in the name of better science. Through its myriad of processes science has always suggested a new answer for the latest identified problem through quantification of inherent problems with the status quo. Therefore science being the rational choice for solution development (because science detected and identified the problem) must be called upon to act in the best interest of the aggrieved species and the region as a whole. The next logical conclusion would suggest that federal policy, through the intervention of NOAA and the experts, must by definition be the best approach of providing the needed scientific remedies because federal policy was the entity that gave definition to the problem as it exists. This may be a false trust. The federal government may be incapable of recognizing, in an institutional way, its limits. Edelman further asserts that, "The most common course is the enactment of a law that promises to solve or ameliorate the problem even if there is little likelihood it will accomplish its purpose" (Edelman 1988: 24). This would suggest that legislation passed, while measurable and accountable for administrative purposes, may have little real effect upon the root cause of the stated problems.

While there is little doubt that the ESA has made a difference for specific species across the nation, it is important to remember that the ESA was never intended as an international ecosystem management tool for mass production of transitory fish – for harvest. When considering the ESA listing of the salmon it is

important to remember that easy solutions rarely exist in the real world; action is obviously needed but cookie-cutter approaches to problems two hundred years in the making may be the perfect recipe for policy failure. Another consideration must be the institutional memory of federal activity in regards to the Pacific Salmon fishery. Many understand that the fishery has been worsened by federal activity more often than not. On one hand they see the federal government as the logical governmental agent because of capacity, competence, expertise and theoretical wisdom; on the other, they see the last two centuries of evidence.

It is helpful to remember that the major challenges to the fishery were constructed, at least funded, by the United States Government. The conservation based Pacific Salmon Treaty is ultimately, a federal construct. In its language and the principles that bind the United States and Canada together on this issue, conservation for the expressed purpose of equal harvest is the end goal. This policy, a plan to perpetuate the conservation of a harvested resource must not be confused with something that it is not. This is a federal agreement to share wealth between two historically friendly sovereign states; implemented for mutual interest and national security. Additionally, the creation and expansion of hatcheries was a federally sponsored policy initiative (Lichatowich 124-135). Dams, the same dams that prevent salmon stocks from easy passage up and down the inland rivers, were built by federal agencies with the full faith and credit of the United States of America (White 89-113). The United States Forest Service and the Bureau of Land Management each had a role in the reclamation of the land and the deforestation

and alteration of native riparian zones (Egan 194-212). The barren areas that used to help salmon spawn are a lasting legacy of federal intervention. It is important to recognize these connections because this newest way of knowing the salmon through personal investment and action through federal expertise is questionable at best.

Chapter Summary

In this chapter I have attempted to answer the first research question: "why are salmon important – what makes salmon valuable." Salmon are important because they are valuable. To begin with, salmon are known as a natural resource. As such, the industrial economic value of salmon plays a multi-faceted, omnipresent role in discussions concerning salmon policy. Secondly, the people of the Pacific Northwest know salmon as a cultural icon and as a mythic hero that reaffirms a shared but constructed identity for a people and place. Finally, salmon serve a symbolic function as an endangered species, a powerful notion that has yet to be fully grasped. Salmon are valuable because people have assigned value to them; different aspects of their existence hold different values – concurrently. As a whole, this chapter posits the notion that salmon are indeed, more than just fish. Salmon policy is difficult to reconcile, at least in part, because of the contradictory orientations associated with human assigned values. Unfortunately, as scarcity increases, value and demand is similarly increased. This may explain how billions of dollars are spent annually on paradoxical practices; practices established and

maintained in the name of "saving salmon." The next chapter is an exploration of our history with salmon as manageable resource. It is offered as background so that a more developed understanding of our contradictory notions may be discerned.

CHAPTER TWO: HISTORY OF A TREATY

The history of the Pacific Salmon Treaty is evidence that enduring political crises are the fruit of shared history. Political conflict, regarding salmon policy, has been formed and sustained by a relationship between invested interests. It has often been the result of perceived inequalities of power, influence, and liberty. It seems that crises exist as a human response to the ideal we call "fairness." The Pacific Salmon wars and the events and reactions that have colored the salmon community of the Pacific Northwest reflect a push/pull relationship between salmon and the cultures that evolved within the region. The frustrations and rancor so apparent in the struggle did not occur overnight. The issues involved and the underlying clash of value-systems are centuries old and when taken together, reflect a common heritage for a region and its people. By extension then, the Pacific Salmon Treaty as a preferred political solution was crafted as a fix to the failures and frustrations born of a shared history. Ultimately, the Pacific Salmon Treaty is a political instrument that exists to fulfill the need for clarity and consistency in human arrangements associated with salmon, its harvest and its long-term management. It establishes and maintains rules for Canada and the U.S., brings function from language, and governs a fishery. As written and implemented, it has tremendous inherent capacity as a tool for organization of labor, implementation of policy, and as a regional legitimizing influence.

Thoughtful study of political crises requires at least a cursory understanding of reality, past and present. It demands an analysis of the broad historical themes that construct the relative context. This suggests that to understand the salmon policy of the present, it is necessary to investigate the salmon policies of the past so that the present can be more readily known. Previous events and the political reactions to those events cannot be ignored if one seeks to develop meaningful interpretation. Therefore, to understand the current treaty and the context of its inception we must first have a working knowledge of how and why we find ourselves at this place, at this time. To achieve this, I will begin with a description of the origin of the debate. Next, I will furnish a brief analysis of the 1985 Pacific Salmon Treaty and describe major themes inherent to its language and utility. Following that, I will provide a historical summary of the post-treaty "frustration years", and discuss significant events that helped foster a renewed interest in securing a treaty. Finally, I will detail the new agreement, with careful attention to the factors that led to its inception, and suggest near-term possibilities concerning its success.

The Origin of the Debate (1800 – 1985)

For thousands of years the earliest immigrants to the Pacific Northwest existed in relative balance with salmon and the environment that sustained salmon. The natural economy that gave rise to the so-called "salmon cultures" was the outcome of a blending of religion, myth and human development. It emphasized

the necessity salmon of consumption while concurrently reaffirming a symbiotic relationship between humankind and salmon. However, when the Hudson's Bay Company (HBC) established its presence in the Oregon Country and British Columbia, the associated values of an industrial economy slowly crept into the regional psyche. The notion of exploitative profitability began to slowly erode the universality of the natural economy. The rise in influence of the HBC and its expanded reach through its subsequent experimentation with products beyond the fur market began the transformation and revaluation of salmon. By 1824, the year the HBC moved its headquarters from Fort George (Astoria) to Fort Vancouver the metamorphosis in cultural valuation was well underway (Lichatowich 54). This process ultimately transformed salmon's essence from natural wonder into natural (free and available) resource: exploitable, predictable and producible raw material for an industrial economy (Schwantes 200-202).

Unfortunately, this transmutation was only accelerated when the wagons of the "Great Migration" (1840s) came. The rapid migration of people seeking a new fortune in the seemingly inexhaustible natural bounty they found, brought an industrial orientation that saw the "remaking" of the natural world as nothing less than a sacred quest (Smith 123-144). Later chapters will analyze the core rhetorical visions that helped foster an enduring political culture for Oregon and much of the region, but for now it is important to recognize that the "Great Migration" produced a simultaneous "Great Transformation" for the salmon and the world within which salmon evolved. Beginning with the first "production" sites in the region, the

Hapgood, Hume, and Company canneries on the Sacramento River built in 1864 and the Eagle Cliff (Washington) site in 1866, Pacific Salmon became a worldwide marketable commodity (Lichatowich 86). With the introduction of "modern" technology, salmon in its canned form became a manufactured product that could be safely stored, processed efficiently and shipped virtually anywhere (Schwantes 200-202).

Almost overnight, canneries and the vision of "free wealth" they promised, converted the utility of salmon. Salmon were no longer just an available source of food for consumption or trade; salmon became raw material for a production-based economy (Lichatowich 84-88). Historian William Robbins in his book Landscapes of Promise reports that by 1874 there were twelve canneries between Astoria and Portland alone; and by 1883 there were fifty-five along the Columbia reaching a peak production of 43 million pounds of Chinook catch (Robbins 1997: 134). The opportunities for swift profit readily available throughout the region in combination with new technology designed to make harvest techniques more efficient, made the industrial production of salmon increasingly more lethal. Gillnets, traps, fish wheels, and the use of seines took salmon at incredible rates. Just one fish wheel at The Dalles took over 227,000 pounds of salmon in a three-month period in 1894 (Robbins 1997: 134). By the last decade of the Nineteenth Century people started to recognize undeniable declining catch rates and sincerely desired a remedy but were uncertain about what to do and how to do it effectively (Robbins 1997: 142-

144). This uncertainty has proven to be a common thread interwoven throughout the history of the Pacific Salmon fishery.

Through the lens of hindsight, it is easy to see the massive ecological transformation that occurred during the first full century of Euro-American involvement in the west as a result of the industrial visions rigorously implemented by fortune seekers. The reality defies adequate description. During that time the natural economy was replaced by the industrial economy. Nature and its valuation changed; this was especially so in Oregon and Washington but in British Columbia as well. The result was resource exploitative industrial economies. Logging, agriculture and fishing became the underpinning for societal development; humankind's dominance of the natural world for human need was a foundation of thought not easily reconciled with nature's finite capacity. With this in mind, with an exploitative-based infrastructure in place, it was logical that the growing need for expansion of profit produced strife between Canadian and U.S. interests.

Case Study: Fraser River

In this context, wealth in the form of natural resources was a "contested" race and the Fraser River sockeye population was the first widely sought-after prize. These fish, reared in Canadian waters, instinctively migrated through the Strait of Juan de Fuca into ocean areas easily accessible for Washington fishers. Knowing this migratory behavior and the context it was bound within, the outcome was predictable, "The Americans were soon catching more of the Fraser's salmon

than were Canadian fishermen" (Lichatowich 176). In 1901 Americans canned 1,105,096 cases (48 one-pound cans per case) of Fraser River sockeye compared to 928,669 cases canned by Canadians (Lichatowich 176). The measurable "take" by Americans – take of fish reared within the sovereign territory of Canadian waterways – fast became a major regional issue.

It is estimated that during the first decade of the 1900s, the massive traps used by American commercial fishers caught nearly 60% of the Fraser River's sockeye salmon (Lichatowich 176). When this happened, Canadian fishers demanded greater equity in terms of harvest; they asked "Why should Americans harvest the largest share of Canada's premier fisheries resource?" (Lichatowich 176). This was an interesting question; a question which led to discussion between the State of Washington and the Dominion of Canada and eventually to the Bryce-Root Treaty of 1908 (Lichatowich 176-177). In following years Canada and the U.S. developed regulations for management of the Fraser River sockeye harvest that provided for a "fair share" of the fish for both parties.

While the Canadians passed the salmon management measures with due speed, the U.S. Congress became entangled in "state's rights" claims made by the State of Washington and was ultimately unable to pass the required enabling language; by 1914 Canada abandoned the treaty (Lichatowich 177). As an historical aside, the capacity by the Canadians but not the Americans for swift government action that was apparent then has remained a constant throughout the history of the treaty. Canada's government was constructed in a manner that

allows for direct command and control of bureaucratic functions; this relative strength in terms of administrative capacity is not conjecture but rather historical fact (VanderZwaag 66-77).

Despite the failure of implementation of the Bryce-Root Treaty, Canada and the U.S. reinitiated negotiations for a salmon agreement in 1918. The Hazen-Redfield Commission was assembled in response to the devastation of the Fraser River sockeye population that occurred the year before. By 1917 a fishery once worth more than $30 million per year was on the verge of collapse (Lichatowich 177). The joint Hazen-Redfield Commission called for the establishment of an international committee that would manage the fishery resource and guarantee equity and access. The proposal was passed by the Canadian House of Commons but was stalled and then eventually killed in the U.S. Congress by Washington fishing interests (Lichatowich 177). This is an important case study because our shared history is witness to a repeated inability on the part of the U.S. Congress to act in concert with its Canadian counterpart.

Delay, Frustration and Missed Opportunities

Unfortunately the continued intransigence on the part of the political leadership in the State of Washington produced long-term consequences. In 1918 it was estimated that only 85,000 sockeye salmon escaped the gauntlet that was the fishery; down from as many as 12 million in 1901 (Lichatowich 178). This 11.9 million fish decline in returning spawners not only produced fewer eggs – and

fewer salmon over time – but the denial of energy transference through decomposition and decay that accompanies the natural process. Ultimately the continued practices altered the physical nature of the rearing grounds and put at risk the riparian areas capacity for the natural production of salmon (Lichatowich 178-179)

Throughout the early 1920s, negotiations for a limited treaty continued but produced few tangible results. Tension mounted: for a brief period Canadians even considered physically altering the mouth of the Fraser River in an attempt to redirect migration patterns. According to Jim Lichatowich, two events in the 1930s gave new life to the promise of a bilateral treaty: Washington State Initiative 77 (a measure passed by Washington voters in the fall of 1934 that prohibited traps and other forms of fixed-gear) and a natural variation of migration pattern for Fraser River sockeye (Lichatowich 179). It appears that an internal political clash within Washington waged for its own reasons in conjunction with an unpredictable but natural alteration in sockeye salmon behaviors permitted the fishery to continue. This "happy coincidence" provided Canadians with more catch and allowed frustrations to ease, if not end. On August 4, 1937 a salmon treaty for bilateral management of Fraser River sockeye salmon was ratified by Canada and the U.S. and the "joint Canada-U.S. program to restore the sockeye salmon in the Fraser River was under way. . . " (Lichatowich 180).

The Origin of a Solution

Success in adoption of a treaty and its subsequent implementation did not however, guarantee success for the fishery. While the newly empowered International Pacific Salmon Fishing Commission (IPSFC) "did a remarkable job of creating fishways, ladders and spawning channels aimed at restoring sockeye and later pink salmon," the IPSFC was constrained by its mandate and unable to manage the "newest" threat to the sustainability of the species – interception fishing (Glavin 110-124). In the years following the Second World War until the early 1970s, Canada and the U.S. became increasingly concerned with the economic threat foreign (non-American and/or Canadian) interception fisheries posed (Jensen 376). Interception fishing, the purposeful harvest of salmon at sea (in international waters) during measured migratory routes is a method of large-scale harvest that denies large numbers of salmon the opportunity to spawn.

Canadian and U.S. fleets have been practicing variations of this kind of activity since the beginning of the fishery but the Japanese, Russian and European fleets, with no investment in the shared costs of the ecosystem, increased pressure on regional fleets because they harvested salmon outside the boundaries of the convention (Finley 2000: 115-116). While it would be difficult to ascertain whether it was the Japanese, Russian or European fleets that put the "most" pressure on the fishery (because of the process involved), it is accurate to suggest that together their impact was significant. When these non-regional fleets harvested salmon that had been apportioned for Canadian and U.S. interests they in

turn produced and then sold salmon at a relative advantage. They took wealth – natural as well as industrial economic value without having to compensate either system. This evolution of fishery harvest techniques and its implementation on a mass scale must not be lost in the discussion because it added even more fuel to a political situation that had been simmering for five decades.

By 1971, the year formal negotiations toward a salmon interception treaty began; frustration was a shared Canadian-American experience. Over the "ensuing fourteen years of talks, the focus of the negotiations changed dramatically as the countries' interests and understandings evolved. For many years, the talks were concerned principally with bilateral allocation...there appeared to be no conservation problems" (Jensen 381). However by the mid-1970s, a new consideration entered the discussion: salmon propagation and the need for conservation policy (Jensen 381-383). This subtle broadening of the talks greatly complicated the task of the negotiators at the table. When assessing the treaty it is important to remember that up to and including this period of time, allocation of the natural bounty was first priority, conservation was second (Jensen 1986). During the early 1980s, as Canada and the U.S. tried to construct rational assessment accounting methods for simultaneously allocating harvest and conserving scarce resources, pressure mounted for a solution. In the end, it is highly probable that the agreement forged in 1985 had at least as much to do with the need for a statement of Canadian-U.S. friendship as it did with a sustainable mechanism for management of the Pacific Salmon fishery (Jensen 1986).

When considering the origin phase of the treaty's history, three points can be recognized as the key contributing factors. The first is accessibility to salmon as a resource through allocation regimes that guarantee control and profit for those engaged in the industry; as such they are of paramount importance. Second, the frustrations exhibited over interception fisheries and the perceived inequalities related to its occurrence is not new; harvest rights and tension have accompanied this political context since its origin. Finally, Canada through a more direct, unitary form of government has demonstrated over time a political leadership capacity to act decisively on salmon policy when necessary; the U.S. by contrast has demonstrated the opposite. The climate these factors helped produce, a climate of longstanding tension and uncertainty, constrained the potential of the 1985 Pacific Salmon Treaty and shaped the course of events in Northwest Salmon policy until the end of the 20th Century.

The 1985 Pacific Salmon Treaty

Even though conflict over natural resources can be initiated by nearly anyone, treaties are the constructed work of specialists; experts with a particular skill-set and range of experiences. Often, a treaty is similar to an ice-sculpture carved with precision to fine points over the course of years. Just as often, politicians that by definition exist within a constrained contextual situation publicly consummate these sculptures with little real understanding of the particulars involved. The Pacific Salmon Treaty is proof of this phenomenon. Signed at the

"Shamrock Summit" on March 18, 1985 by Canadian Prime Minister Brian Mulroney and U.S. President Ronald Reagan, the Pacific Salmon Treaty was an agreement tailored for greater political theater. Some believe that the Reagan administration, "stung by Canadian and domestic criticism of its slow action on the transboundary acid rain issue... turned its eye to this [signing of the treaty] opportunity to improve relations with the Canadians" (Jensen 397).

A Treaty is a Treaty

Mulroney and Reagan, men with a shared Irish ancestry and a purported private camaraderie that mirrored their respective countries' unique historical friendship recognized their political situation within its greater context. It appears that they also knew good theater when they saw it. The two leaders recognized that the act of reaffirming their strategic friendship during a challenging time in world history – during the political uncertainty within the Soviet Union – as tangible political gain with little or no loss. Mulroney and Reagan were practiced politicians. As such, they probably recognized that "win/win" opportunities in the tense international climate were rare indeed. Accordingly, they seized the opportunity unapologetically under a thin veil of Irish pride. In this context, they likely saw a treaty (and all treaties that broadcast goodwill and partnership) as a useful tool, regardless of the details. This pragmatically constructed stage must not be lost in the discussion; 1985 was a good time for a treaty – the relative utility of said treaty was something that could be "worked out."

Fortunately the treaty Mulroney and Reagan signed was most likely, much better than either of them probably knew. The 1985 Pacific Salmon Treaty provided a framework for a scientifically determined allocation system. It ended fourteen years of tense bilateral negotiations. The agreement bound Canada and the U.S. to a formal, bilaterally maintained, science-driven policy-making organization: the Pacific Salmon Commission. Ultimately the treaty glued together two sovereign nations, four U.S. states, twenty-four U.S. Treaty Indian Tribes, one province, and one territory for a common set of mutually beneficial goals (Yanagida 577-578). With the range of expectations, reasonable as well as unreasonable, held by the respective parties, it is obvious that crafting the treaty was no small task. It must be noted that whatever its long-term results, the development of the treaty itself was an amazing accomplishment.

As adopted, the 1985 Pacific Salmon Treaty was an evolution of previous arrangements between Canada and the U.S. in terms of the salmon fishery. Even though the document produced certain undeniable ambiguities – and associated problems that exist still today – the 1985 treaty was far better than anything prior. While evolutionary steps were taken in the direction of progress for the fishery, the journey was not completed. This is an important point to make. For on the whole, the agreement promised a rational, long-term approach. It was sensitive to the need for allocation as well as conservation mechanisms, all the while ensuring the continuity of the respective member's sovereignty concerns. Unfortunately the

promise of the treaty was offered without an inherent capacity to produce the intended results.

Understanding the 1985 Treaty

When assessing the Pacific Salmon Treaty as a source document it is helpful to approach the task with respect for time, place and context. History, by definition, is the development of previous histories: itself a result of earlier situations and decisions. Therefore, a critical study of the major themes that were the foundation of the 1985 Pacific Salmon Treaty seems warranted. This demands an examination of the two major conceptual values that dominate the language of the agreement and in effect, define the 1985 treaty: allocation and conservation (Jensen 400-410). To do this, I will begin with an assessment of the meaning of allocation through the principle of equity, a core principle defined in Article III of the treaty. Afterwards, I will describe the consensus-oriented administrative model empowered by the agreement to ensure conservation of the resource, assess its plausibility given the unique political situation, and comment upon its role in the most recent controversies.

The Search for Equity

Thus far I argue that the Pacific Salmon crisis was and remains a complex web of interdependent value clashes. I further argue that at the heart of this dilemma is the rather capricious nature of "equity." There are multiple,

legitimately held definitions of equity. Added to this is the reality of a bilateral construct. Canada and the U.S. as sovereign powers with internally developed and sustained political cultures maintain distinct and often differing cultural expectations of the value of equity. As humans we naturally hold individually formatted conceptions of reality; this is exponentially true when considering nations of peoples with regionally determined experiences and policy desires. This must be understood because the entire regime of allocation assumptions for the 1985 treaty was based squarely upon a particular understanding of the meaning and value of equity. Interestingly, this one term implies a host of political and cultural issues including sovereignty, harvest and individual liberty. Salmon as resource is finite – salmon exist within a world of limits – and in zero sum games "equity" has been recognized as the favored answer (Jensen 400-410).

Article III of the treaty was written to guarantee equity through formal practice. It established specific directives: "prevent overfishing and provide for optimum production; and provide for each party to receive benefits equivalent to the production of salmon originating in its waters" (Pacific Salmon Treaty Article III, 1.a). Joy Yanagida in her study of the 1985 Pacific Salmon Treaty suggests that, "The purpose of the equity principle is sensible enough...[but] This is more simply said than done" (Yanagida 588). Yanagida is referring to the long-standing conflict over the perception (that has some support) of "Canadian salmon" being taken by U.S. fishers and the related proposal for compensation for lost (stolen)

harvests. However, time has shown us that several other, arguably more ominous problems arose out of the attempts to implement the so-called "equity principles."

An Incomplete Approach

The first problem related to effective implementation of the equity principle was the incompleteness of the science that assessment methodologies were based upon. The conservation and harvest regulation strategies produced by the Pacific Salmon Commission were based upon previous and on-going catch statistics and updated weekly with respect to pre-season allocation commitments (Glavin 45). Inherent in this approach is an expectation of and reliance upon stable catch projections. This notion of sustainability, an approach that did not rationally consider the "unknowable quotient" in terms of the evolving and dynamic nature of the riparian areas and shifting oceanic conditions was wholly insufficient for the task at hand.

This is the case because the Pacific Salmon fishery is not a zero-sum scenario; nature and not humankind control the variables; there are no absolute "constants" in the equation because the natural economy simply does exist that way. Carmel Finley, a salmon policy scholar at Oregon State University, puts it best "I contend the treaty was based on obsolete science, and that it set unreasonable expectations which hamper negotiations to this day. The treaty also envisioned the resource as a giant salmon machine... The problem of course, was that ocean conditions changed drastically after 1983" (Finley 1998).

Finley further argues that the very nature of a "steady state" ocean is itself an incomplete and/or dangerous notion because it implies a level of control and certainty that simply cannot be found, nor kept (Finley 1998). Far too many variables can throw the entire regime off kilter and with devastating effect. The point is that the mechanisms designed to provide for equal apportionment of the salmon "pie" through optimum production were based squarely upon the salmon availability of the present, and a relationship of past productive performance. While this model may well work for standard industrial economy activities, where control of the raw material and its availability is a constant, it was not realistic given the nature of the fishery involved (Glavin 45-46: Lichatowich 164-169). This approach did not anchor "abundance" assessments to the plausible, ecosystem-specific future possibilities. In other words, the treaty through the medium of scientific methodologies and the flawed and/or incomplete science-based policies that were born of them, sought to drive the car by using the rearview mirror as its guide; by all measures, an incomplete approach when attempting safe forward progress.

How is the Concept of Equity Applied?

A second problem developed from the language of Article III. This problem is the difference in conceptual understanding of the term "equity" within the context of rivers of origin and "benefits equivalent to the production" of salmon. During my research, I find scientists and legal scholars on both "sides" of

the argument. However, established international legal precedents specified a "truth" that failed to support Canada's proprietary view of salmon "ownership" (Shelton and Koenings 161: Shepard and Argue 3). Canada had argued that this provision suggested salmon (wealth) allocation should be equalized based upon theoretical production value of the rivers of origin, whereas U.S. fishers had maintained that salmon as a whole should be apportioned on the equity basis.

This was a major rift because Canada found the precedent and the resultant lack of policy change less than satisfactory. Canada saw inequity in terms of catch (and over-catch) and the absence of recompensatation for the estimated value of the salmon that originated in Canadian waters. Even now, Canada still maintains that a river of origin standard has a higher legal standing than the U.S. accepts. Interestingly, the 1985 treaty as adopted, provided no exclusive rights for the "country of origin" (Yanagida 589). Nevertheless, Canada continued to argue the point. This struggle had the net effect of lessening attention and feasibility of the concept of a mutual fishery and instead polarized vested interests and escalated conflict (Shelton and Koenings 161). Unfortunately the frustration was grounded in the confusion over the perceived "equity" of U.S. fishers taking sockeye salmon from the Fraser River – an ecosystem entirely within Canadian territory. The "Fraser River over-harvest" and the subsequent hard feelings that resulted were a logical reaction to a perceived inequity; it was undeniably emotionally appealing and politically useful for anti-treaty rhetoric. However, under the terms of the 1985 treaty the issue existed beyond the reach of official remedy.

The Salmon Paradox: Optimum Production Without Overfishing?

There was a third problem with the treaty. However, unlike the text-bound problems this one was more discrete. The problem was a fundamental rhetorical contradiction over the simultaneous ("optimum production" and "prevent overfishing") major principles. These values are contradictory and they promote opposing policy approaches. If the purpose of the treaty was to ensure sustainable levels of harvest through conservation strategies while concurrently aggressively pursuing optimum production through enhancement strategies, how can success be measured? Was the goal a steady-state harvest, or increased production levels and the associated ecosystem consequences that would result? As described in chapter one, harvest within the context of ambiguity produces over-harvests because of the pressures of rational economic decision-making. Sustainability, even for future consumption, is put at risk whenever over-harvest is approached, even more so when it is attained. There is inherent within the language and application of the Pacific Salmon Treaty a utilitarian and conservation value clash: either salmon are to be maximized for best economic profit that by design emphasize short-term gains, or salmon are to be managed for long-term sustainability of the stocks. It cannot be both.

Fishery sustainability within this context suggests assessment and allocation regimes that consider the dynamic nature of oceanic and riparian habitat conditions and a less aggressive harvest protocol. Sustainability of the fishery would demand natural indicators that current science may not yet know to consider. If

sustainability was/is indeed the primary value than any management regime applied would keep a door open to changing knowledge of and about the ecosystem that sustains the fishery. I argue that if science has yet to find a best method for assessment for equity in general, then it has by definition less capacity to successfully assess stocks so that abundance is guaranteed in an uncertain ecosystem. There was no provision for either of these concerns. Therefore, the highest value of the document was the maximization of salmon for best economic profit that in turn lent itself to short-term rather than long-term planning, even though this contradicted other enumerated values found within the language of the treaty.

Internal Mechanisms – Conflicting Administrative Objectives

The allocation and conservation mechanisms and the flawed assumptions that were produced by them were only a piece of the puzzle. There was another major deficiency inherent to the language and construction of the treaty. This particular problem was one of administrative incapacity – a problem of "process". The Pacific Salmon Commission, which was undeniably the result of well-intended and honorable people, was an example of too much dependence upon consensus and too little enforcement capability. Conservation was a stated goal of the treaty but the mechanisms empowered were inherently incapable of the level of management and decision-making those successful conservation strategies require. Like many other international ventures, the entity as envisioned was not the entity

that was empowered. The bilateral technical committees, panel authorities, and even the membership and voting rules for the commission itself created a monstrously inefficient method of fishery management (Schmidt 132-133).

While the breadth of the principle policy objectives of the Pacific Salmon Commission (as outlined in Article III) were well known and even celebrated by those engaged in its fashioning, the original language of the 1985 Treaty formalized inherent contradictory expectations. This in time fueled an unanticipated set of interrelated problems. Through bilateral agreement, the treaty compelled the respective parties of Canada and the U.S. to act with a unanimous voice on major policy initiatives. While this was not a problem for the Parliamentary System of Canada, it turned out to be a major problem for the specified members of the U.S. Contingent. This was so because of the peculiar institutional arrangement of jurisdictions and powers shared by states and the federal government.

On the U.S. "side", one representative from the states of Alaska, Washington and Oregon, as well as one representative for "treaty recognized" Native American tribes were compelled to make decisions collectively. Simply put, the U.S. contingent was one vote – it was unable to make policy decisions without unanimous consent of the representatives. The net effect was a de facto "veto" that gave wide powers to individual internal U.S. interests. This caveat opened the door to "veto politics" and as such transformed the internal workings of the U.S. effort into something it was not envisioned to become. This is important because it would be difficult to understand the post-treaty years without

recognizing that this structural deficiency was a principle obstacle to timely correction measures that might have otherwise taken place.

Assessment of the 1985 Treaty

As a whole, the 1985 treaty constructed an ideal management approach that did not fit with the real-world situation it was supposed to manage. The Pacific Salmon Treaty and its elaborate decision-making protocols were based upon a consensus model. Unfortunately for the fishery, consensus is not necessarily a shared goal in contested economic activities. Given the history of the fishery, a system that required a vested interest managing a scarce resource by unanimous consent was in the final analysis – almost a good idea. While the model included many good "advanced" initiatives such as overt public participation by tribal interests, its infrastructure provided no available means for timely response during crisis (Yanagida 585). The science-based governance structure was put at risk because of the limitations of science. It is important to note that the elaborate administrative architecture, a process that required sequential committee to committee "steps" (aimed at ensuring a scientifically justifiable framework for policy action) would have been difficult enough to manage without the added burden of unanimity between U.S. commissioners. This caveat gave considerable "veto" power to individuals in the governance process and as previously mentioned, fueled the fire that was to come.

The Post-Treaty Years

Shortly after the 1985 treaty celebrations had ended, a slow but undeniable truth revealed itself: the treaty and its associated mechanisms were insufficient for the task at hand. Terry Glavin argues that,

> It is a great tribute to Canadian and American fisheries scientists, and to the scientific and technical staff at the Pacific Salmon Commission, that such a complex management regime survived at all –to say nothing of the remaining salmon populations the system had been designed to manage (Glavin 44).

The processes implemented to save salmon and secure the associated benefits of its harvest were constrained by the language of the treaty's inception. During the adopted "life" of the treaty, 1985-1992, the salmon fishery changed dramatically. In an analysis of the Pacific Salmon Treaty a decade after its ratification, Michael Blumm and Lorraine Bodi conclude, "Most of the commission's deliberations during its initial decade have concerned short-term harvest allocations, not long-term reduction of intercepting fisheries or rebuilding of depleted fish runs" (Cone and Ridlington 276). As implied by the economic theories underpinning the utilitarian values interwoven throughout the treaty, short-term adjustment and not long-term sustainability was the primary focus of the Pacific Salmon Commission.

The Economy of the 1980s – and early 1990s

When assessing the 1980s and 1990s, context is important. This was a time of wide-ranging economic transition. It was an era of structural readjustment and economic uncertainty. These factors combined to help produce a political

environment that compelled leaders to seek economic solutions – even if those solutions were unsustainable – because people needed work and the region needed economic activity. This industrial inclination, often at the expense of ecological sustainability was especially pervasive in the U.S. In the early 1980s a harsh recession transformed the economy of the Pacific Northwest forever (Schwantes 483-515). Interestingly, the so-called U.S. economic recovery that lasted from 1983-1990 was itself sustained by massive government deficits and a ballooning of the national debt. It was bracketed on either side by recession economics. Times were especially bad in traditional natural resource economies during the transition. Within the Pacific Northwest, salmon as resource took on an elevated significance as a result.

During the 1980s and 1990s exploitative industries such as timber, mining and fishing were pushed to the limits of productivity throughout the Pacific Northwest despite mass job loss and localized production capacity diminishment. The forests were "opened up" and timber was harvested in great quantity. Agriculture began marketing new products in new ways, and a new economy was in its infancy (Schwantes 483-515). These economic and cultural stresses had an impact upon the ecosystem that sustained salmon. Resources were depleted for industrial and not natural capitalization. It produced a climate of exploitation that had an impact upon the regional psyche of the humans that shared an ecosystem. People gradually recognized the decline in the "natural bounty" and some became more vocal about what they wanted, when they wanted it, and why. Within this

context, the Pacific Salmon Commission and all the other major interested agencies and interests, estimated at well over fifty, tried to find an elusive balance.

The Search for Treaty Renewal

In 1992 the Pacific Salmon Commission negotiations for the scheduled re-ratification of the treaty did not provide new arrangements. Consequently, Canadian fishers became angry over the inability to find solvency for the core dilemma: the issue of equity in harvests and profit "on the table" since 1985. Given the economics of the time the salmon fishery was to many one of the last threads of an exploitative-based society that encompassed much more than just "making a living." To these people the ambiguities associated with the treaty put their way of life at risk. This uncertainty added to the escalating frustration throughout the early 1990s on both sides of the border. As interception fisheries of all nationalities (especially the Alaskan fishing fleet) continued to profit, often at what the Canadians believed their loss, pressure for relief mounted.

It should be remembered that Canada and the U.S. tried to find compromise. In 1993 a direct government-to-government negotiation was initiated. This in turn resulted in the appointment of a "neutral" mediator in 1995. It was felt that both "sides" were too close to the issue and that only an "outside" perspective could provide clarity and credibility to an increasingly charged political environment. During this mediation process New Zealand Ambassador to the United Nations (and former chair of the World Trade Organization) Chris Beeby presented a

formula for relief that would have curtailed U.S. fisheries and/or compelled the U.S. to pay compensation (Finely 1998). Beeby's formula would have used domestic wholesale value of fish to establish the value of catch for each country. He proposed his "solution" and was summarily dismissed without official bilateral comment. To date, the U.S. has declined to formally comment upon the Beeby Initiative. However, Ambassador Beeby served a purpose because his publicized failure reaffirmed the difficulty involved in an enduring solution. As time passed the respective negotiators themselves recognized the growing divide between the fishery interests and found no other "common ground" except that a solution was needed, a solution they couldn't provide (DFO 1999/hq(113)).

The Post-Beeby Escalation

As an illustration of the growing discontent in the region, two simultaneous opinion editorials (op-eds) published in the September 1994 "Alaska Fisherman's Journal" showcase the significance of the issue in terms of regional politics as well as the relative schism between the respective parties. In his article "A Matter of Equity" Canadian Minister of Fisheries Brian Tobin argued that, "From 1985 to 1993, U.S. interceptions of Canadian-origin fish rose from six million per year to nine million – an increase of 50 percent...In the same period, Canadian interceptions of U.S. fish fell by 40 percent" (Tobin 17). He concluded that, "Clearly, agreement under these circumstances was impossible...The way to solve the problem of declining U.S. salmon production is not for U.S. fishers to catch

more Canadian fish but to restore American production at the source" (Tobin 40). In his response, "Caveat Emptor" U.S. Senator (Alaska) Murkowski argued, "Canada insists that 'equity' can only be served by cutting U.S. (read 'mostly Alaskan') harvests. But under the treaty, 'equity' isn't about fish numbers, it's about making sure that the relative value of each country's fishery is consistent with its salmon production" (Murkowski 17). He further stated, "The failure of the Canadian strategy should have been predictable. It was ensured by Canada's persistence in making unrealistic demands and its use of strong-arm tactics..." (Murkowski 35).

Tobin and Murkowski's rhetoric espoused a need for rationality and a simultaneous call for solvency to a shared problem; yet they each failed to see the opposing point of view objectively. It is obvious from the distance between them that things had gotten too far apart for meaningful progress. The short-term discomfort associated with a lasting compromise appears to have been too high a price for either of them to accept (at least in 1994). It is worth noting that within their respective articles, the underlying philosophical schism that sustained the escalation of frustration and animosity over the solution-less salmon crisis was on full display. The salmon war was fought over the seemingly competing values of equity and liberty. Unfortunately the underlying crisis did not subside with successive negotiation efforts: from 1994 until 1997 tension continued to escalate. Throughout the region hostility over the lack of progress grew on all sides, to levels previously unthinkable within the modern Canadian – U.S. context. The mid-

1990s were a time where the demand for a long-term solution grew from a dismissed footnote into a serious international problem – and yet compromise was always just beyond reach.

The 1997 "Pacific Salmon War"

In late July 1997, Canadian fishermen angry at American harvests of "Canadian" sockeye salmon had had enough. Acting on their own and with the expressed intent of raising the international awareness and consciousness of the issue, they employed a makeshift blockade with some 100 fishing boats thereby trapping an American ship in port. The Alaskan ferry "Malaspina" with over 300 passengers on board (many U.S. citizens) was kept in dock in the British Columbia port of Prince Rupert for three days (Wilson-Smith 24). The fishermen involved in the blockade demanded the major concessions outlined in Ambassador Beeby's proposal offered more than a year before (The Economist 36). With this singular act of protest and the ensuing journalistic frenzy that resulted from it, the Canadian fishermen had achieved at least one goal: international attention was fixated upon the strange happenings in the Pacific Northwest – the same Northwest once believed to be a model of bilateral cooperation.

In response to the blockade the United States Senate voted 81 to 19 for a resolution calling on President Bill Clinton to send the United States Navy to protect the American's "right of innocent passage" through Canadian waters (Wood 12). In further response to the blockade Alaskan Governor Tony Knowles

announced that he intended to sue the Canadian government and the fishermen involved for damages and then promptly revoked a 36-year-old lease that routed Alaskan ferries through the port of Prince Rupert (Wood 13). For three tense weeks (following the release of the ferry and its patrons) public dialogue took the form of "war rhetoric" as Canadian and U.S. political figures saw political opportunities and entered the fray. British Columbia Premier Glen Clark announced a counter-suit contending that, "American fishermen had broken an international treaty" and sought damages in excess of $300 million (Egan A14). Newly elected Washington Governor Gary Locke, previously silent on salmon issues, became directly involved. Likely recognizing the stakes, Locke added fuel to fire by ratcheting up the rhetorical confrontation with his neighbor to the north. Following one particularly colorful phone conversation he stated, "I had a private talk with Premier Clark, and he made it very clear to me that he's willing to grandstand this issue, and fish the salmon to extinction, if that's what it takes" (Egan A14).

As if to up the ante Premier Clark asserted that he would deny the United States Navy access to a submarine base located in British Columbia until the issue was resolved. Evidently, his words sent a chill through both the respective capitals because shortly thereafter Canadian Prime Minister Jean Chretien and U.S. President Clinton became directly involved. Cooler heads prevailed in the crisis and a new commission was established. Chretien and Clinton jointly appointed Dr. David Strangway and William Ruckelshaus to "reinvigorate the stakeholder

process established... [during 1996] and to resolve the Pacific Salmon controversy" (Strangway and Ruckelshaus 1998). This intervention by the Canadian and U.S. Government, with the simultaneous beginning of the fall salmon harvests, de-escalated the crisis – at least for a while.

The Impact of the Strangway-Ruckelshaus Initiative

The Strangway-Ruckelshaus Initiative did not succeed, at least as intended. From August 1997 until January 12, 1998 Strangway and Ruckelshaus held hundreds of meetings with the respective leadership of each nation's agencies and interests. It was a sincere effort supported at the highest levels of government on both sides of the border. Strangway and Ruckelshaus implemented an aggressive campaign designed specifically to bring the vested stakeholders to the table and find a useful approach. Unfortunately there was no compromise to be found, at least between the stakeholders. In the end Strangway and Ruckelshaus recognized that they had no reasonable or realizable process for success. It appeared that their initiative was an utter failure; yet another opportunity lost, proof that the salmon conflict was irreconcilable. However, this was not the case. Through their failure Strangway and Ruckelshaus gained insight into the nature of the problem, a theoretical framework for solution and most importantly – they learned about the dynamics of the people invested in the fishery itself. Based upon this information Strangway and Ruckelshaus released a final report that would in time provide the

foundation for what has since become the June 1999 agreement. In brief, the report suggests four recommendations:

1) A new process; free from the stakeholder concept,
2) Adoption of interim fishing arrangements conceived by fish managers and scientists, enforced by governments,
3) Development of a practical framework for implementing
4) Article III leading to establishment of longer-term fishing arrangements, and
5) A comprehensive review of the PACIFIC SALMON COMMISSION and its mission.

(Strangway and Ruckelshaus 1998).

The report also implies the political utility of a meaningful investment of time and treasure in scientific research for enhancement of the fishery. They recognized that research monies would help develop better fisheries management strategies as well as provide for a direct investment in habitat and riparian repair (Strangway and Ruckelshaus 1998). Both saw the need to reduce the ambiguity and provide for a sustainable access, enforced by government regulation, to a shared fishery. Predictably in the aftermath of the failure, many lost hope and support for a compromise proposal wavered. Yet a few key figures remained vigilant for a lasting solution. On September 29, 1998 Terry Glavin speaking to the David Suzuki Foundation argued for a "new bi-national treaty [that] must reflect not only the legitimate interests of fishermen, but also the public interest in salmon, which is a classic common-property resource in the U.S., and in Canada..." (Hogben 1998). While Glavin's call for action was not immediately answered, it was a harbinger of a renewed effort at salvaging a treaty.

Forging A New Agreement

The time between the collapse of the Strangway – Ruckelshaus effort and the successful June 1999 agreement seems to have been a time of opportunity. The senior political leaders of the respective nations were invested in a solution even though it remained beyond reach. The pressure that had been escalating for years was beginning to have an effect upon the relationship between Canada and the U.S. Both sides knew this and they wanted a workable solution. The Strangway – Ruckelshaus Report clearly suggests as much. After reviewing the facts, I contend that the convergence of four distinct factors made a successful political solution probable. These four factors include: 1) the listing of Pacific Salmon under the Endangered Species Act; 2) creation of "endowment funds" for investment in scientific approaches to better species management and habitat recovery; 3) a renewed, visible effort on the part of key regional political leaders; and 4) a shared economic need for a healthy, sustainable fishery. While it is arguable that any one of these factors would have been sufficient enough reason for either of the respective parties to adjust their positions – their convergence spawned an undeniable sense of urgency and a renewed willingness to compromise for a lasting solution.

The Listing of Salmon under the Endangered Species Act

Although some might argue the point, the listing of salmon under the ESA was a powerful incentive for settlement. It was an undesired but predictable

response to a problem that simply hadn't been remedied by regional interests. To date, no person is completely sure what the listings will prescribe in terms of urban, rural and industrial transformation; the specter of unpredictable and painful change is afoot everywhere within the U.S. Pacific Northwest. The resulting lack of clarity in terms of impact scared many within the fishery to reconsider previous positions so they could salvage at least a portion of a harvest. This is an important point because a treaty would bind the U.S. to a predictable if flexible harvest schedule at a time when such harvest would otherwise be in question. By contrast, the listing of salmon stocks without a treaty could very well have led to fishing closures and the de facto denial of a large segment of the fishery (Spencer 1999).

"Free Money" for Investment – The Endowment Funds

The second factor that helped promote an agreement was the willingness of Canada and the U.S. to create two endowment funds for "scientific cooperation, stock enhancements, and habitat enhancement" (DFO 1999/hq(110)). Canada and the U.S. will jointly administer the endowment funds. Beginning in 1999 the U.S. will phase in contributions that will last approximately four years. The key provisions of the funds will focus on more flexible fishery assessment methodology, clearer scientific data on the relationship between river and oceanic conditions on specific stocks, and enhancement of "wild production through low technology techniques" (DFO 1999/hq(110)). This approach did not include an apology or re-compensation funds and creates a U.S. Government-funded

endowment dedicated to promoting sustainable methodologies. It also provided "maneuver room" for the respective parties within the negotiation. U.S. Fraser River Panel Member Robert Zuanich in his testimony before Congress claimed that, "without new agreements to reduce Canadian fishing pressure on Northwest salmon, state and local officials simply could not mount a credible recovery plan to respond to expected ESA listings" (Zuanich 1999). In other words, the funds allow added flexibility for the regional re-investment in the salmon ecosystem and its management.

United States Special Negotiator for Salmon James Pipkin in his testimony before Congress in support of the endowment funds argue the agreement was, "a major achievement...it represents a long-term solution to the controversy that for many years has been an irritant in our relationship with Canada" (Pipkin 1999). In specific discussion of the funds, Pipkin concluded, "the new bilaterally-managed funds will facilitate initiatives that optimize production, to the benefit of fishers in both countries. The funds will also provide a strong incentive to the parties to reach agreement on fishery regimes in the future, since money from the funds will not be available unless bilaterally agreed fishery regimes are in place" (Pipkin 1999). Whatever the long-term result of the treaty, it seems obvious the promise of investment funds paid for by the U.S. Government and not the U.S. fishing interests made a recognizable difference in the situational context and led to an agreement.

Involvement of Regional Leaders

A third factor that led to U.S. willingness to seek a solution was the sheer force of will exhibited by the region's governors, especially Oregon Governor John Kitzhaber. Kitzhaber brought a unique skill-set and a reputation for creative approaches within environmental policy to the table. He is widely recognized for his "Oregon Plan for Salmon Recovery" as well as his co-authoring with Utah Governor Mike Leavitt of a National Governor's Association Initiative for scientific-policy approaches they entitle, "Enlibra" (Duin 1999). The Kitzhaber-Leavitt collaboration is a framework for sustainable approaches to industrial and ecological management and will be the subject of future study. However, for now it is sufficient to suggest that Kitzhaber used his political capital to help foster agreement on the Pacific Salmon Treaty as he has throughout his tenure on other environmental issues. His reputation for bringing diverse interests together and deriving regional cooperation has been well documented (Duin 1999). Whatever the case, when Kitzhaber and Locke became personally invested in the process the context changed and an agreement was soon found. Both men sent personal representatives to the negotiations and both continuously stepped in when and where needed.

It should be noted that Washington, Oregon and Alaskan negotiators were at the bargaining table throughout the latest agreement process (Spencer 1999). This is important because it hadn't always been the case. The end result is a treaty that reflects the values Kitzhaber and Locke favored while simultaneously

reflecting (through new management techniques) a continued investment in an "optimum production" ideal. The treaty promotes allocation of resources after sustainability measures have been secured – instead of what had been the de facto process of the 1985 Treaty. Not surprisingly, the core tenets of the process are remarkably similar to the philosophy of Kitzhaber's Oregon salmon plan. This is important because even though Oregon's intrastate initiative ultimately failed to prevent federal listings of Pacific Salmon, the basis for the approach appears to have been one of the recovery models used for the Pacific Salmon Treaty agreement. While the efforts of Kitzhaber and his counterparts obviously were not the singular reason for agreement, their ability, expressed desire and personal involvement in the processes did in fact help lead to an agreement and must be recognized as a factor of the end result.

The Economic Need for Certainty

When considering the factors that led to an agreement, no analysis would be complete without appreciation for the fundamental role of economics or more specifically the value of "risk management." Business craves certainty – it cannot exist without it and while the history of the salmon crisis is replete with bilateral wrangling over ambiguity in harvest, the region's economy and political context is different now. The economic success of the last two centuries has had a related effect upon the region's natural sustainability capacity. Fishing interests knew that a solution was needed. Things were getting out of hand. Profits were becoming

increasingly uncertain. The economics of the moment favored an "abundance-based management regime" that employed harvest techniques as defined by current science, harvest techniques that guaranteed fishing interests at least the promise of present and future profitability.

After reviewing the evidence, I contend that fishing interests recognized the changing dynamics of the fishery and knew that something had to be done. I further contend that they saw certainty as defined through the Pacific Salmon Treaty as a commodity worth buying. In industrial economic terms, the risk was worth the potential reward because continued ambiguity had become more costly than sustainable behaviors. In other words, the promise of the latest agreement assures invested parties that catch, at least some predictable catch, will be guaranteed without the costs associated with continued ambiguities or the costs associated with challenging major pieces of the ESA in court.

Chapter Summary

When considering the long, colorful history of the Pacific Salmon Treaty it is easy to be lulled into believing that economics was the singular purpose behind its need, development, implementation and future success. While economic considerations championed by Alaskan Congressional pressure did in fact nearly derail even the latest bilateral agreement through Congressional delay in late 1999 (Paulson 1999), economics were not the solitary issue. Following further compromise, the agreement in form was eventually funded with the public support

of Alaska's U.S. Senator Stevens. He concludes, "We haven't quite gotten to the point of the absolute protection that we were assured we were going to have, but we've come as close to it as we can" (Associated Press 1999). In the end, even Senator Stevens recognized the absolute necessity of a stable fishery – the kind of certainty only secured through a binding, bilateral treaty. This evolution in understanding was itself a significant "watershed" event.

After eight years of struggling for re-ratification of the 1985 accord, Canada and the U.S. resolved the Pacific Salmon crisis; at least the political crisis. With the new treaty, fixed harvest quotas will be replaced with "abundance-based strategies" that are designed to promote and protect stock survival. The new treaty also sets respective limits for Canadian harvest of pink salmon and Alaskan harvest of sockeye. Both Canadian and U.S. fishers will have to reduce their harvest of certain Chinook stocks. Additionally, funds will be committed to priority riparian and habitat repair efforts as well as scientific discovery aimed at new management approaches (Silver 1999). This agreement, a blueprint for regional cooperation for salmon policy, was co-signed by the U.S. Treasury and provides a flexible structure for management of an important resource.

At present, the agreement is "on track". The first year funds are "in the bank" and the structural adjustments are on-going (Kowal July 31, 2000). In the following chapters, the history of the treaty will be revealed to be a public commentary on the people of the region, the values they hold and a statement about a regional approach to sustainability and development. In context, the treaty as ice-

statue described at the beginning of this chapter has been carved and put on display in the village green under the watchful eye of an expectant region. Through that view, it is possible to answer the second major research question. We have a maturing knowledge of salmon and its value. As the region evolved, and continues to evolve from a colonial economy into what may become a sustainable economy, the methods have changed. Before there were treaties, Canadian and U.S. fishers harvested without regulation. When scarcity was recognized, clumsy and often-inefficient management techniques were tried, implemented and replaced with more efficient methods.

With this most recent treaty, an abundance-based philosophy has been put into motion but its utility has yet to be proven. Much is still unknown. As full of promise as it may be, the new treaty is still a political document; it is a tool for the conservation of a resource. As such it is subject to the same fundamentals of economics and the industrial value system that have perpetuated the decline of the fishery. To better appreciate the relative prospect of success, it is necessary to analyze the respective political cultures and the bureaucracies they sustain. I believe that this investigation may provide needed clarity in terms of understanding the force and drag of the structural obstacles surrounding this initiative.

CHAPTER THREE: POLITICAL CULTURE & SALMON POLICY

In previous chapters I discuss the contradictory meanings of salmon and the history of the Pacific Salmon Fishery. While these are important aspects of the salmon issue they are not sufficient for the task at hand. Context is needed for utility to be gained. Political culture provides context. Political culture defines and maintains the relative boundaries of policy initiation, development and implementation within a political state. Culture defines community norms – it reaffirms societal values. It fosters a particular arrangement of societal institutions that influence the balance of interests that in turn promote or constrain specific policy administration. It helps define the relative reach of policy, in size and scope. Ultimately, political culture explains the human-to-human relationships that determine the context of a given time and place and the human activity therein.

This chapter is intended to provide an explanation of how political culture shapes contexts that in turn produce salmon policy. To achieve this I will describe the theoretical foundations of political culture, explain how and why Canadian and U.S. cultures are different, illustrate the mechanics of the culture-policy relationship through a case-study assessment of Oregon and its distinct political culture, define the impact of culture upon an associated institutional arrangement and then conclude with a brief assessment of its effect upon salmon policy initiation, development and implementation.

A Foundation

When assessing public activities and their resultant policy arrangements it is helpful to recognize some basic rules. People living within a society exist within a particular contextual space that is governed by societal norms. Particular actions are allowed while others are not. For instance, peaceful public assembly in the U.S. is tolerated while actions portraying a willful endangerment of others usually are not. Rules, written and unwritten, maintain truths about the culture and its expectations. This implies that repeated actions are the result of community (cultural) allowance. If it is true, that continued human activities are the result of cultural sanction, then enduring public policy is the result of purposeful arrangements between knowledgeable people within a given society – a society with a distinct political culture. Political behavior researchers Jerry Yeric and John Todd conclude, "No definition of the public is entirely adequate, but perhaps the simplest way to describe it is as a collection of individuals who share a common attitude" (Yeric and Todd 4). This finding supports the work of political scientist Daniel Elazar.

Elazar's theories suggest that attitudes, values and beliefs held by a particular group of people determine its political culture. Elazar argues, "Political culture is the summation of persistent patterns of underlying political attitudes and characteristic responses to political concerns that is manifest in a particular political order" (Elazar 1993: 214). A distinct political culture then is a spatial thing; it is the attitudes of members of society at an exact time. Political culture is an evolving

societal experience but is also a manifestation of formal and informal constraints. Individuals within a given culture define institutions, power arrangements and preferences toward policies through their everyday actions. The people living within a society are involved as participants in the "culture process." This is significant because people within a cultural context are participants whether they recognize their participation or not.

In ancient Greece, the philosopher Aristotle is reported to have claimed that, "Observation shows us, first, that every city [polis] is a species of association, and secondly, that all associations come into being for the sake of some good – for all men do all their acts with a view to achieving something which is in their view, a good" (Barker 7). Aristotle saw people (men) as political animals that were most comfortable within an associated political culture (Barker 10). He believed that attitudes, values and beliefs converge into a framework for the public good. Association understood the role of group dynamics. He recognized that culture is developed through locally determined processes over time to govern through a cooperative effort that in turn promotes "good" action. Later in this chapter I will describe and employ Elazar's migration-based "culture streams" framework as a theoretical tool for regional cultural analysis, but for now it is enough to say that the existence of political culture provides context. It defines and sustains cultural values through individual arrangement and collective adherence that in turn strengthens or weakens particular institutional arrangements and policy orientations.

Political Culture and Schema Theory

Political culture "is one of the primary sources shaping politics. . . " because it is the process by which collective attitudes, values and beliefs produce political structure and in turn, collective decision-making (Elazar 1993: 214). To appreciate the role of political culture it is vital to understand how people individually develop their political perspectives and why the resulting cultural developments based upon groups of people with shared political perspectives form a policy context. In previous chapters I argue that our understanding of salmon is multi-faceted and complex and that people within the Northwest hold industrial and natural value system orientations and that these frameworks are in perpetual competition with our contradictory knowledge of salmon. Given these truths, how then do people discern political truths – or more specifically, how do people discern political truths related to salmon?

An answer may be found within the study of schema theory. In "The Breadth, Depth, and Utility of Class, Partisan, and Ideological Schemata" Ruth Hamill, Milton Lodge and Frederick Blake conclude that cognitive tools framed as "knowledge structures" determine how people know and consequently organize the political world around them. They argue that "one's prior knowledge about some domain influences what one sees and remembers and how one interprets reality and guides behavior" (Hamill, et al. 851). Furthermore, they claim that "The key distinction here is between information and knowledge: facts, figures, beliefs, and impressions about people, places, things, and events are not stored into memory as

discrete bits and bytes, but are organized semantically into coherent 'clusters' of knowledge" (Hamill, et al. 851). Knowledge, they argue implies more than mastery of facts but rather management of discrete understandings (Hamill, et al. 851).

Schema theory suggests that organization of information through amalgamated knowledge clusters that in turn sustain political schemas provide citizens with a tool for discerning patterns of cooperation and conflict, relationships between interests, and serve to differentiate between "good" and "bad" outcomes (Hamill, et al. 852-853). The work of Pamela Conover and Stanley Feldman suggests that contrary to cognitive dissonance theory, people might be "cognitive misers" that "have a limited capacity for dealing with information, and thus must use cues and previously stored knowledge to reach judgment and decisions" (Johnston and Feldman 96). With this in mind, cues have a special significance because if they are based upon faulty information or worse, obsolete truth, all future data will be similarly skewed. Further study is ongoing about how we develop and utilize schemas, but regardless of the particulars involved in the process, the notion of limited capacity "frames" of knowledge clustered around pieces of information has real significance when trying to assess public understanding of and involvement with complex environmental policy issues.

Knowledge clusters related to the ways people know salmon are often triggered by contradictory visions spliced together throughout the Pacific Northwest's history and culture. James Cantrill, a noted communication scholar on

environmental rhetoric and its implications, argues that, "Much of what we 'know' about the environment may depend on our age, economic well-being, region of the country, and other demographic characteristics as well as the dominant cultural forces which surround us" (Cantrill 72). He finds that, "These beliefs need not be consistent and are selectively drawn upon in the processing of environmental discourse. They also remind us of what we take to be 'true' about the world" (Cantrill 76). Cantrill's analysis suggests that simultaneous inconsistent truths are embedded into individual world view development and as such become embedded cultural truths through association.

Schema theory suggests that over time locally determined culture is reaffirmed through the nourishment of consistent ideology and the constraining of contradictory notions. People within a given culture manage life within a set of prescribed rules. Shared community-held constraints define the range of policy options through formal and informal censorship of policy alternatives. Yeric and Todd's work supports this finding. They argue that there are four "learning processes that are directly linked to political socialization: imitation, anticipatory socialization, political education, and political experience" (Yeric and Todd 55). These four "steps" to political maturation suggest that members of a community gradually assimilate the characteristics inherent in a unique political culture through a normal socialization experience. This means that existing political culture is sustained as long as population patterns are relatively constant (at least in numbers that can be assimilated) and political arrangements remain devoid of transforming

ascendant world view shifts. In other words, barring great shifts in population, political orientation, and extraordinary circumstances, a political culture reproduces the same culture. This perspective helps illustrate how and why a certain state may have a reputation and enduring capacity for creativity in terms of public policy while its neighboring state may not. This also helps to explain differentiation in terms of environmental public policy. In some places the prevailing political culture demands "protection of the environment" as a social good. By contrast, some places demand "protection of jobs" over all other social goals. This leads us into a discussion of symbols and the connection between symbolic representation and the schemas forged to support them.

Symbols as Tools

Symbols are tools of language. This is important when evaluating the role of political culture upon salmon policy because through symbol abstract ideas are given substance through the medium of language and as such provide meaning for events and circumstances (Mach 68). Symbols affirm or discount previously assembled knowledge and related information is then stored into individual and collective memory accordingly. Symbols are the currency of influence within political argument and as such they have a capacity of significant influence, especially within the context of environmental crisis. It has been well established that symbols by their function, have undeniable weight in political decision-making (Edelman 1988). Therefore, it is critical to remember that symbols are

representatives of constructed truths. Symbols are constructions that exist subject to modification and change (Elder and Cobb 82). Symbols have power but are dependent upon context. The enduring power of symbol stems not merely from the common meanings they suggest, but more importantly from the affective sentiments they foster (Elder and Cobb 83). In other words, symbols are significant because they tap into emotions formed around knowledge clusters that act as screening agents for information.

The result is that symbols in context form a frame of reference, a language to interpret the political landscape through – a pathway for appeal (Elder and Cobb 84). Unfortunately, new languages can be difficult to learn and facts that appear to contradict "knowledge" previously stored can be hard to reconcile. If we know symbols as representatives of the "good life" and/or a threat to the "good life" based upon the rhetorical visions inherent to our political culture, then more rigorous analysis of the data will not occur. People will simply categorize new information according to pre-existing judgments. This will reinforce previous conceptions of environmental truths. If Moore is correct in his assessment that people "want our environment and our economy," is sustainability possible within a context that firmly holds that there is no inherent conflict?

There may not be a sufficient answer, at least yet. However, if government is an extension of individual will expressed collectively, then our policies should similarly reflect irreconcilable notions of salmon, its utility and long-term value. But is this the case? Does political culture sustain contradictory truths? To

determine the answer, we are compelled to thoughtfully assess the respective political cultures of Canada and the U.S. as well as the policy paradigms they engender.

Canadian – U.S. Political Culture

Political culture is an important factor when considering salmon policy within the Pacific Northwest because it determines institutional arrangement. Unfortunately, there is no singular Pacific Northwest culture but rather a collage of many, these cultures may produce conflicts. Each distinct culture has been defined by the challenges unique to its landscape, its specific settlement history and its people. Culture determines culture and each took root and evolved independently. While the cultures of the Pacific Northwest have an undeniable commonality they have specific differences as well. New York Times reporter and free-lance author Timothy Egan's definition of the Pacific Northwest as "any place salmon can get to" has poetic as well as conceptual utility but it is a limited description that is more a rhetorical ideal than realistic assessment.

As professor Daniel Kemmis explains in his book Community and the Politics of Place, "No real culture – whether we speak of food or of politics or of anything else – can exist in abstraction from place" (Kemmis 7). Place therefore has considerable influence upon culture. The "Pacific Northwest" is a vast region with many different kinds of places. There are deserts. There are rain forests. There are valleys, and there are estuaries. There are also differing conceptions of

value within those places. This is why there is no universal "Pacific Northwest Experience." In fact, I argue that any attempt to artificially impose a monoculture conception of culture upon the region would be an unwise investment with little scholarly return. This is because a macro-study would overlook significant differences, not the least of which are the structural differences between the two sovereign states of Canada and the U.S. and the cultures that sustain each. Historian William Robbins writes,

> Despite the aggressive designs of the United States, especially in the nineteenth century, the Canadian-U.S. boundary was established through negotiation rather than by conquest. But that veneer of accommodation and sense of common purpose masks more than it discloses because there are notable differences separating the two countries. Canada and the U.S. celebrate different traditions and conventions; each has inherited unique and distinctive historical legacies. Markedly disparate mythologies, cultural attributes, and accumulated traits distinguish the two nation-states (Robbins 1994:42).

Seymour Lipset in his landmark book Continental Divide further argues, "the two countries differ in their basic organizing principles. Canada has been and is a more class-aware, elitist, law-abiding, statist, collectively-oriented, and group-oriented society than the U.S." (Lipset 8). Lipset concludes, "fundamental distinctions stem in large part from the American Revolution and the diverse social and environmental ecologies flowing from the division of British North America" (Lipset 8). Lipset contends that Canada and the U.S. maintain incongruent world views and orientations. He argues that the mechanics of Canadian and U.S. governance reflect these differences and are a major point of departure between the

respective states. Lipset posits that Canada's first codified Constitution, written in 1867, was largely framed in reaction to the then recent U.S. Civil War. Power is concentrated, purposefully, in a Parliamentary system. Precisely because of the cultural aversions to a "civil war" Canadians constructed and have sustained a culture that favors a government where authority is vested in the federal government with specified powers shared by the provinces. These institutional arrangements are a direct result of culture. In Canada careful attention was paid to ensuring that national jurisdictional and not regional approaches to public policy became the norm.

Significant Contrasts

In order to assess respective cultures of the Pacific Northwest it is first necessary to recognize some obvious distinctions between Canada and the U.S. When considering the larger issues it is crucial to remember that the United States was born through violent revolution and Canada was not. This fundamental divergence in experience produced a fundamentally different understanding of government – sustained through generations of culture. The United States developed a form of self-government that vested "reserved" authority in local states that in turn established and maintained the federal experience. Lipset argues that, "The U.S. is still more religious, more patriotic, more populist and anti-elitist, more committed to higher education for the majority and hence to meritocracy, and more socially egalitarian than Canada" (Lipset 37).

Lipset's research suggests that Americans in general are less inclined to favor either large welfare programs or recognizable governmental constraints on individual economic liberty (Lipset 37-8). Lipset sees the dramatic break with England and the subsequent development of a "rugged individualist" philosophy as undeniably "American" and itself a cultural foundation – a foundation not shared by or with Canadians. This foundation has produced a governmental philosophy oriented towards local, de-centralized decision-making that assumes concurrent jurisdictional authority. This penchant for fragmented power is not by accident. It purposefully sacrifices efficiency for the benefit of individual rights and personal liberties. Even though the threat of a "king" has long since passed, the fear of an omniscient all-in-one uncontrollable federal entity strikes at the heart of the U.S. consciousness. Table 1. illustrates some core differences in cultural inclinations between Canada and the U.S.

Table 1. Canadian – U.S. Cultural Inclinations

Inclination	Canada	U.S.
General respect for authority	More	Less
Individual rights at expense of collective gain	Less	More
Collective gain at expense of individual rights	More	Less

Through myth, literature and history, Canadian and U.S. political cultures have evolved into separate conceptions of political existence. The contrasts are stark. To begin with, U.S. culture is based upon a principle belief in sovereignty of "The People" while Canada still recognizes the role and function of elites such as the Queen. Secondly, the history of development and expansion in the United States has been the result of naked desire and bloody conquest while Canada's history has been a study in negotiation and conciliation. Thirdly, the United States has been a dominant world force since the end of World War II while Canada has played a supportive role in specific policy spheres. Finally, the United States developed and implemented a republican presidential form of government with de-centralized bureaucracies while Canada created a federal government in many ways the antithesis of the U.S. system. The institutional differences between the U.S. and Canada are not accidental: they are the logical results of distinct cultural orientations and incumbent expectations, as shown in Table 2.

Table 2. Canadian – U.S. Institutional Orientations

Institutional Orientation	Canada	U.S.
Efficiency of government	More	Less
Representativeness of government	Less	More
Influence of interest groups	Less	More
Responsiveness of government (in time)	Faster	Slower
Fragmentation of power	Less	More

Despite their differences in form it is important to remember that Canada and the U.S. are both vibrant democracies with recognizable similarities in popular culture. Both Canada and the U.S. have had defining relationships with Great Britain. Canada and the U.S. have a strong friendship that will most likely become even stronger. Canada and the U.S. are close relatives but they are not twins. It would be counterproductive to clump Canadian and U.S. political cultures together as the "same" because of quaint but inaccurate understandings that would most likely produce more confusion than clarity. Historian Donald Meinig describes the situation in the following way,

> Americans routinely perceive and accept Canada itself as a borderland and take for granted the easy transnational movement of people, goods, money, and ideas – all the while quite blind to the fact that Canadians may have a rather different view of that boundary and what it means to live within the towering shadow of a world power (Robbins 1994: 40).

Meinig's conclusion has important implications for salmon policy. Scholars must be sufficiently disciplined enough to ensure that the poetic rhetorical identity of sameness attached to the people of North America, especially the Pacific Northwest, is not overstated because such visions claim a level of sameness that simply may not exist.

The Pacific Northwest: An Illusion with Limited Utility

The Pacific Northwest is a constructed illusion. It is a fusion of place and people. It is a convergence of hidden dissimilarities and an expression of human intent. People often think of the Pacific Northwest as a regional unit but this notion

cannot be completely justified. While the region has a shared natural history, the Canadian and U.S. experience within the region is, has been, and will continue to be different. More importantly, the interpretations of the respective experiences – interpretations made through the prism of political culture and its related historical contexts – are vastly dissimilar. Robbins states that "In contrast to the great myths of the American nation, especially in its western regions, in Canadian literature, as Seymour Martin Lipset points out, 'the frontiersman' has never been a figure for special glorification" (Robbins 1994: 42). This difference has important implications. National identity, sustained through myths that reaffirm values and value-systems, fosters a divergence in attitudes, beliefs, institutions and policy.

Cultural identity and the myths that transmit the identity's truths are powerful forces. Through his research Elazar authors an approach to understanding political culture and its development founded upon historic migration patterns of settlement and the value-systems they perpetuate. His theory on "The 'geology' of settlement and the cultural streams" suggests that major sub-cultures are formed, at least in part, as a product of ethnic migration patterns – and the associated contexts they sustain. Elazar suggests that relative emphasis on personal enterprise, civic purpose and the role of individual citizenship are key variables. Elazar finds three distinct political sub-culture types within the U.S.: moralistic, traditionalistic and individualistic (Elazar 1993). Within this theoretical model moralistic cultures recognize politics as a method of achieving public good through individual civic investment. These cultures sustain truths that legitimize an active role for

government. Traditionalistic cultures, by contrast, recognize the role of the existing order but view political participation as a reserved activity reserved for selected elites. In these places cultural truths reinforce the legitimacy of elites and thereby structurally inhibit the range, role and expectations of average citizens.

Elazar argues that the third major sub-culture, individualistic, recognizes the notion of democratic order as a marketplace for strictly utilitarian functions and views participation as driven by private motivations and personal gain (Elazar 1966: 86). In an individualistic culture, most people play a minor role in government and they often view those involved with a measure of suspicion. Obviously these three classifications are generalized theoretical tools. However, they are useful models for analysis. While categorization is not by itself conclusive it is helpful for clarification of specific value dynamics within unique community cultures. Elazar's theories are especially salient when looking at the origin of Canadian and U.S. culture. Canada has a traditional, elitist orientation and proudly so. This is not the case in the U.S. where all three threads can be discerned within the text and spirit of the Declaration of Independence as well as the U.S. Constitution of 1787. With these facts in mind then, political culture has undeniable influence upon the range of activities granted license within its respective context. Places where government is valued and supported by citizens are more likely to sponsor policy-innovation whereas places where government is not valued as a civic responsibility would be less likely to intervene.

Canadian and U.S. culture derive alternative and often-contradictory meanings from their respective "settlement" history. This is significant because derived experience in turn produces initial expectations and over time "different settlement experiences" promote different climates of expectation. With each new experience respective values were affirmed or challenged, thereby interweaving new threads of collectively constructed "truths" into the social fabric. Renowned communication scholar Walter Fisher argues that, "human beings are inherently storytellers who have a natural capacity to recognize the coherence and fidelity of stories they tell and experience" (Fisher 24). Fisher's research suggests that this Canadian – U.S. difference about the frontier and the meaning of the stories that came out of that experience is significant. Orientations that have sustained Fredrick Jackson Turner's notion of the frontier and its fundamental characteristics in the U.S. may not stir the same range of cognitive and emotional support in Canada.

The moral virtues established during the respective settlements of the west reflect the disparate expectations and orientations of Canadian and U.S. political culture. The transformation of the land and the lessons gained from it are not uniting experiences between the two countries. This supports the notion that Canadian and U.S. understanding of nature and our role within it may be equally as disparate. In their collaboration, "Political Culture, Postmaterial Values, and the New Environmental Paradigm," Mary Steger, John Pierce, Brent Steel, and Nicholas Lovrich argue that Canadian and U.S. attitudes about the environment are, in fact, disparate. Through a detailed analysis of Canadian and U.S. orientations on

acid rain as well as general environmental attitudes, they find that modern "Canadian political culture is importantly different from that of the U.S." (Steger et al. 249). They conclude that Canadian political culture was "more organic, collectivistic, and holistic than the individualistic American political culture" (Steger et al. 249). This finding suggests that Canadian citizens, as a whole, are more concerned about environmental issues as well as more inclined to seek collective governmental action in its name, than U.S. citizens.

The Pacific Northwest(s)

Now that the differences between the Canadian and U.S. cultures and their resultant political development has been explained it is possible to look at a sub-division that exists within the Pacific Northwest: the differences between the Canadian Northwest and the U.S. Northwest. The Canadian Province of British Columbia and the states of Alaska, Oregon and Washington reflect their respective national culture as well as individually determined norms. This is important because the institutions within these places reflect their culture. These entities share an economic history as well as an ecological experience but each has a unique political culture and by extension, distinct policy context. In general, Oregon represents a dominant moralistic culture while Alaska, Idaho and Washington have developed distinct moralistic/individualistic blends (Elazar 1993). Differences exist even when comparing states as theoretically similar as Washington and

Oregon. In his book, The Pacific Raincoast: Environment and Culture in an American Eden, Robert Bunting suggests,

> Industrial society transformed the region, but much of the change followed paths blazed during the settler era. Driven by common processes of change, the region shared similar cultural and ecological changes. Yet Washington and Oregon also reacted somewhat differently, creating a slightly different landscape north and south of the Columbia River. Oregon continued to house a rather homogeneous population, held to its conservative social imprinting, and maintained its long-standing pattern of a largely 'home-owned' economy with resident capitalists and mixed agricultural farms. Washington showed less continuity, as well, by holding to its more expansive, free-enterprise vision. Less exclusive than Oregon in its desire to attract people and capital Washington continued to be more pluralistic and development and growth-oriented (Bunting 103).

Bunting's assessment suggests that the differences between Washington and Oregon are fundamental and structural, this despite the fact that Washington and Oregon probably have more in common than any other two political entities within the region.

Implied within Bunting's claim is an approach. Analysis of political culture through a study of a particular state in contrast with Canadian norms can provide needed insight into the mechanics of political culture and policy outcome. Bunting's conclusion and inferred approach has added significance when combined with Elazar's theories concerning political culture development. Taken together, these thoughts suggest that Oregon is a sound choice for political culture and context analysis because it has the most stable historically recognizable political culture within the region. Oregon's distinct culture has promoted a policy context that has allowed its government to make significant contributions as a policy

innovator, especially within the natural resources arena. Oregon, the earliest U.S. state government within the region, also served an important function in the development of neighboring states and territories as well as an undeniable role in the past and promise of salmon.

A Comparative Assessment: Oregon, Canada and the Origin of Culture

The State of Oregon is the result of a union of human vision and geography. Consequently, the political culture that evolved within its sphere is itself a composite, a maturing blend of place and people. Oregon, like the rest of the Pacific Northwest, is a product of human invention; it is a story about place remade in human terms, sustained through myth and the political behaviors allowed within its form. Oregon has sustained a dominant "moralistic" culture with a locally determined perspective for most of its history (Elazar 1993). Through continuous re-invention Oregon as legitimate sovereign state defines values, promotes socially constructed visions of progress, and constrains and/or emphasizes human activity based upon its created norms through narrative. The "Oregon Story" is a moralistic tale of opportunity found, or perhaps more accurately, a narrative of opportunity made. It is the result of myth and idealism.

The political culture of Oregon and the "Oregon Story" that sustains it is a narrative that reaffirms the values of self-selected interventionists seeking idealistic visions in a land rich with natural resources where such notions could be afforded. It is also a story of people sustaining visions through the power of myth – passing

on expectations through truths rooted in a constructed world. At the time of settlement, Oregon (like much of the Northwest) was viewed as "a land abounding in potential, a place where nature's wealth and human technical genius would combine to forge a good society...[with] seemingly limitless opportunity" (Robbins 1997: 179). The U.S. Pacific Northwest was once described in a 1904 issue of Pacific Monthly as, "this garden spot...this land pregnant with hidden resources...possibilities that almost stagger the imagination..." (Robbins 1997: 180). These words suggest a convergence of opportunity and expected "human-made" perfection – an idealistic notion that deserves more explanation.

Root Rhetorical Visions

Oregon, unlike the Canadian Northwest, was developed through a cultural investment in the root vision of the "garden" – an Eden realizable only through human improvement of the natural world (Smith 1978). The garden focus and the moralistic perspective sustaining it is an experience that Canadians did not and do not share. This difference in vision and purpose cannot be over emphasized in terms of its significance to the larger story. In Canada, the Hudson's Bay Company was the agent of heroic standing. The company, as a legitimate agent of the crown, functioned for measurable profit and managed its affairs accordingly. Its expansion and the associated development of commerce was just that – economic expansion. Settlement occurred because people saw opportunities for private gain. By contrast, the heroic image in the U.S. is of the individual pioneer individually

carving out civilization from a stubborn wilderness on a mission from God. As argued by Fisher, history told through stories conveys truths: the lessons, characteristics of the heroes and villains, as well as the value-systems that support these conceptions of truth perpetuate a particular world view orientation (Fisher 1987).

The idealistic vision of the garden drew people with a shared set of values, expectations and faith to Oregon. In its purest form, the Oregon Story is the outcome of a collision of complimentary root myths. In his book Virgin Land Henry Nash Smith contends that the insatiable thirst for reconstitution of the garden through the toil of the land by "yeoman" farmers that were "pioneering" the frontier was nothing less than a spiritual quest. It should be recognized that our Canadian neighbors did not share the quest – nor could they, given their cultural view. Smith explains that U.S. citizens viewed the West as a "place where afflicted humanity raises her drooping head; where conscience ceases to be a slave, and where laws are no more than the security of happiness" (Smith 147). Smith's description of superhuman justification fits nicely with Elazar's notion of Oregon as a moralistic culture. The vision of the garden provides definition to the cultural dynamics associated with a moralistic framework. Implementing "God's Will" on the frontier became an embedded societal mission. However, Canadian folklore does not similarly convey the nobility of the settlement enterprise. Elites within Canada set direction and the masses responded, often for personal motive. It is vital to recognize how the collective identification with the "pioneer" and

associated orientations contained therein defined the cultural norms and the institutions that developed within the U.S. Northwest during settlement. It is equally important to recognize that these U.S. orientations did not, and could not, define the cultural norms of the Canadian Northwest.

A Distinct Role

The Oregon Country was the first place settled in the U.S. Northwest. Therefore, Elazar's theories would suggest that the moralistic tendencies that drove early settlement would be most pronounced in the place where settlement took hold. I contend that this is the case because the culture maintains certain unique characteristics that can be directly linked to the root vision of the garden. In Oregon, the vision of the people as the garden's master became embedded as truth – sustained through myth. This notion of "master" with legitimate rights of absolute control in turn sustained behaviors consistent with a continuance of this root rhetorical framework of values. At present Oregon culture still promotes a set of assumptions about human activity and property rights that Canadians do not fully understand. The pioneers shared an unquestioning belief in their cause and in their view of Oregon as "pregnant land" to do with as they saw fit, but there is no similarly held Canadian ideal. Canadians claim no sacred ordination of purpose, no superhuman justification for collective activity. They maintain a widely different set of values towards rights and responsibilities. This difference reveals much. While U.S. settlers transformed the land into a majestic place of "heaven-sent"

opportunity made for "human purpose," Canadians kept a more grounded, utilitarian conception of the settlement of the land (Lipset 1990). This truth has significant implications because idealistic and rationalistic methodologies rarely co-exist.

Threads of Commonality

While there is no singular Pacific Northwest there are threads of "sameness" woven throughout the region. There are cities, farms and structures of civilization that look similar. Many people scattered throughout the region share daily activities that have much in common with their international neighbors. Geography, shared world history and necessity have undeniably connected the people of the Pacific Northwest at least to some degree. This is undeniable. However, the reasons for settlement and the culturally determined measures of success were, and are, markedly different. I suggest that the symbiotic relationship between place and people developed in the Canadian and U.S. Northwest spawned a pattern of behaviors that in turn gave rise to many different political cultures that helped to shape the region through the application of distinct value-systems. These cultural inclinations were and are expressed through institutional arrangements and individual expectations. Consequently, this evolution fostered respective political contexts that legitimized rhetorical visions of the place and its people. Over time, people reaffirmed the constructed truths through public policy that in turn sustained the prevailing visions.

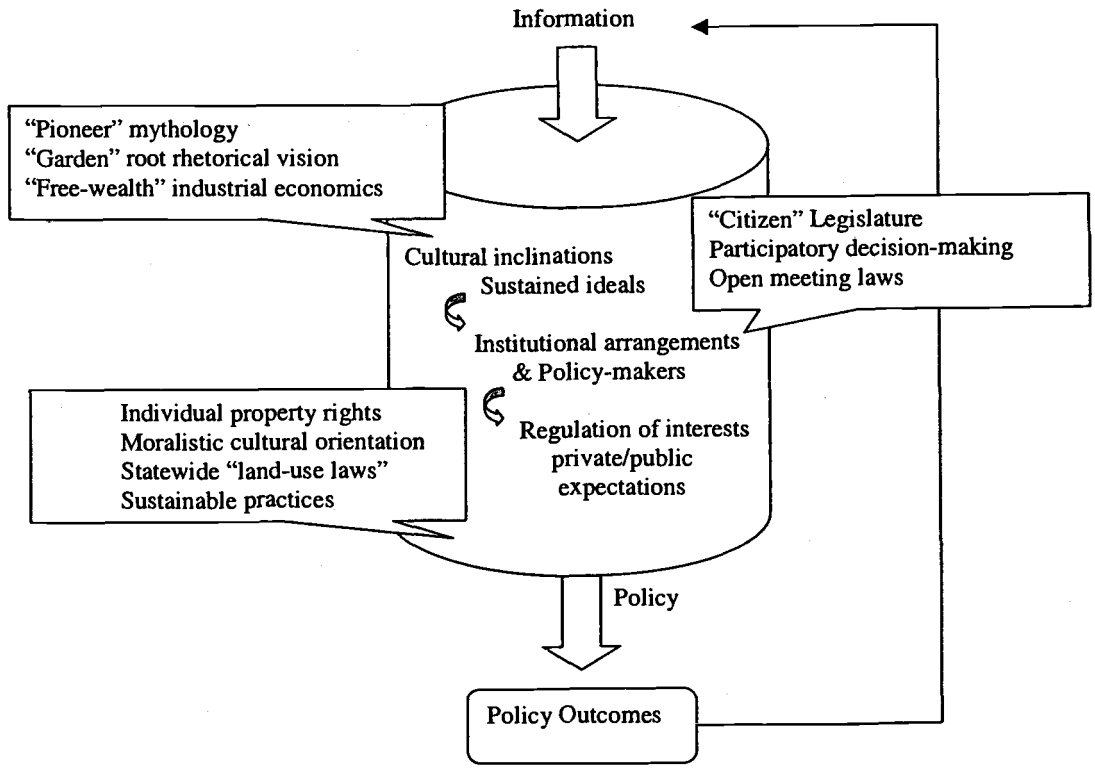
Functionality: Political Culture is a Dependent Variable

Elazar's theories suggest that political culture is determined by the popular will expressed through expectation and custom. By extension this means that the Oregon Story and its associated investiture of citizen activism would not have continued unless the original moralistic tendencies of Oregon's political culture were strong enough to shape and constrain political organization and individual behaviors. It also suggests that modern Canadian political orientations are the result of earlier determined truths. Put another way, political culture is a dependent variable. It is a product of the people that sustain its norms. It sets the tone for what is appropriate and inappropriate for discussion. In Oregon, as in Canada, political culture establishes a policy context: a space where the "things we know" collide with the things we want. Appeals consistent with the truths held by the respective culture were projected through policy. This is an important point to remember because appeals cannot succeed where contexts are ambiguous and values are absent (Edelman 1988). As demonstrated in this and earlier chapters, values do exist in Oregon, and in Canada, simultaneously. Symbols and icons that have lost relevance are meaningless and impotent, while symbols with cultural relevance are both meaningful and powerful (Edelman 1988).

The symbols of salmon, the pioneers, wheat, and fir trees that adorn the Oregon Capitol are viable conceptions. The heroic image of former Governor Tom McCall "saving the Willamette" and the environmental rhetoric of current Governor John Kitzhaber have salient political utility or they would not endure

(Duin 1999). Cultures promote policies and institutions that produce leaders. To illustrate how culture determines policy in Oregon, it is useful to think of culture and the institutions sustained by cultural norms as a filter (see figure 1.) that "processes" information and produces policy-makers who develop policy. McCall and Kitzhaber would not have been elected and re-elected if their actions did not reflect cultural values. Likewise, the appeal of the crown, the expectation of order and the shared collectivist notions of Canadians would not continue unless the invisible forces of culture sustained them. Policies are not developed in a vacuum but instead result of institutions and leaders that emerge from cultural inclinations.

Figure 1. The Policy-Process in Oregon



Political culture defines the relative boundaries of political activity. For example, during the 1960s and 1970s Governor McCall led an environmental awakening in Oregon that led to the implementation of the returnable bottle bill, the public beach access bill, the creation of a Department of Environmental Quality, the clean-up of the Willamette River and the implementation of Senate Bill 100 "Land-use Planning." The culture allowed him to stretch the limits of government activity and expand environmental understanding. It also helped him redefine expectations. People learned that collective efforts could produce tangible benefits. McCall's leadership challenged traditional private/public understandings, this is important because during the economically depressed 1980s and early 1990s environmental values were stretched but not replaced by the pressures of industry.

More recently, the political culture of Oregon has sustained Governor Kitzhaber in his sponsorship of a state-led salmon recovery plan, in the establishment of Executive Order 00-07 formally committing Oregon to "sustainable practices," and his co-sponsorship (with Utah Governor Mike Leavitt) of "Enlibra" a new environmental approach. Kitzhaber maintains widespread popular support at least in part because he exhibits personal leadership on environmental issues (Duin 1999). He is allowed the political freedom to act on his principles. This is a crucial point because culture sustains as well as it constrains. Culture produces a leadership climate that governs policy development. The will of the people sustains the rules that in turn produce policy and policy-makers.

Kitzhaber explained the role of political culture upon the fate of the salmon in the following way,

> If salmon extinctions occur, it will not be the first time in our history and probably not the last. But it will be the first time a species has been allowed to become extinct in Oregon and in the Northwest – in the face of strong evidence of how that fate might be avoided. My choice is to reject the guiltless complacency that has permitted this drift toward extinction and to simply do what needs to be done. (Kitzhaber Feb 18, 1999).

Culture then, has a direct and undeniable impact upon policy. Salmon, a species dependent upon so many different factors, represents a convergence of policy initiatives that are subject to the prevailing truths embedded within the respective political cultures within the Pacific Northwest.

How Does Political Culture Relate to Salmon?

Political culture and its associated policy outcomes play a significant role in the future of salmon. Through generations of human activity we have redefined the natural landscape within the Pacific Northwest. We have constructed dams, moved rivers, displaced riparian areas and generally put salmon at risk. Salmon are on the brink of extinction precisely because of our action. Our alterations to the natural economy and the systems that sustained the health of the fishery for thousands of years have a cost. We must recognize the power of culture and internalize its enduring legacy or risk losing more than just salmon. William Robbins cautions that, "The interface between human activities and the natural world is the story, but a critical subset to its telling is the history that humans themselves have inscribed

on the landscape over the last two centuries" (Robbins 1997: 15-16). In just two centuries we have created a history of destruction and displacement. The face of the Northwest was forever altered because of human activity that resulted from cultural conditioning. In this way, culture transformed an Oregon wilderness into a mechanical garden, a machine rebuilt in human terms for human design.

Contradictory Truths

Culture promotes rules that become institutional values. Unfortunately, incomplete truths passed from culture to institutional values have the same influence as complete truths. This has a significant impact upon environmental context: the way we know the natural world and its relationship to expressed economic realities. In his book, Discordant Harmonies, biologist Daniel Botkin argues,

> We have clouded our perception of nature with false images, and as long as we continue to do that we will cloud our perception of ourselves, cripple our ability to manage natural resources, and choose the wrong approaches to dealing with global environmental concerns (Botkin 189).

Botkin argues that incomplete notions of nature are sustained through institutional processes. We allocate collective resources and prioritize government activities based upon our knowledge about the world. This perpetuates insufficient as well as sufficient truths. It embeds incomplete as well as complete knowledge about the natural world. The Oregon Story can serve as a useful illustration, because the garden ideal it perpetuates is itself a complex convergence of several contradictory

storylines. These stories are based upon particular conceptual associations with key symbols of the garden ideal. Through myth they stimulate knowledge clusters fashioned together by lifetimes of reaffirmation that in turn further solidify respective truths. In circular fashion the stories reify an Oregon that may not exist. Oregonians with widely dissimilar environmental philosophies simultaneously celebrate the virtues of the pioneers, the power of a river and the meaning of salmon despite the obvious differences in utilitarian, anthropocentric and biocentric values. This convergence of value-systems is why Oregonians in particular have such a hard time reconciling a shared cultural faith in the enduring nature of salmon with a simultaneous recognition that a "comfortable" quality of life is putting the fate of salmon at risk.

The rhetorical vision of the garden may prove to be a tale of two visions: the vision of garden in waiting and the vision of garden destroyed. The symbols that identify the texture and societal beliefs exist concurrently as midwife and executioner. They foster life but at its own expense. Dams produce energy at lowered cost but they kill salmon. Fish hatcheries produce salmon that in time can be harvested but they have put native runs at risk and threatened the biodiversity of the species. Forestry produces wealth and has historically secured economic vitality for Oregonians but its practices have devastated riparian areas and endangered nature's capacity to support salmon spawning. Over time, dams, hatcheries, fish harvests and timber practices have been embedded in the culture and now exist as symbols of a particular orientation of experience passed on

through generations of political socialization. In many cases political culture has sustained contradictory truths that are proving unsustainable, truths that lead to policies with internal inconsistencies and unanticipated results.

Governing the Balance of Interests

There is mounting evidence that the people of the Northwest are heavily invested in an inadequate framework of counterproductive screens for information assessment and subsequent decision-making. We have old glasses with insufficient prescriptive correction: we cannot see the truths before us. While many people recognize that things are changing within the Northwest we have yet to make the kind of policy shifts needed for real progress. Studies suggest that more people are beginning to worry about the health of their environment (Kempton, Boster and Hartley 1996). And yet, some industries have purposefully clouded truths and fueled confusion because of perceived industrial economic self-interest – while others have worked on creative alternatives for reasonable compromise. Culture sustains values through institutional processes but it also helps govern the balance between public and private interests. The group dynamics of a society during times of environmental conflict produce evolutionary changes in this relative balance. Unfortunately, at present there are too many people that have yet to fully appreciate the potential harm or are unable to accept needed change to the present balance of interests. Throughout the U.S. Northwest, and especially in Oregon, the rights of individuals are at odds with the needs of the environment within which they live.

This suggests that Oregonians, people recognized for activist environmentalism, may be uncertain about what can be and/or must be done and why.

The fundamental issue in the salmon crisis is uncertainty, which has led to confusion, delayed decision-making and salmon decline because of the shared but conflicting values salmon hold. The root conceptions sustained through culture are earnestly held and stridently protected, but they are contradictory. The outcome is fragmented policy-formulation and unfocused administrative actions that allow vested interests to continue making profits in their respective natural resource industries even though their specific techniques may put the long-term health of the fishery at risk. There must be a re-education process to replace insufficient truths. This will temper the power of public and private interests as well as invest people in enduring rather than ephemeral approaches. The structural relationships within the political context of the region are founded upon core value-systems that contradict the natural economy. Until people reconcile the paradoxical notions of the garden myth with a more accurate understanding of ecosystem sustainability within rational limits, little progress seems possible.

Chapter Summary

This chapter is an answer to the third research question. Political culture can be defined as the conventions and context of people with shared attitudes, values and beliefs. People within particular political cultures know the world around them through knowledge clusters that interpret and filter information for

their limited memory capacity. Through an examination of the differences in Canadian and U.S. culture I conclude that the Pacific Northwest exists as many different locally developed associations that share an experience with salmon and an interest in salmon policy. Finally, through a case study analysis of Oregon in comparison to Canadian culture the importance of root visions in conflict has been illustrated.

The inherent contradictions embedded within the political cultures of the Pacific Northwest have tremendous influence. People hold the symbols of the constructed ideal sacred even as they have different understandings of what that each symbol means. They respond to symbols that perpetuate the simultaneous reverence and utility of the air, land and sea while actively putting those resources at perpetual risk. People relate those symbols of influence to knowledge clusters that sift out inconsistent information and reaffirm obsolete assumptions. The case study is helpful because it is a representative model of how humans relate what they know to how they live within human constructed political cultures. If this were true it suggests that people throughout the Northwest have similar, albeit not necessarily the same, contradictory tendencies concerning nature and its relationship to humankind as most people.

The notion that political cultures throughout the Pacific Northwest sustain contradictory truths is supported by the internal inconsistencies of the modern industrial economy and the orientations it engenders. While Canada and the U.S. maintain different culture and sub-cultures, they may well share a human capacity

to justify conflicting clusters of knowledge and value. New approaches that re-examine the values of nature within a sustainable framework are needed, but have they been found? Is the Pacific Salmon Treaty a structure flexible enough to master the changing nature of the fishery and the biosystems that maintain it, given the enormous power of the conflicting political cultures that spawned it? This is the central question that the following chapters will try to answer.

CHAPTER FOUR: PACIFIC SALMON TREATY – A POLICY ASSESSMENT

Value, history and culture affect salmon policy. However to adequately measure the functionality of policy it is necessary to evaluate administrative processes and bureaucratic capacity. The Pacific Salmon Treaty is policy. Therefore, a systematic assessment of the Pacific Salmon Treaty and the Pacific Salmon Commission must be made. While this chapter is an answer to the fourth research question it is also an attempt to explain, in clear terms, what exactly the Pacific Salmon Treaty as renegotiated in June 1999 is; what this treaty means, what the treaty does and why this particular treaty was needed. It will also provide an understanding of environmental conflict as struggle, expressed through the "Keltner Struggle Spectrum." Through this analysis the conflict-management function and potential of the Pacific Salmon Treaty may be discerned. After these issues have been adequately explored, I contend that the foundation has been set for a summary assessment of the salmon crisis and its dependent relationship with the newly re-born salmon treaty.

A Definition of "Treaty"

The Pacific Salmon Treaty is a treaty. It is an international policy initiative that exists because two sovereign states believe it needs to exist. While arguably the Pacific Salmon Treaty has symbolic value beyond the words of its text the fact that it is a treaty is an important point to remember. It is a binding agreement

negotiated within a unique political context about a free-ranging natural resource. On one level the treaty is itself a shared resource. It is an instrument of policy. The treaty is also a product – developed, sponsored and continued for tangible gain(s). Canada and the U.S. each adopted the treaty for their own advantage, period. It is an international marriage of convenience implemented because the respective parties believe a formal relationship on salmon policy is a crucial need.

The Pacific Salmon Treaty is more than the sum of its parts because it is an expression of national will. It is a document that establishes active political association for measurable gain within the context of geopolitical relations. Donald Snow and Eugene Brown in their book Beyond the Water's Edge define foreign policy as that which "deals with how states pursue their interests in a world where those states lack authority over the actions of other states. The need for foreign policy arises because all states have interests, conditions that are important to their well-being or, in some cases even to their existence" (Snow and Brown 4). Snow and Brown concede that all foreign policy interactions are subject to the shifting nature of an environment that affects both the substance of policy and "ultimately the processes by which that policy is determined" (Snow and Brown 5). Foreign policy therefore can best be described as the process by which states attempt to establish certainty in an uncertain world, the means of achieving relative security. One of the most significant manifestations of this nation-state actualization then is the development of treaties.

What Treaties Do

In theory a treaty binds nation-states to particular policies for a specified duration of time. This duration is usually measured in time and/or by specified goals or targeted outcomes. The Panama Canal Treaty as well as the treaty between China and the United Kingdom on Hong Kong can serve as useful examples. Both of these treaties specified the purpose, duration and scope of respective parties powers. Other well known treaties include the General Agreement on Tarriffs and Trade (GATT), the North American Free Trade Agreement (NAFTA) and the North Atlantic Treaty Organization (NATO). These treaties produced (and are producing) specified objectives that have unfolded in an agreed upon manner. From these examples it seems evident that treaties have been traditionally reserved for "major issues" such as economic development, regional security and global interconnectivity. However, with the breakdown of the Cold War and the associated foreign policy challenges of a new order (and economic patterns that reflect it) concerns that were either "absent or less important during the Cold War" are now generating more interest and activity, more areas of intergovernmental activity are becoming "major issues" (Snow and Brown 327).

At the present, environmental degradation and the forces that promote it have increased transstate significance. The crises that have resulted from environmental decay and natural resource collapse have become foreign policy priorities because access to natural capital is becoming increasingly uncertain. With the gradual recognition of fixed global limits in terms of raw material and

pollution-carrying capacity, nation-states are scrambling to find the kind of certainty only treaties can provide. Interestingly, the Pacific Salmon Treaty is an example of an issue that has more significance today than it had, at least of its own merits, a decade or two ago. It is helpful to remember that in 1985 the Cold War was the major issue in foreign policy. However, globalization and technological developments have driven the demand for global certainty and have by extension, elevated ecological concerns to new stature. With that in mind, it is important to remember that substantive treaties especially over shared access to a finite resource, are usually entered into only after an extensive period of intra- as well as international discussion, debate and posturing. This is especially true in the United States where our structure of government vests power for treaty evolution in two separate branches: advice and consent of the U.S. Senate is required through a two-thirds vote before a U.S. President is allowed to consummate a binding agreement (Kegley and Wittkopf 440-442).

The Treaty-Making Process

Within the U.S. treaties are the product of a collaborative necessity. This is the desired result of our "founding fathers" because it prescribes a process where Congress is "a constitutionally independent, coequal, and democratically rooted voice in shaping U.S. foreign policy" (Snow and Brown 193). Treaties result from a required collaboration between a sitting U.S. President and a majority of the U.S. Senate. This produces a situation that achieves three things: 1) it ensures that the

President is in consultation with the Senate over proposed changes and/or extensions of foreign policy, 2) it provides added stature to the Senate that "spills" over into other power arrangements, and 3) it guarantees that the treaties passed are the fruit of a deliberative process and in theory more reflective of the "public's interest." This process has a colorful history. Since 1787 nearly all treaties have passed the Congress. This is so despite the widely disparate political views held by the various presidential administrations throughout U.S. History. There appears to be a context of congressional deference as well as presidential accommodation in terms of treaty development (Kegley and Wittkopf 440-442). However, there have been exceptions to this general truth. The Treaty of Versailles stands as one of the most notable and far-reaching examples of congressional and presidential failure in terms of the treaty-making process (Kegley and Wittkopf 441).

Over the course of U.S. history treaties have reflected particular values of American culture. Often treaties have been stymied through informal processes before they were presented in formal fashion. The privilege to reject treaties may well provide the U.S. Senate with a degree of latent power that compels U.S. Presidents to self-censor policy alternatives or choose non-treaty devices. It is helpful to remember that international executive agreements, like domestic executive orders can carry the force of law until challenged by Congress or the courts. Whatever the case, the U.S. structure is not the norm. In most countries, including Canada, the executive authority has the power to make and keep internal as well as external agreements (Kegley and Wittkopf).

What a Treaty Means

In global context adopted treaties are statements of trust and co-dependence. Often a treaty is the preferred solution to crisis: historical feuding, political upheaval and/or multinational misunderstanding. In general, treaties serve many functions: instrument of hostility cessation, instrument of coordination, instrument of definition, instrument of description and ultimately instrument of collaboration. The Pacific Salmon Treaty fulfills all of these historical functions. Unfortunately, treaties are generally established for large, often long-standing disputes; they are seldom drafted for small or inconsequential tasks. Treaties are quite often a temporary relief for a situation in need of an enduring solution. The function of a treaty serves to bind sovereign interests together for collective gain or loss. Consequently, all treaties contain inherent risk. This is especially true of treaties entered into by major powers because treaties broken can be more de-stabilizing than treaties never made. A treaty is an act of law. A treaty is a legitimate compact that welds nationally determined public policy to shared international objectives. Over time, treaties and the administrative bureaucracies developed to enforce them often gain derived power. The longer a treaty and its political context exist the more difficult it proves to change the prevailing policy orientations and bureaucratic behaviors the treaty helps to foster. This suggests that treaties are dependent upon structured administrations and as such can act as constraining forces. In other words, treaties are not policy-neutral – and cannot be policy-neutral by function. This further suggests that treaties should be developed and

implemented when, and only when, nation-states are willing to implement the language as intended for the specified duration of collaboration with full understanding of probable implications, most notably a transformation of the associated political landscape.

What the Pacific Salmon Treaty Really Means: Shared Sovereignty

Earlier in this study I argue that Canada has historically demonstrated a greater capacity for treaty implementation than the U.S. As evidence I cite the Canadian ratification of the first proposed Canadian – U.S. salmon treaty, the Bryce-Root Treaty of 1908. Since then Canada has continued to demonstrate a national desire and a structural capacity to manage its salmon interests in a bilateral cooperative manner. By contrast, The U.S. has not demonstrated a similar commitment or capacity. I emphasize this point because the world is changing, especially in relation to its understanding of environmental politics. Karen Liftin in her essay "The Greening of Sovereignty" claims that, "The establishment of international environmental institutions and the activities of transnational environmental actors, particularly NGOs and scientists, are creating new forms of governance and authority. While they may not stand poised to replace the state, they may be modifying the character of sovereignty" (Liftin 9). Liftin suggests the "New World" is a place where environmental regionalism may be increasingly more significant for policy expectations. She contends that sovereignty might evolve into a collaborative existence, at least within prescribed areas of traditional

governmental action. Paul Wapner supports Liftin's conclusion. He argues, "While sovereignty suggests that states have authority and control over their own territories, those territories themselves are part and parcel of the global ecosystem and cannot be isolated in any meaningful fashion" (Wapner 276).

The Pacific Salmon Treaty is a treaty that ultimately redefines absolute sovereignty, at least in terms of salmon production and management for Canada and the U.S. By function, the treaty recasts sovereignty as a regional concern. The treaty commits Canada and the U.S. to a broadening of traditional understandings of control and authority through shared process. This is an important point because the U.S. has traditionally been less willing to publicly commit to enduring relationships when U.S. control isn't absolutely guaranteed. Therefore, a challenge for the U.S. is recognizing the shifting nature of sovereignty. Raymond Cohen in his book Negotiating Across Cultures argues, "Two broad topics have proved especially delicate for U.S. diplomacy in its dealings with non-European countries: status and sovereignty" (Cohen 45). While Canada and its people are usually classified as products of European culture, the history of U.S. salmon policy in the Pacific Northwest is added evidence to his primary conclusion.

F.H. Hinsley's definition of sovereignty as "final and absolute authority in a political community" may no longer be valid. Wapner suggests that, "The concept of sovereignty has gone through a long but ultimately slow evolution with regard to international environmental issues" (Wapner 277). Within a world increasingly aware of the interconnectedness of ecological relationships, status and sovereignty

will clearly need to be redefined (Liftin 5). Past identity built upon the relative prowess of a nation-state to "control" territory is fast becoming an obsolete means of nation-state power assessment. It appears that the legitimizing influence of international treaties may actually provide for "pseudo-sovereignty" where states enjoy standing with specified rights but do not necessarily retain capabilities (Liftin 7). This understanding reflects an increasingly connected world and must be kept in mind. Whatever the eventual designation, an enduring balance between rights, responsibilities and expectations on the part of nation-states with shared resource ecosystems clearly must be sought.

Treaties in Context

Treaties are developed, implemented and continued as the expressed will of nation-states. This cultural allowance, in the form of policy, gives treaties internal legitimacy. I contend that in the ideal they are written, adopted and implemented as instruments of collaboration as public bonds between peoples. I further contend that in the realm of the practical they exist as reasonable accommodations over identified national interests. Treaties prescribe specific actions based upon enumerated principles, rights, truths, and mutual expectations. They are often the result of tense pre-negotiations and serve compromises that respective nation-states would more than likely have preferred not to make. I submit that treaties serve the function of "riverboat pilot." Employed specifically for defined purposes they provide "safe" passage through dangerous obstacles. When successful they

transport ideas to mutually beneficial destinations intact. Treaties then, exist as more than instruments of collaboration and agreement. They exist as carriers, carriers of bilateral investment, trust, and promise.

The Mechanics of the Pacific Salmon Treaty

Treaties transform ideas into public activity through language. The elasticity of negotiation rhetoric must be recast into concrete form and bureaucratic process. Most treaties also prescribe a process by which the governing administration can measure progress. The Pacific Salmon Treaty is not an exception. It established a policy approach that is structurally dependent upon the respective governments internal as well as external commitment. Canada and the U.S. have formalized specified conduct. The Pacific Salmon Commission measures progress in terms of adherence to the principles enumerated in Article III. through yearly status reports and regularly scheduled discussion. Should either side stray from the stated policies then the other side, through formal and informal means, would most likely acknowledge the behavior and call for sanction.

Treaties are legal documents. They are subject to certain (issue and/or place dependent) provisions of international law. Accordingly, the Pacific Salmon Commission is legally bound to construct and manage policy within the relevant international legal frameworks. At times, nation-states duly engaged within the activities allowed by treaty litigate interests associated with root issues or are themselves litigated against in national or sub-national courts for political gain.

The General Agreement on Tariffs and Trade is such a treaty. Interests inside and outside the World Trade Organization have litigated various elements of the Uruguay Round of GATT for targeted advantage. Consequently, treaties like the Pacific Salmon Treaty exist as enduring targets for groups that seek relative advantage at the expense of other groups within a "zero-sum mentality." Treaties act as law and are subject to law. They govern through regulation of nation-state behaviors.

The Pacific Salmon Commission

The Pacific Salmon Treaty is a governing/management treaty. Through its perpetuation a bilateral collaboration has been established, empowered and legitimized. Its agent, the Pacific Salmon Commission, is a government functionary that exists at the will of Canada and of the U.S. jointly. It is a symbiotic bureaucratic construct that answers equally to both respective powers. The Pacific Salmon Commission simultaneously determines macro-salmon policy while using its influence to indirectly administer oversight of Canadian and U.S. efforts. Through treaty both nations have committed their internal fisheries administrations to the shared objectives spelled out by the language of the document.

The Pacific Salmon Commission determines broad policy recommendations that the respective governments and their internal bureaucracies are contextually bound to implement. I contend that this is a crucial point because the respective

Canadian and U.S. fisheries management agencies are compelled by the constraints of a unique political situation. The treaty governs the sustainability of a shared resource and is itself an agent of law. This suggests that failure to follow the recommendations of the Pacific Salmon Commission (once determined) would be nothing short of an international breech of faith. Deviation from recommended policy is subject to public pronouncement as well as "unofficial" political sanction.

Internal Organization

The internal organization of the Pacific Salmon Commission mirrors the complexities of salmon politics. It is a sixteen-member body that provides regulatory advice and specific technical recommendations to Canada and the U.S. for conservation and maximization of the salmon fishery. It is composed of three regional panels: the Northern Panel, Southern Panel and Fraser River Panel, and one Transboundary Panel. These panels formulate specific recommendations for differing aspects of the fishery for their respective geographic areas of concern. All panel-adopted proposals are then sent to the full Pacific Salmon Commission. Membership on the Commission and its sub-units is equally distributed between the respective parties. Each panel has a chair and vice-chair that traditionally rotate nationality providing Canadian and U.S. "leadership" alternately. An interesting structural component of the Commission is the designation of publicly recognized alternates, defined as a slate of individuals, which mirrors the seated membership for each panel as well as the Commission itself.

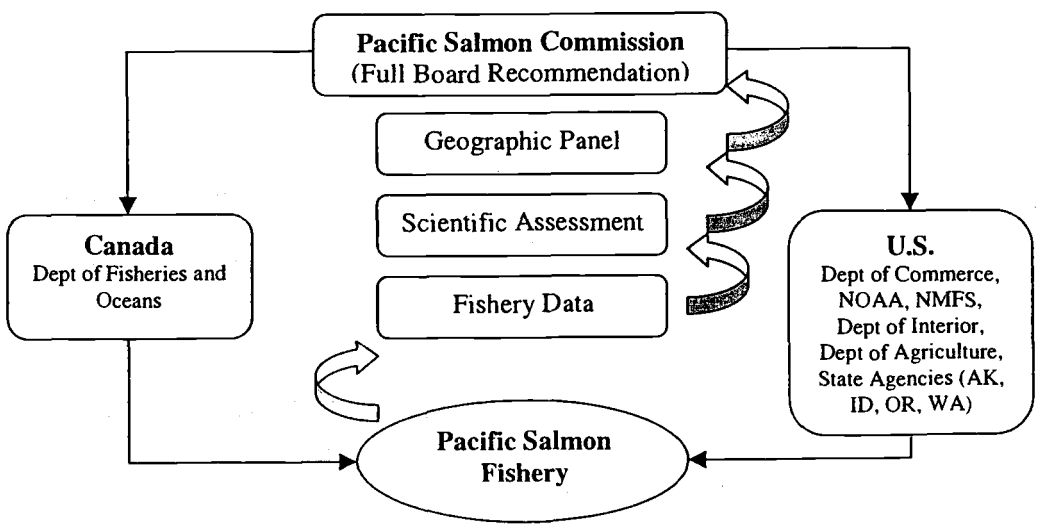
To accomplish its mission the Pacific Salmon Commission has a second tier of organization. Serving these "policy-making panels" are discipline specific "bilateral technical committees" that analyze data through scientific processes to assist respective panels with their decision-making. These focused groups provide data for each of the panels and to the full commission as needed. In addition to the panels and technical committees the Pacific Salmon Commission maintains administrative "standing committees" on finance and administration, fishery evaluation and a working group on data standards. Behind the scenes, a small full-time staff referred to as the "Secretariat" administers the internal management of information technology, scheduling, publishing and coordination of activities for the Commission as a whole (www.psc.org).

How the Commission Works

Don Kowal, former Director for Oceans Policy for the Canadian Department of Oceans and Fisheries, currently serves as the Executive Secretary of the Pacific Salmon Commission. In this capacity Mr. Kowal is the chief administrative officer for the commission and its professional staff. In a telephone conversation on July 31, 2000, he explained that Canada and the U.S. provide information to the Commission on management procedures and fisheries status. Relevant information is then assessed by the related technical committees and forwarded to the jurisdictional panel(s). Panels assess options and send management recommendations to the full commission for consideration. The full

commission retains final authority over all formal policy. When necessary the full commission sends formal and informal recommendations to the respective governments for final approval and regulatory implementation (Kowal July 31, 2000). In a follow-up electronic interview completed on September 25, 2000, Mr. Kowal stressed the importance of the scientific committees for the newly adopted "abundance-based management" approach (Kowal Sept 25, 2000). While Mr. Kowal is hopeful about the new agreement, he emphasized that the Pacific Salmon Commission cannot administer or enforce adopted fishery management plans. These functions are left to the internal bureaucracies of the respective parties. A more fully developed explanation of Canadian and U.S. internal fisheries management is provided later in this chapter but a general description of the process is provided in the diagram below (see figure 2.).

Figure 2. PSC Recommendation Process



In earlier chapters I suggest that Canada and the U.S. are different. I establish that culture and the historical legacies inherent to culture's development are undeniably a reason for the differences. I further suggest that the structural underpinnings of the respective powers also play a role. Canada maintains a federal parliamentary democracy. Unlike the U.S. they have a Prime Minister as head of government and a "Governor General" as de facto head of state – appointed by the Queen of England, s/he serves at the discretion of the crown (Forsey 2000). The structure of government divides "federal duties" from "provincial duties" but has not historically recognized provincial powers as "reserved sovereign states" in the same general way the U.S. Constitution has. In the Canadian System fisheries is a federal jurisdiction and Provincial authority is non-existent. Within Canada, the Cabinet, under the direction of the Prime Minister exercises executive authority that in the particular case of salmon means complete direct authority (Canada Information Office).

The Canadian Approach

The Canadian Cabinet is comprised of Members of Parliament and each serves at the discretion of the Prime Minister. The Cabinet as the senior members of the majority coalition (or party) administers the affairs of government. They do this by initiating policies consistent with fulfilling the responsibilities inherent to the task. The Canada Information Office lists the following federal Parliament responsibilities "national defense, interprovincial and international trade and

commerce, the banking and monetary system, criminal law, and fisheries" (Canada Information Office). Interestingly, management of the fisheries is listed in the top five priorities within the Canadian system. This elevated profile has the double advantage of providing fisheries managers extra political heft in policy-setting as well as securing funds for desired activities (as a national priority). I suggest that the fact that there exists a Minister of Fisheries and Oceans within the Canadian Cabinet, with the singular responsibility of maintaining sustainable fisheries and oceans through administration of the Canadian bureaucracy, is itself a tremendous difference.

In accordance with the spirit and language of national policy, Canada established and maintains a Department of Fisheries and Oceans (DFO). The DFO directs fisheries policy throughout Canada through regional plans developed and implemented by its internal administration and sub-directorates. It serves as the primary federal component for all management activities related to fisheries and ocean functions. This is an important point to remember. The DFO, one unit of government with one leadership team, has jurisdiction and responsibility for sustaining the nation's fisheries. Canada maintains a group-oriented inclusive approach to governance. This has in turn promoted an underlying respect for the role and authority of the federal government. This is significant when considering the process by which Canada manages its fisheries. It helps explain how Canada can sustain a dynamic citizen-invested process while retaining the bureaucratic capacity for timely action.

The Canadian Ministry of Fisheries and Oceans

As a member of the federal Cabinet The Honorable Herb Dhaliwal, Minister of Fisheries and Oceans, has regular contact and thus direct influence upon the Prime Minister as well as other Cabinet members for coordination of policy related to his responsibilities. When considering the Canadian government it is helpful to remember that the Canadian Cabinet is by structural design a power-concentrating political construct. The Cabinet is filled to further the interests of the governing coalition. This has not traditionally been an easy task. The multi-party splintered-interest nature of parliamentary systems should not be overlooked, especially in Canada. Maintaining a governing coalition has become even more challenging in recent years. Since the 1987 "Meech Lake Accord" (between the federal government and the provinces), regional interests have been pushing for more influence and say on specific policies (Lipset 1990). Therefore, membership within the Cabinet in Canada appears to play a symbolic as well as functional process.

Prime Ministers may influence policy more through their selection of a person (representing an area or issue) for a particular Cabinet post than through any of the specific policies they promote during their tenure. Who gets what, and why matters very much within the politics of the Canadian Cabinet. Often the seats are apportioned out of internal or external necessity. Minister of Fisheries and Oceans Dhaliwal, a twice-elected Member of Parliament from British Columbia, former businessman and possible "up-and-coming" leader within the Liberal Party of

Canada, probably has more influence than many other cabinet members precisely because of who he is, where he is from and what his selection meant to interested parties. Minister Dhaliwal's selection for his post was not an accident. His previous experience as member of the Steering Committee on Fisheries and Oceans and on the Standing Committees of Finance and Fisheries and Oceans during his time in Parliament has given him internal as well as external credibility (www.dfo-mpo.gc.ca/ MINISTER/Minister.htm). In simple terms, Minister Dhaliwal may well be positioned to implement far-reaching policies with minimal delay. Such is the nature of the centralized but responsive Canadian federal government.

The Canadian system of self-rule is unique. While provincial interests usually respect federal policy because of the concentrated administrative processes and management capacities inherent to a federal priority, the provinces have historically found ways to ensure their concerns are addressed (Lipset 1990). In Canada, issues resolved at the federal level are customarily accepted at the regional level as "previously settled." However, regional interests influence is growing and being projected, usually at the deputy minister level (Lipset 196-201). While specific provinces have occasionally challenged the authority of the federal government through "succession" rhetoric, these situations have usually had more to do with self-governance ideology and local control than with specified issues of federal policy (Lipset 193-196). Ironically, Canadian governance has not traditionally rewarded "guerilla tactics" as expressed through endless litigation and perpetual "interest warfare" (Forsey 2000).

Canadians have proven to be culturally oriented towards collaborative cooperative solutions. This has produced a Canadian tradition of efficient use of power for targeted federal objectives (Forsey 2000). This apparent contradiction is worthy of note. Canadian culture seems to value representation as expressed at the most local level while simultaneously favoring bureaucratic capacity and timely responsiveness. This suggests that internal cooperation between agencies within Canada for development of fisheries policy (a stated federal priority) is relatively strong and comparatively expedient. I argue that Canadian history is evidence of an internal capacity to capitalize upon international collaboration precisely because of their cultural expectations and structural efficiencies.

The U.S. Approach

Unlike Canada, the U.S. is a de-centralized presidential system with clear and theoretically finite separation of powers. In the U.S. jurisdictional authority is shared. On some issues, geographically determined state sovereignty retains jurisdiction. On other issues, several distinct "levels of government" often with overlapping authorities compete for jurisdiction. The underlying philosophy of U.S. self-governance reflects the anxieties and rewards of a revolution that Canada never experienced. Consequently, the national political experience emphasizes fragmented governance, segmented powers and over-lapping administrative controls. Institutional arrangements often contribute to the adversarial nature of regulation adding complexity to policy implementation (Wilson, J. 1989). As a

result, the U.S. has fostered a political culture that favors local solutions even when such actions are at the expense of national objectives. Within the U.S., states are recognized as "sovereign" with all powers not expressly "granted" to the national government, save those "captured" through Congressional determination through the "necessary and proper clause" and/or other broad provisions in the Constitution such as the "commerce clause."

The Canadian conception of federalism forged by the Constitutional Act of 1867 is the polar opposite of the U.S. ideal. It appears that the U.S. Civil War was the major contributing factor for the respective differences. The document is evidence that Canada wanted to avoid the conflict they saw inherent to shared jurisdictional authority (Lipset 1990). I contend that the core difference between Canadian and U.S. ideology is the role of trust in government – and a corresponding centralization or decentralization of authority. Thus far, the U.S. has demonstrated a willingness to accept the tradeoffs of an autonomous administration of locally determined priorities. Even though the U.S. President has a Cabinet, law demands of this Cabinet a distinct role. Cabinet officers are not members of the Congress or of the Courts. This promotes inconsistency in terms of bureaucratic discretion. When administrators managed by an executive branch with little real control over the allocation of their agency's public resources and subject to a Congress governed by shifting coalitions that may enact a new program only to supplant it shortly thereafter long-term bureaucratic consistency is sacrificed (Wilson, J. 1989)

Purposeful Fragmentation of Powers

Another challenge in terms of functional management of the respective agencies within the bureaucracy is the elevated role of lobbyists, Congressional staff and career public employees that understand the ephemeral nature of U.S Presidential administrations. Presidential administrations are the result of "candidate-centered" campaigns. Often they reflect the short-term concerns of the agenda that delivered the office. The relationships between agencies and other political interests have been and remain a contributing factor to the continued fragmentation of governance within the U.S. because administrations are by definition short-lived experiences. This is an interesting field of study and it probably demands more research into how influence is gained and lost, what it can or cannot achieve, and how it is sustained within the U.S. system of government administration. However, the purpose of this study is not to posit a cause but rather suggest that the relationships between the agencies of government, the Congress and the Executive are complex, constantly shifting and subject to the will of an unpredictable public. Unfortunately, these are not the only challenges inherent to the U.S. system.

Added to this landscape are the respective interests, their objectives and the influence of regional and state powers. Within the U.S. structure, state governments often mirror federal bureaucracies and often in full expectation of playing almost equal roles. Interestingly, on issues of shared authority between the federal government and the states governors may have equal power, if not formal

authority, equal to the related federal bureaucracies. This additional tier of complexity is especially significant in environmental policy because environmental policy was in many cases fostered by state initiative. As described in chapter three, this is especially significant in Oregon where landmark legislation on environmental issues has helped sustain a political culture of innovation. During the 1960s and 1970s Oregon established a reputation that in turn provided expanded discretionary standing on environmental issues because the state "got there first." The result has been an environmental policy context within which states, particularly in the West, play a more dominant role than in other, more traditional areas of public policy.

National Governor's Association (NGA) – A Locally Oriented Nationalizing Agent

The National Governor's Association recently adopted the "Enlibra" proposal. This nationalizing approach for rational, science-driven environmental policy-making is evidence that governors and the states that sustain them are coming of age. Through this body governors are seeking expanded discretionary powers on environmental issues as well as other targeted policy spheres (National Governor's Association). Although governors have historically been recognized as regional figures, the recent ascension of gubernatorial prowess in terms of national presidential elections by "rising stars" of the NGA (Dukakis 1988, Clinton 1992, Bush 2000) is a significant development. Governors are now more involved in regional cooperation and local administration for targeted policy goals. These

trends may well transform the structural relationships between the states and the federal government as state capacity evolves. Whether by design or circumstance this gradual shift of responsibility from federal bureaucracies onto the states appears to have fostered a spirit of renewed activism, at least on the part of the nation's governors (Bowman & Kearney 1999). For good or for ill, this "state versus federal" power dynamic is not as present in Canada and it necessitates slower more complex policy formulation behaviors.

U.S. Fisheries Management – "The Big Picture"

The simplest way to explain fisheries management in the U.S. is this: it is nearly everything Canadian fisheries management is not. There are literally hundreds of distinct governmental authorities that must find solutions (together) within a political landscape stocked full of private, public-non-profit and public interests. It is a system with confusing sovereignty. Tribal rights have particular standing depending upon the place, issue and objective. It is within this larger frame that fisheries management policy in the U.S. is crafted, funded, implemented and measured. In contrast to Canada where there exists a singular federal jurisdictional authority, the National Marine Fisheries Service (NMFS) – the entity primarily responsible for management of the Pacific Salmon fishery – is a sub-unit of the National Oceanic and Atmospheric Administration, itself a sub-unit of the Department of Commerce. While the Secretary of Commerce is a member of the

U.S. President's Cabinet, s/he is neither a member of Congress nor primarily concerned (as a matter of structure) with fisheries policy.

Traditionally, U.S. Secretaries of Commerce have been selected because of their interests and proven abilities to implement enduring policies that promote fair commerce (business). Fish are usually not the major focus for a Commerce Secretary. Interestingly, while NMFS maintains certain and specific authorities within the arena of fisheries management and its administration, NMFS is hardly the last word. Three other major departments, Agriculture, Defense and Interior have a direct role in policy formulation, at least in terms of dams, forests and land management. It is significant that major departments by construct have internally developed and sustained organizational culture and bureaucratic tradition. In consequence, salmon policy is subject to at least four distinct bureaucratic cultures and their associated political contexts, in clash (Wilson, J. 1989).

A Complicated Puzzle

Thus far, I argue that fisheries management in the U.S. is a complicated process. To illustrate this point I want to showcase Oregon and the salmon stocks associated with the Columbia River. From birth they are wards of an evolving plethora of government agencies and authorities all seeking to implement action for their own reasons. Most of the time, "salmon policies" reflect the bureaucracies from whence they came; the product of culture. Salmon have different values based upon the recognized mission of the respective agency. Interestingly, the

Oregon and Washington Departments of Fish and Wildlife, the U.S. Army Corps of Engineers, United States Departments of Agriculture and Interior, as well as the Department of Commerce (through NOAA, NMFS) all share discretionary authority over salmon – dependent upon situation, location and subject. On a second tier of legitimate authority rests the Northwest Power Planning Council, the Bonneville Power Administration, the Oregon Department of Environmental Quality, Oregon Division of State Lands, Oregon Parks Department, the Oregon Department of Forestry, as well as countless regional water districts and local watershed councils.

The list of participants cited earlier is more a sampling than a definitive list of legitimate government agencies involved in fisheries management. The list did not include the non-governmental interests such as Oregon Trout, 1000 Friends of Oregon, the Native Fish Society, and the Oregon Business Council to name just a few. Interest groups (non-governmental organizations) have played and continue to play a major role in the policy-formulation and implementation of salmon management. Business, recreation, government, science, ecology, and anti-growth interests are all legitimate recognized political participants in the on-going debate. This probably is as it should be given the American political context. History is evidence of the enormous sway some of the "non-governmental interests" have on salmon issues in Oregon as well as in most of the northwest states. In a few cases these organizations have maintained even more influence than formal governmental structures. Simply put, the American system of fisheries management is

incremental in nature and inclusive. Within the American system, interest groups have legitimate access to formal processes including the courts. In contrast to the Canadian preference for bureaucratic efficiency, the U.S. structure favors representation to responsiveness.

Salmon policy in the U.S. is the result of a philosophy of fragmented governance. It is a process that values individual participation. It is a process reflective of the fears of a centralized government and it is a process with the expectations of a revolutionary spirit. I contend that the process is like a mirror to the soul that is the American Ideal. It is a slow, complex, inefficient approach that is by its essential nature potentially captive to the grandstanding of a solitary activist. In his book A Common Fate, Joseph Cone illustrates the impact of dedicated activists such as Bill Bakke, the man that helped lead the fight for ESA listings of Pacific Salmon stocks (Cone 1996). Bakke and others like him used the system against itself to make a point. His story and many others are evidence that the American system is by function a participatory organism. At its best, fisheries management in the U.S. is a process that exists as a living manifestation of the dialectic that the "Founding Fathers" wanted. At its worst, it is a powerful unorganized slothful mess.

The relative extremes of Canadian and U.S. fisheries management helps clarify the differences in approach. While the same economic and environmental interests are involved, the manners in which the respective interests express themselves, as well as the duration of play, are significantly more complex (and

public) in the U.S. In Canada, when policy is determined and appropriately funded it can be implemented without the political, legal and cultural cacophony that has become merely "the ordinary" in U.S. policy-making. This differentiation has an effect when considering a joint approach to resource management specified by a binding bilateral treaty.

The Mission of the Pacific Salmon Commission

The Pacific Salmon Commission exists so that Canada and the U.S. can rationally manage the Pacific Salmon fishery in such a fashion that the respective nations are assured harvests into perpetuity. The Commission was established and has been strengthened to ensure harvest rates and mediate potential conflicts between vested interests before they arise. Secretary Kowal suggests that the Pacific Salmon Commission serves the function of neutral agent, stressing scientifically rational approaches to shared challenges (Kowal Sep 25, 2000). He contends that the Commission played a vital role in the salmon crisis (1992-1999) by continuing to stress the importance of solvency while simultaneously performing their charge. Kowal views the Pacific Salmon Commission Annual Reports (summary accounts of yearly Commission activities) as well as the scientific reports passed on to respective nations' bureaucracies as the tools of progress. When asked about particular statements, pronouncement and/or resolutions that helped foster the 1999 agreement, Kowal referred to the existence

of the commission as the forum through which progress was made (Kowal Sep 25, 2000).

Since its inception, the mission of the Pacific Salmon Commission has proven as difficult to accomplish, as it was easy to explicate. On a continued basis it is expected to bring order out of chaos and rational policy out of political crisis. The principles so clearly stated within the treaty binds Canada and the U.S. to the administration of the fishery in such a fashion that abundance is determined, achieved and then secured in perpetuity. Within that framework, salmon as valued but scare natural resource is to be sustained through an aggressive conservation methodology that has been built upon the human conceptions of "abundance", "harvest" and "natural bounty." Through the language of the new agreement the commission has been charged with nothing less than the salvation of the Pacific Salmon fishery, through jointly determined collaborative effort.

Why Treaties?

Earlier in this study I argue that treaties are developed when conflict previously unresolved must be resolved for mutual gain. I further contend that they are necessary when governments either cannot or will not curtail specific actions voluntarily. Nation-states, contrary to the will of respective governments do not exist within a vacuum. The world is an interdependent collage of shared interests, needs and expectations. Treaties are often needed as tools of resolution, providing relief within situations where nation-states cannot do so alone. It is important to

recognize that the most recent agreement for continuation of the Pacific Salmon Treaty was re-negotiated only when conflict and political pressures compelled the respective participants to seek resolution.

The Factors of Success

The Pacific Salmon Treaty represents an earnest attempt at rationally governing the Pacific Salmon fishery. It is probably the best treaty we can build, at least for now. The treaty emphasizes scientific investigation, provides for formal policy-making through a legitimate bilateral commission and protects the respective nations internal administrative bureaucratic controls. These are significant. However at least four other factors will help determine whether the effort is an enduring success: 1) adherence to the treaty, 2) cultural acceptance of lessened harvests, 3) re-defined economic relationships and 4) continued commitment by Canada and the U.S. to implement the spirit as well as the language of the treaty. Ultimately, whether we can get "there" from "here" will depend in large measure on whether the people of Canada and the U.S. will choose to make the Pacific Salmon fishery a long-term priority.

The first consideration is whether the respective interests will allow the treaty to be implemented as drafted. Adherence to the treaty is an obvious but vital first step. Once abundance is determined and the harvest levels are set for the fishery both nations must live by them. This is easier to do during "good" years when fish are plentiful and the profits are high. This is not so easy when internal

and external pressures compress the fishery. It is important to remember that people are dependent upon the promise of the fishery for their lifestyle. This suggests that some will be inclined to try and find relative advantage or favor outright non-adherence. This could occur in many forms. Subtle actions such as the "loosening" of the language for a particular aspect of the fishery at the Pacific Salmon Commission, or targeted pressure at the agency level in either the Canadian or U.S. fisheries management bureaucracies might take place. More overt attempts to gain advantage might include funding battles, conflict over the accuracy of the science involved or even challenges to the members making policy. If the fishery continues to decline it is possible that politicians in both countries might favor dissolution of the treaty altogether.

Cultural acceptance of lessened harvests is a second major factor regarding the success of the treaty. People must recognize that things have changed. The symbols that have defined a particular orientation are incomplete. Some of the tools of management may require revisiting other policy choices. Dams, timber practices, urban and rural development as well as lessened availability of salmon for industrial and sports harvests are all issues that must be rationally discussed on their merits. As long as people cling to representations of nature "as it never was" the fishery is at risk because people will not do the kinds of things that will need to be done to save it. Cultural recognition of the problems, potential costs involved in implementing solutions and possibilities of a healthy fishery is a necessity.

The industrial economic principles and practices related to salmon must be redefined for the treaty to succeed. As long as short-term thinking is the most rational, cost-effective paradigm the fishery is at risk. Economic pressures are powerful influences upon all involved in the process of determining fishery policy. However, when they are skewed salmon policies reflect it. Many involved in the harvest are over-capitalized and dependent upon larger and larger harvests to pay mounting debt. The declining price for salmon and its increasing worldwide availability has increased the pressure and made the situation worse. The need for return on investment coupled with the increasing difficulty in profitability suggest that the fishing interests will be more inclined to push for rules that favor short-term profit at the expense of long-term sustainability. Until the crisis is internalized by the cultures involved and new values for salmon become embedded into institutional arrangements and formal policy practices success of the treaty cannot be guaranteed.

The last major factor for consideration when assessing the viability of the Pacific Salmon Treaty is the relative commitment held by Canada and the U.S. to implement the spirit as well as the language of the document. Earlier in this chapter I mention several significant treaties and their function. The North Atlantic Treaty Organization, the World Trade Organization and the United Nations are all treaty-constructs – they are legitimate bodies sustained through international commitment. The Pacific Salmon Commission is not on the same level because there is not the same level of commitment by either Canada or the U.S. to make it

so. Defense and trade are issues that strike at the heart of national self-interest and because of this, treaties related to defense and trade, have traditionally wielded enforcement authorities, that is, they have had "teeth" to enforce policies.

The Pacific Salmon Commission does not have the administrative power to manage the fishery. It is a recommendation-making body that is dependent upon Canadian and U.S. fisheries bureaucracies for implementation of policy. While this does not in and of itself ensure failure, it demands of Canada and the U.S. a higher level of interest and an assurance that within their respective internal processes that each maintain a commitment to the spirit as well as the language of the document. This suggests that instead of merely meeting the letter of the law, Canada and the U.S. must commit themselves to securing the enduring sustainability of the fishery. This will be a difficult task because so much is at risk, so much uncertainty remains. To better understand why and how these internal and external pressures impact the Pacific Salmon Treaty I believe it is helpful to explore the nature of conflict and assess the fundamental role of this treaty, the forum for struggle management.

Conflict Defined, Struggle Assessed

In their publication "Foundations of Natural Resource Conflict: Conflict Theory and Public Policy," professors Gregg Walker and Steven Daniels define conflict as an "incompatibility involving what (issues), who (parties), when (situated in time and place), how (how addressed or responded to), results

(outcome), and by whom (how decided)" (Walker and Daniels 14). They recognize conflict as an experience to be managed rather than a result to be avoided. Scholarship in the field has emphasized the " interaction of interdependent people who perceive incompatible goals" while similarly finding that "incompatible activities – occur within cooperative as well as competitive contexts" (Folger, Poole, and Stutman 1997; Tjosvold and Van de Vliert 1994). In simple terms, conflict suggests circumstance where people recognize scarcity and seek resolution to the incompatibilities associated with achievement of the benefits related to the object. I contend that this notion is especially salient in terms of environmental policy.

Conflict exists when and where people cannot see attainment of recognized goals reasonably occurring. It produces a particular kind of context fueled by ambiguities and charged with emotion. Through their research, Walker and Daniels find that issues managed within an alternative context, a collaborative learning based approach, produced better outcomes. Their findings suggest that natural resource conflict can be successfully managed within a conceptual framework composed of "three dimensions" – substance, procedure and relationship (Walker and Daniels 22). This "conflict management process triangle" identifies the specific structural forces that interact and produce conflict. Walker and Daniels argue that conflict can be managed through finding connections between the issues involved in the triangle and improving the relative condition of each aspect. Walker and Daniels' work posits the notion that specific

environmental policy crises can be significantly improved when attention is paid to all three dimensions.

The Struggle Spectrum

Even though the research of Walker and Daniels has been more domestic in nature, I argue that it has immense utility in terms of understanding conflict and its impact upon relationships between nation-states bound together through treaty. However, I further argue that their work is strengthened by the work of J. W. "Sam" Keltner. Through his research, Dr. Keltner suggests that the term "struggle" is more useful than the term conflict because struggle implied positive as well as negative utility. He finds that struggle has six distinct stages: "mild difference, disagreement, dispute, campaign, litigation, and fight or war" (Keltner 2-17). He also find that struggle has ten specific conditions: "process leading to resolution, problem-solving behavior, relationship between parties, goals, orientation to each other, communication, decision-making, intervention possibilities, possible outcomes, and intractability potential" (Keltner 5). He argues that the point of intersection for each stage/condition has a particular methodology of resolution, or in simpler terms – no two stages can be resolved by the same approach. This understanding of struggle reveals underlying factors that may not be visible in "the heat of the moment" yet contribute to the relative intractability of the respective parties. Interestingly, Keltner concluded that struggle could move up or down the spectrum without necessarily passing through each stage in sequence. These

notions of struggle as an ongoing relationship subject to stages where collaboration is identified as more or less likely; have direct implications for a treaty.

A Synthesized Framework

Through synthesis of Walker and Daniels' work and Keltner's approach a useful tool for understanding the Pacific Salmon crisis is revealed. The product of this convergence provides a rational methodology for understanding the context of crisis as well as a rational approach for improving its state. Precisely because treaties are what they are, formal agreements (relations) between respective parties, they provide a forum for improvement. Treaties by function can act as instruments of collaboration between invested nation-states through the establishment and continuance of procedures and governance mechanisms designed to manage struggle. Struggle, whether caused by internal or external pressures are inherent to treaty implementation and can be managed for positive effect. However, this can only occur when struggle is managed effectively through on-going assessment and awareness of the "stage of struggle" as well as tailored "stage-specific" management techniques. The Pacific Salmon Treaty empowers the Pacific Salmon Commission for just this kind of role. Therefore, if the Commission can learn to employ a rational approach to struggle management, an approach that is sensitive to the nation-state relationship, the substantive needs of those involved, as well as the process (of management) itself, the respective parties may well be able to retain the most important commodity: management of ambiguity and security of the resource.

The Bottom Line: Collaboration

The Pacific Salmon Commission is charged with establishing a sustainable salmon fishery. The commission has no direct jurisdictional authority for fishery techniques or any administrative controls over respective national internal administration. Yet it is expected to succeed nonetheless. Accordingly, the commission provides general guidance for respective national bureaucracies to follow. The treaty (as law) formally commits all Canadian and U.S. agencies to a shared salmon management regime and measures results. Internally crafted initiatives for national goals are supposed to give way to broader, bilateral necessity. In theory, Canadian and U.S. policy act in a singular voice through the established respective administrative norms. This process of treaty implementation developed and sustained within a context of bilateral political and economic pressure has a structural impact upon the respective nations internal fisheries management bureaucracies. This clash is justification for an increased emphasis on bilateral struggle management in lieu of further investment in absolute conflict avoidance.

When considering the process through which salmon policy is formulated the influence of internal constituencies, public as well as private, cannot be ignored. The influence of these constituencies remains significant. As a consequence, their concerns are made known. Even though their influence is exercised differently in the respective countries, the incumbent relationships between vested interests

cannot help but constrain policy development and implementation. James Q. Wilson argues that,

> The existence of so many contextual goals and political constraints has several consequences for the management of public agencies. First, managers have a strong incentive to worry more about constraints than tasks, which means to worry more about processes than outcomes. Outcomes often are uncertain, delayed, and controversial; procedures are known, immediate, and defined by law or rule. It is hard to hold managers accountable for attaining a goal, easy to hold them accountable for conforming to the rules. Even when a bureau's primary goals are clear and progress toward them measurable, the managers of the bureau cannot be content with achieving them with the least use of resources; they also must worry about serving the contextual goals of the agency. . . (Wilson, J. 131).

In the ideal, the Pacific Salmon Commission would have absolute authority over salmon policy through administrative control of the agencies working under its auspices. The language of the treaty suggests as much, at least in ideal form. Unfortunately, respective national bureaucracies and the political realities that sustain them exist within a particular context. Within it, the individuals and groups charged with specific administrative functions are compelled to act upon a myriad of contending goals – some of which emphasized through targeted use of influence.

After reviewing the fisheries management process of Canada and the U.S. I have found that there are inherent administrative differences. While the politics of the American political system is largely the result of the purposeful separation of governmental powers, the Canadian system is the result of a national predisposition towards a collaborative communal approach (Lipset 1990). The bureaucracies of Canada and the U.S. are reflective of their national political culture as well as their

structures of governance. This is a significant factor in the past, present and future success of the Pacific Salmon Commission and its policies.

Chapter Summary

The Pacific Salmon Treaty serves at least three functions. First, it is an instrument of bilateral commitment. It publicly acknowledges and by so doing legitimizes the shared nature of the salmon fishery and its significance to the respective nations' political, economic and cultural investments. Through its formal and informal structures the treaty promotes the ideal of collaboration. Second, it is a management tool with an inherent capacity for expansion. The treaty binds Canada and the U.S. to a jointly determined policy approach based upon expandable science-driven methodologies built upon a regional perspective. It has evolved over time and the scope of scientific study has expanded with each reassessment. Finally, it empowers the Pacific Salmon Commission with an organizational capacity to manage struggle, at least theoretically. By function, the Commission is expected to act as a unifying agent. As such, it can establish and sustain an administrative culture for as long as the treaty remains in effect. Over time this may result in a policy synthesis that blends together the "best" elements of fisheries management perspectives.

Much about the enduring prospects of the Pacific Salmon Treaty and its implementation remain unknown, and cannot be known for some time. While the agreement is "on track," the effects of the renegotiated treaty are difficult to

measure (Kowal July 31, 2000). The treaty's function is the resolution of conflict and the promotion of cooperation and collaboration in salmon policy. Science in partnership with an aggressive conservation intervention strategy is the underlying purpose of the new agreement. If this principle is implemented much can be done to improve the fishery. However, much can be lost if the Pacific Salmon Commission fails to recognize its concurrent responsibilities in managing the struggles between the respective parities and more importantly, maintaining the bilateral relationship between Canada and the U.S. during the various stages of struggle.

The underlying forces of relationship, substance and procedure lie at the heart of successful treaty implementation over time. Harvest rates, interception activities, sovereignty questions and habitat production capacities are all issues that will likely produce struggle and should be managed. A long-term solution will not magically appear, instead it must be developed over time within a framework of trust. An enduring solution may well turn out to be less a matter of proportionality than relationship. If the Pacific Salmon Commission can effectively achieve a balanced approach that is firmly invested in the associated relationships a regional outlook may become the new context. This in turn could help foster the kind of climate within which a sustainable fishery is realized.

CHAPTER FIVE: FINDINGS

When I began this study in the fall of 1997 Canadian fishermen had just blockaded the Malaspina and tensions were escalating. Things have changed. At present, the Pacific Salmon Commission has received the first year's installment of endowment funds and is patiently expecting the second. The 1999 Agreement is holding and there is a deafening calm. The war rhetoric has subsided and people appear generally optimistic about the treaty's newfound approach (Kowal July 31, 2000). It has been an opportune time to be a student of the Pacific Salmon fishery and its political management. Over the past few years I have watched as the events leading to a renegotiated treaty have taken place, one failure after another, until success was achieved. Sadly, much of the recent past can best be described as the "two steps forward, one step back" method of progress. But progress was made. Now that a solution has been found the pieces to the picture puzzle are in place. The following assessment is my best attempt at describing the image; the composite mosaic that has been crafted as solution and its probable effect – the image that is our present reality.

Simultaneous Values

From the beginning of this study I argue that salmon maintain simultaneous and competing values. I further argue that it is precisely because of the salience as well as the contradictory nature of these values that the fate of salmon within the

Pacific Northwest has an elevated status. The very fact that there is such a thing as the Pacific Salmon Treaty is evidence enough that salmon and the issues that surround their existence have extraordinary significance. After all, to date there is no "Pacific Trashfish Treaty." In this study I suggest that humans know salmon through human constructed values that we have chosen to assign. The associated economic and political relationships formed around the assigned value of salmon have produced a complex political crisis with few answers. I argue that through this process we have reduced salmon's existence. Salmon are no longer an independent species with natural values. Instead, salmon are a resource for exploitation, a regional icon, a religious symbol and an endangered "indicator" species. These findings provide context for the Pacific Salmon crisis.

A History of Crisis

I believe that once the values of salmon are understood the history of the Pacific Salmon Treaty makes sense. It has proven to be a colorful history of changing relationships. I contend that the recent agreement and subsequent rededication of the Pacific Salmon Treaty is the evolutionary outcome of continued negotiations that trace their origin to circumstances pre-dating the 1900s. I further contend that the history of salmon as resource has in large measure maintained regional prominence because resource-exploitative based societies that developed within the Pacific Northwest efficiently turned natural wonder into free wealth.

During this analysis I find that Canada and the U.S. have a shared history but a varied experience with salmon policy.

Through my examination of the treaty's history I find that conservation and equity have most often been framed in utilitarian terms. The industrial economy and its monopolization of human constructed language and by extension action based upon our shared vocabulary have constrained the range of alternatives. Through the advantage of hindsight, it is possible to recognize the landmark 1985 Pacific Salmon Treaty for what it was and was not. It was negotiated and implemented in the spirit of the day with a trust in the absolute terms of scientific management. At the time, it was widely recognized as the enduring solution. Unfortunately, it proved not to be. Seven years later when renewal was to be consummated Canada and the U.S. were so entangled in the effects of the treaties weaknesses that they could not reconcile the differences between expectation and reality. The science had been flawed and as a result an administrative regime had aggressively pursued a false and/or insufficient understanding of nature that led to a fishery in crisis.

I argue that the "crisis" we experienced from 1992 until 1999 was as predictable as it was preventable. The ideological assumptions that sustain Canadian and U.S. fisheries management are dissimilar. This is most likely because of the great differences in our respective approaches to governance. While the 1997 "salmon war" was a tragedy, it was the logical outcome of interests so thoroughly engaged in conflict that rational solvency was nearly abandoned

despite the undeniable subsequent diminishment of the resource. By contrast, I contend that the agreement announced in June 1999 is the result of an evolutionary process. It is a good treaty. It is reflective of the changing nature and assumed expectations of the fishery and its health. It is much more flexible than its predecessor and it came about after crisis. After analyzing the history of the salmon experience in the Euro-American Pacific Northwest, I discovered several truths: 1) there will not be a perfect (permanent) solution since the nature of the fishery demands a flexible management response; 2) science-driven mechanisms must contain inherent flexibility for changing science while simultaneously retaining a role for struggle management; and 3) salmon management is an evolving developing relationship between Canada, the U.S. and salmon.

Culture for Context

Because I believe history has lessened utility outside of cultural context I used chapter three to explore political culture and its impact upon salmon policy within the Pacific Northwest. I argue that the constructed world we know is itself the result of human action within a particular political situation. Through schema theory it is easier to recognize how humans form understandings of the world and then act upon those understandings. This in turn suggests that the dynamics of culture perpetuate certain kinds of knowledge and by extension specific actions. Through an analysis of political culture I find that Canadian and U.S. participants approach environmental policy from different perspectives that in turn produce

different results. I also find that salmon policy is an outcome of culturally held ideological expectations manifested through governance structures. This is especially evident in Oregon where the culture has maintained a distinctive role within the formulation and non-formulation of environmental policy. In Oregon, political culture developed and sustains socially constructed environmental truths through policy. Government, the agent of societal action is nothing less and nothing more than an expression of the constructed truths held by its citizenry. Treaties then, as legitimate expressions of political will, carry qualitative measures of community value. Treaties should be recognized as reflections of national concern and products of a distinct circumstance.

The Pacific Salmon Treaty, an outcome of bilateral cultural expression, empowered the Pacific Salmon Commission with general administrative duties. The Pacific Salmon Commission was created to establish and then maintain conservation of the salmon resource in perpetuity. Through a brief description of the role of treaties in general, as well as the Pacific Salmon Treaty in specific, I argue that treaties rarely perform exactly as envisioned. I further argue that they are often expected to achieve the desired ends regardless of the implementation schedules and the relative limitations of discretionary authority. This characteristic suggests that ends and not means may be the true function of treaties. In other words, much is expected of the Pacific Salmon Commission, regardless of its inherent capacity to achieve the desired ends. Even though the new science-driven approaches provide the Pacific Salmon Commission more latitude on species

management, the expectations are proportionately affixed. It will succeed because people are invested in the outcome. Abundance, the human construct that it is, will be attained at least in name because the organization of the treaty as well as the interests surrounding its renegotiation as an instrument deems that it must; whether or not the human concept abundance actually promotes natural abundance.

Cultural Product & Evolutionary Improvement

Through a thorough policy analysis of the treaty I find that, on paper at least, the Pacific Salmon Treaty is an amazing achievement. It simultaneously guarantees the conservation of the fisheries and ensures profitable harvests in the future. It promises a flexible proactive style that will close specific "at risk" fisheries if needed. However, ambiguity in terms of methodology exists. The Pacific Salmon Commission has not firmly determined the factors that would prescribe the closing of a fishery or how such a closing would be achieved. The endowment funds that promise government subsidized investments in habitat restoration and fisheries conservation techniques were an innovative way of buying off at least some of the inconvenience this new approach will secure but are unproven. Given the recent past, the funds may have been one of the only "carrots" compelling enough to bring interests together for agreement because of the possibility of success. Whatever the case, the treaty is a remarkable diplomatic achievement because it grounds Canada and the U.S. in a more realistic understanding of the fishery while establishing an adjustable method of fishery

management and increased research capacity for future outcomes. It promises relief if not enduring resolution.

An Interdisciplinary Perspective

In an era of increased uncertainty over environmental issues the renegotiated Pacific Salmon Treaty brings a degree of certainty. It reaffirms an enduring partnership on behalf of salmon and the ecosystem that sustains salmon. Fourteen years in the making, it was an evolution in the continuing development of natural resource management. Oddly, the treaty process succeeded because of an approach that allowed economic need to squelch economic incentive through a government subsidy in the form of endowment funds. It must be noted that the shifting nature of sovereignty as well as the growing necessity for regionally determined solutions to transboundary issues fostered an atmosphere that allowed traditional methods of bargaining, aided by a generous stimulus package, to find compromise where it had not previously existed (Kowal Sep 25, 2000). In form and function the Pacific Salmon Treaty is probably as good a bilateral agreement as can be expected given the situation. Unfortunately, salmon policy is enigmatic; people want sustainability even as they harvest.

After studying this topic and the surrounding "salmon story" through a policy/political/communication framework, I cannot help but recognize that the treaty is likely inadequate for the larger task at hand: the creation of a sustainable salmon fishery. The Pacific Salmon Treaty, like most political instruments within

the natural resource context, is insufficient because we have constructed skyscrapers on shifting ground and because we have been unable to fundamentally change the way we coexist with our environment. The natural economy does not work by the same rules as the prevailing industrial economy. Yet public policy demands structured certainty that can be measured and maintained despite situations that require flexibility and responsiveness. Botkin had it right. Our conceptual notions are incomplete and in turn they produce inadequate processes. While the Pacific Salmon Treaty produced an evolution of thinking in environmental administration, it is grounded upon an embedded faith in human management of the natural world and a primarily economic orientation toward salmon as a renewable resource. The short-term economic expectations attached to the production of available wealth cannot help but provide insufficient guidance over the long-term because the rules favor certainty.

The Treaty We Need

The treaty we need is the treaty we will probably never build. Our cultural orientations have sustained institutional arrangements that are too hardened, too settled for meaningful change to be probable. We need a treaty that values non-industrial economic exchange, a treaty that recognizes the transference of solar energy brought by returning salmon as a legitimate value but this will result in smaller harvests. We need a treaty that provides the Pacific Salmon Commission with enforcement authorities as well as the funds necessary to aggressively pursue

a healthy fishery, but this will require a significant Canadian and U.S. delegation of power. We need a treaty that limits harvest in short-term and long-term cycles, that is sensitive enough to recognize changes within the fishery and strong enough to shut the fishery down when needed so it can repair itself, but this will require better science, more resources and different administrative structures. We need a treaty that recognizes that other industrial economic functions have an undeniable impact upon the fishery as a whole and then grants the Pacific Salmon Commission license to act when necessary, but this will require intergovernmental cooperation at a level that has not been attained previously. We need a treaty that provides "buy-out" procedures so we can limit the salmon fleet and gradually lessen its lethality but this will require costly public repayment of private investments. I contend that we can construct the treaty we need but that doing so will require the same sense of mission that landed men on the moon, defeated the Nazi war machine and has kept the atomic genie in the bottle. It will demand of us an absolute commitment to the sustainability of the fishery, a level of commitment yet to be proven.

Is Progress Possible?

This assessment suggests that the world we "know" is not the world we live in. We know we operate with incomplete models yet we attempt to "manage" our world nonetheless. Salmon are so much a part of how Pacific Northwesterners define the "good life" that change even for salmon's long-term sake will come at a high price in industrial economic as well as non-industrial economic terms. This is

especially true in Oregon where we have constructed notions of human-made perfection and sustained these truths through heroic metaphor. Dams, agriculture, timber, salmon and the transformation of nature into a "new garden" define who we are, what we want, and why we want it. When these are challenged, ambiguity produces conflict. This is not new, but it has long been so. We have yet to come to terms with a salient truth: "the garden" is an illusion. The world we see through metaphor is an invented reality. Until we develop more complete models for understanding "the real world" we risk staking policy to fragile foundations.

It is fitting that the fifth major research question of this thesis requires an answer that cannot be offered, at least in the present. Once upon a simpler time, the Pacific Northwest had the natural capacity to carry a developing civilization without being "at risk." That time no longer exists. Unfortunately, the core ideals that crafted Canadian and U.S. political culture have perpetuated an illusion and in turn produced ideologies, institutions and policies that are at odds with the natural world. This may well be the central problem of our time. How do we refine our understandings of the present so that we can secure a future? At issue is not merely the salmon but rather ourselves: are we able to adapt? Can we, and will we make the choices necessary to sustain both the salmon and ourselves? Do we understand that salmon and the ecosystem that sustains salmon are more important than an economic enterprise? Can we construct a vision of the good life that seeks sustainability and balance instead of profits and dominance? These are primary questions we should be asking ourselves; the visions we should be in search of.

Lichatowich argues that, "we must seek a balance between the natural and the industrial economies in the Northwest" (Lichatowich 226). He has suggested a sound course of action. We must find balance between the natural economy and the industrial economy but we must also do more. We must seek a balance between the world we knew and the world we must learn. We must recognize the limitations of policy and find methodologies of managing the struggles inherent to changing our knowledge of life and of life's sustainability. We must relearn the Pacific Northwest on its own terms through eyes open to the world as it is. Until then, we risk making and re-making the same mistakes. We risk developing political solutions to problems insufficiently framed and ultimately implementing solutions that make bad situations worse, in the name of "progress."

Conclusion

The Pacific Salmon Treaty is a good beginning but it should not be an end itself. While it has immense inherent capacity as a management tool it can have no enduring legacy if we fail to utilize that tool effectively and eventually move beyond its limits. Collaborative regionally determined solutions consistent with national and international protocols are the path we must take to ensure sustainable outcomes. These solutions must be made with the conflicting nature of our conceptions of salmon in mind, lest they lead us to conclusions and subsequent actions that harm more than heal. Thus far, our history is witness to our propensity to act in our own worst long-term interest. It appears that the new agreement

provides both nations with an awkward but useful instrument for long-term planning as well as conflict management. We must endeavor to keep communication open and constant, all the while adjusting our policies to reflect the enduring interests of the salmon fishery we are duty-bound to perpetuate.

Ironically, the salmon, a species forged over time through the massive geological change that is our region's past, is at risk because our policies reflect a physical and conceptual industrial transformation of the Pacific Northwest. We have remade the landscape into something that reflects our image of what we believe should be instead of what is. Unfortunately, the impact of our blurred vision and our actions based upon the information we "saw" through that blurred vision has yet to be fully known. Fortunately, our vision has improved, at least a little. The 1999 agreement and subsequent adoption the Pacific Salmon Treaty is our best attempt yet, but even it reflects our evolving assumptions.

In the final analysis, I conclude that the industrial economy has not so much replaced the natural economy as it has perpetually held it hostage. The natural economy still exists even when we fail to recognize it. Our ignorance does not negate natural truths. The enduring lesson that can be drawn from this treaty is that together we have more to lose than we can afford. Together we must find a sustainable future based upon a balance of the industrial and natural economy implemented through a management regime built to manage struggle, or else risk repeating the mistakes of our shared past.

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