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DISSERTATION
UNDERSTANDING
THE INTERNATIONAL JOINT COMMISSION:
A COMPARATIVE CASE STUDY APPROACH

Submitted by
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In partial fulfillment of the requirements
For the Degree of Doctor of Philosophy
Colorado State University
Fort Collins, Colorado
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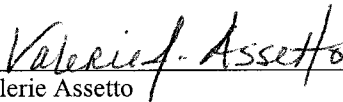
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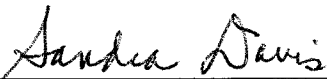
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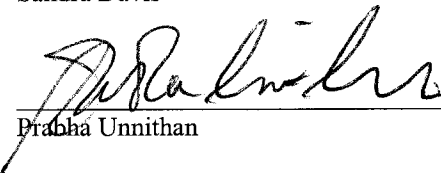
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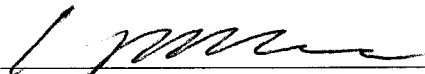
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ABSTRACT OF DISSERTATION
UNDERSTANDING THE INTERNATIONAL JOINT COMMISSION:
A COMPARATIVE CASE STUDY APPROACH

Why the interest in the Commission? Internationally, its reputation is one of the most successful among conflict management agencies. Using a case study approach, this research aims to understand and account for the Commission's effective performance in two policy areas. The cases are chosen to capture a range of variation.

In 1977, the governments of Canada and the United States asked the IJC to investigate controlling extreme water levels in the case on Great Lakes Diversions and Consumptive Uses. With the high water levels of the Great Lakes during the 1970's, there was interest in diverting water out of the Basin for western economic development. In 1985, the IJC finally made its recommendations on the issues.

In 1975, the governments referred questions concerning the transboundary implications of the Garrison Diversion Unit project to the Commission. This public works project was designed to divert water from the Missouri River Basin to the Souris and Red River Valleys in North Dakota for irrigation; however, interests in Manitoba were concerned about the harmful implications of inter-basin water transfers. This represented a classic western water project that benefitted farmers in North Dakota. In comparison with the Garrison Diversion case, the Great Lakes reference demonstrates the technical and political complexities generated by regulatory issues in managing boundary problems. The Garrison case shows the influence that domestic politics can have on binational relations.

We find that issue areas do matter in the Commission's ability to bring the governments to the table. We find that studying the domestic setting in which the Commission operates reinforces our argument about the influence policy arenas have on binational policy processes and outcomes. We find that the Commission's study boards became arenas of policy conflict, and in the case of the Great Lakes, were unable to generate consensus on regulatory norms. In comparison, the IJC was more successful in building a clear domestic constituency with the Garrison case. Its lack of a clear political constituency in the Great Lakes case was a handicap in building public and governmental support for a more independent role in that issue area.

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CHAPTER ONE: INTRODUCTION

The subject of international conflict management is an area of interest to students of comparative policy studies. Settling disputes among nation-states in a peaceful and diplomatic way is obviously preferable to the alternatives, i.e., settling them unilaterally through military action. Countries need to understand these processes of peaceful amelioration in today's increasingly interdependent world. Defining issues concerning international disputes with comparative policy constructs may bring insight to the study of the boundary settlement process itself. Understanding the influence of the issues themselves on these processes is the first aim of the book.

The success of bilateral and tri-lateral organizations is key to maintaining diplomatic ways of ameliorating boundary disputes. Environmental issues are prominent among boundary disputes today. Secondly, by studying the International Joint Commission organization in its complex domestic setting, this book also aims to increase the knowledge that is relevant to maintaining bilateral environmental management organization's role concerning the elaborate issues emerging in the twenty-first century.

Introduction to the Commission

Among the most acclaimed conflict management institutions at the bilateral level is the International Joint Commission (IJC). Established under authority of the 1909

Boundary Water Treaty between the United States (U.S.) and Great Britain to resolve conflicts pertaining to boundary waters and other environmental problems along the U.S.-Canada border, the Commission has played a major role in settling a wide range of water and environmental disputes in this setting. According to its charter, the Treaty provides the principles and mechanisms to help resolve disputes and to prevent future ones, primarily those concerning water quantity and water quality.¹ As established by the Treaty, the IJC ‘issues Orders of Approval in response to Applications for the use, obstruction or diversion of waters that flow along, and in certain cases across, the boundary if such uses would affect the natural water levels or flows on the other side.’ The IJC ‘studies specific issues, or monitors situations, when requested by the governments of both countries.’ Implementation is at the discretion of the U.S. and Canada. Provisions are made for matters referred to the IJC for binding decisions but this power has not been invoked to date.

The Commissioners act as a single body seeking common solutions, not as separate national delegates representing their Governments. The IJC uses technical and advisory boards to gather informational facts on issues referred to them for investigation or arbitration. These boards are appointed by the IJC to ‘report on compliance with Orders of Approval, while study or advisory boards assist in References.’ Public hearings and input by interested citizens are organized when the two Governments request Applications and References. Achieving consensus is the IJC’s mechanism for

¹International Joint Commission, “Fact Sheet,” (Ottawa, Ontario and Washington, D.C. 1977).

organizational decision-making on questions and matters referred to it by the governments.

Thus far, the IJC is described as primarily a binational water management agency that uses consensus to solve boundary water disputes and issues arising between Canada and the U.S. This organization provides us with a prime example to explore these processes of boundary dispute management. The organization's use of consensus and the lack of means for appeal further reinforces the need to reach workable solutions between the two countries. The IJC's accomplishments may be a result of this arrangement. This book will analyze these strong points of the IJC through discussing its mandate, functions, and how it is perceived by its client governments as well as scholars.

Yet another element of the IJC's success is its remarkable record of public inclusion. Under the Treaty, all interested parties are to be given a convenient opportunity to be heard. Thus, the IJC provides for public participation and advice in preparing its reports. Citizens may also serve on Boards and task forces. Information is available to concerned parties upon request. The 1978 Great Lakes Water Quality Agreement, a subsidiary document, also authorizes development of a public information program. The IJC has been able to use public support in some cases to further the compliance of the two Governments to work together towards a common goal. Public participation remains an important component of the IJC and possibly in explaining its success as a binational water management agency.

Despite the Commission's many achievements and record of successful bilateral conflict management, the IJC's performance record is not unblemished. Over the past

two decades the Commission has been unable to resolve a number of binational problems that technically fall within its mandate, either because it was unable to reach diplomatic agreement on issues referred to it by the governments or because the Governments were unwilling to entrust issues that otherwise appear to fall within its mandate to the IJC. For these reasons, the IJC has more recently acquired a reputation that is in some respects flawed for purposes of addressing a range of more contemporary issues. In the process of analyzing two references, we expect to better understand these flaws.

Substantive policy specialists, international lawyers, and non-governmental organizations interested in the work of the Commission have largely waged this debate over the effective performance and role of the IJC. While a few political scientists have sought to understand and comment on the work of the Commission, few have given it sustained attention or sought to understand its behavior in more systematic terms. This is somewhat ironic, since recently the advent of new binational and tri-national international institutions driven by the North American Free Trade Agreement have drawn renewed attention to the role and purpose of the IJC and its institutional place in managing resource and environmental conflicts in U.S.-Canadian relations.

Third, this study aims to understand and account for the IJC's effective performance in two policy areas using a comparative policy oriented approach. Important to this is understanding the IJC's successes and shortcomings as an international conflict management agency. This study draws on the work of scholars interested in international governance and public policy. For this purpose the study employs a comparative case study approach, examining two critical instances of IJC policy-making that reveal

different aspects of its conflict management behavior; that is the IJC as a broker and a regulator or investigator.

The following pages of this chapter provide an introductory review of the policy debate over the IJC's performance, pointing to the main elements of controversy and highlighting the perceived deficiencies in its diplomatic performance and practice. The study then draws on scholarly literature concerning policy as an independent variable to identify possible explanations for the IJC's institutional successes and shortcomings as a binational conflict-dispute management agency. Then following this section is a description of the methodology used to develop this framework. The chapter concludes with a brief overview of the organization of the book by describing the chapters to follow.

The Politics and Performance of the IJC

Since its inception, the IJC has successfully resolved a number of disputes that the governments have referred to it. Among its most distinguished accomplishments are solutions to water allocation disputes on the St. Mary's and Milk Rivers and its manifold works under the Great Lakes Water Quality Agreement (GLWQA) of 1972 as revised in 1978 and the 1987 Protocols. Officially the agreement is referred to as the 1978 GLWQA.

Because the Rivers cross and then re-cross the border, the question of equal distribution and use was problematic. The IJC was able to negotiate a settlement under Article VI of the Boundary Waters Treaty that satisfied both Canada and the U.S.² The rivers are treated as one stream for the purpose of irrigation and power use. The

²William R. Willoughby, *The Joint Organizations of Canada and the United States* (Toronto: University of Toronto Press 1979), 25-26.

settlement was amended in 1921. Even though the matter was successfully negotiated, the agreement's implementation was deferred until Montana's Water Code was completely revised in 1980; Montana then recognized the 1909 Boundary Water Treaty and the decision that treated the two rivers as one.³ Other successes include the creation of the Boards to regulate water use on the St. Lawrence River and Lake Superior.

Yet another benchmark was the 1978 GLWQA. This agreement expanded the regulatory powers of the IJC over the waters of the Great Lakes. The 1978 Great Lakes Water Quality Agreement recognized:

...the need to make the two federal governments collectively more directly responsible for the control and regulation of transboundary water pollution; the need to recognize the existence of a Great Lakes ecosystem... and provide a means to initiate a gradual and consistent management arrangement toward the implementation of that ecosystem over the long term; the need to respect but, at the same time, more effectively use the federal systems to which the two governments subscribe to provide for the long-term ecosystem management of the Great Lakes.⁴

Ameliorating the pollution in the Great Lakes had proceeded in a piecemeal fashion, such as, the fourth reference to the IJC dating 1912 concerning phosphorous levels. During this process it took more than ten years to get the Great Lakes states and the province of Ontario to ban phosphorous use. Even after twenty years, treatment of major sewage water still had yet to be accomplished.

³Mary Ellen Wolfe, "The Milk River: Deferred Water Policy Transitions in an International Waterway," *Natural Resources Journal* 32 (Winter 1992):74.

⁴Leonard B. Dworsky, Albert E. Utton, and David J. Allee, "The Great Lakes: Transboundary Issues for the Mid-90's," *The University of Toledo Law Review* 26(2) 1995:348-349.

After the 1912 reference, the governments waited thirty six years to make a concerted effort on the quality of water in the Great Lakes. One such effort was the U.S. 1948 Water Pollution Control Act. While weak, this law established new federal enforcement policies over interstate waters. This Act initiated more progressive measures including the U.S. Water Quality Act of 1965 and the Clean Waters Restoration Act of 1966. These acts set a precedent for the Province of Ontario's water quality program. The initial attempt to reach a bilateral agreement on water quality resulted in the 1972 Great Lakes Water Quality Agreement. It bore little resemblance to the initial U.S. effort back in 1948. The federal governments' piecemeal approach to water pollution over the years only increased the urgency for an holistic binational agreement between the U.S. and Canada. These legislative attempts on water quality control and a 1964 reference to study the lower Great Lakes along with the 1972 Agreement finally resulted in revisions of the 1978 Great Lakes Water Quality Agreement. Later, the 1987 Protocols were added to it. The provisions of the Treaty and relevant laws and institutions will be discussed in more detail in Chapter Two.

While many are quick to point out the problems and inadequacies associated with the Treaty and performance of the IJC, it is hard to deny that on a case by case basis it has been successful in conducting the References and Approvals that have been referred to it by the two governments.⁵ The IJC's record of accomplishments has been overshadowed

⁵ Leonard B. Dworsky, "The Great Lakes 1955-1985," *Natural Resources Journal* 26(2) 1986; David G. LeMarquand, "Preconditions to Cooperation in Canada-United States Boundary Waters," *Natural Resource Journal* 26(2) 1986. See literature review in Chapter Three.

more recently by the governments' failure to assign new problems to the IJC, especially since the 1980's. The longstanding air quality dispute, finally resolved in 1990, is perhaps the most notable case of environmental conflict in recent U.S.-Canada relations where the two governments failed to use the IJC mechanism for dispute resolution. In other cases, the IJC has encountered significant difficulty in discharging functions referred to it by the governments primarily because of its limited authority. The case of the Great Lakes Consumptive Uses of 1977 provides an example of the complexities of arriving at a binding binational, long term management strategy in a complex environ. This case is the topic of Chapter Four and Chapter Five.

New Challenges

A number of factors have contributed to the IJC's image problems in recent years. Clearly, the magnitude of boundary challenges has increased. In the Great Lakes region, for example, population growth, urbanization, and the affect of industrial activities along the boundary have added complexity to the IJC's agenda.

This environ includes the fact that the Great Lakes Basin contains the world's largest system of fresh water. It is the resource center of a major industrial and agricultural region of North America. The region is strategic economically as it continues to evolve with increased competition within the domestic and global economies. It has a mature industrial base and supporting infrastructure. The agricultural and industrial complex developed along the natural water routes and man made canal links. With the concentration of steel and iron production and metal fabricating, this industrial center pioneered the development of Canada's and the U.S.' economic base. Today the Great

Lakes Basin represents nearly eleven percent of the total employment and fifteen percent of manufacturing employment for the two nations.⁶ The total Basin employment did increase between 1970 and 1990.

These developments have contributed to the region's emergence as the largest bilateral trading area in the world. They have likewise contributed to the emergence of intensive environmental activism and a high level of social mobilization related to environmental management along the border. Activist groups are highly attentive to the IJC, a factor that has put the Commission under intense public scrutiny since the 1970's.

This rise in civic activism and citizen interest in binational affairs has, in the minds of some, politicized the IJC's agenda, contributing to the reluctance of federal officials to entrust the resolution of sensitive issues to it. The complexity of the issues themselves and the economic costs of solutions, as seen in the case of air quality, have raised the stakes in binational diplomacy, contributing to this reluctance. In this same vein, the character of the issues themselves may contribute to the likelihood they can be dealt with effectively by the IJC. Finally, organizational and administrative factors encompassing institutions at the international, national, regional, state/provincial, and local levels may increase difficulties in coordination and in the willingness of the governments to make use of it in seeking diplomatic solutions. These factors concern the main thrust of this study's focus to further understand boundary dispute management through the performance of the Commission.

⁶ The Great Lakes Information Network,, (Great Lakes Commission: Ann Arbor, Michigan U.S., copyright@1993-1999), [Http://www.great-lakes.net](http://www.great-lakes.net).

Approaches to Studying Success and Failures

International Governance a Point of Departure

It bears noting that, as an international diplomatic agency, the Commission's mandate and functions bridge the policy formation and policy implementation processes. Any assessment of the IJC's performance must address both these dimensions of its activities. With that proviso in mind, at least two distinct bodies of literature (International Governance and Comparative Policy) may contribute to an assessment and better understanding of the IJC's successes, failures, and potential for developing diplomatic solutions. In order to find ways of looking at success of international organizations, the international governance literature has something to say about effectiveness. In the search for a better understanding of this phenomenon and the factors that influence it, the literature on effectiveness provides a starting point.

Within the governance literature, Oran Young notes that considerable variation in the effectiveness of environmental governance systems is found at the international level. He adds that "...an examination of actual experience with a variety of environmental regimes..." needs to be conducted to understand effectiveness at this level.⁷ Young has identified six dimensions of effectiveness in such regimes. They are problem solving, goal attainment, behavioral effectiveness, process effectiveness, constitutive

⁷Oran R. Young, *International Governance: Protecting the Environment in a Stateless Society* (Ithaca and London: Cornell University Press 1994), 141.

effectiveness, and evaluative effectiveness.⁸ From this we can discern the importance of rules, process, outputs, and outcomes. Young's dimensions are useful in constructing a working definition of IJC success for the purpose of this study. In relation to our goals, success for the IJC is getting the two parties to the table in order to reach consensus on the issue at hand.⁹

Young's construction of the problem of governance at the level of international institutions, while broad enough to incorporate some aspects of how such institutions formulate or are related to the policy formative processes, nevertheless tends to view effectiveness through the lens of policy implementation. As a rule, the governance literature tends in this direction. It is because of this focus that this literature, though relevant, is not the driving force of this study; however, we take from this literature the suggestion that the study of IJC's effectiveness must encompass the whole policy process. We broadly structure the analysis of the case studies using this policy process.

In the area of effective performance, Jacobson and Weiss observe that international accords are only as effective as "...the respective parties make them."¹⁰

Effectiveness is the result not only of how governments implement accords (formal legislation or regulations that countries adopt with the accord) but also of

⁸Ibid., 143.

⁹John E. Carroll and Roderick M. Logan, *The Garrison Diversion Unit*, (Montreal, Quebec and Washington, D.C.: C.D. Howe Research Institute and National Planning Association 1980), 36; W.R. Sewell and Albert E. Utton, "Getting to Yes in the United States-Canadian Water Disputes," *Natural Resources Journal* 26(2) 1986:201-206.

¹⁰Harold K. Jacobson and Edith Brown Weiss, "Strengthening Compliance with International Environmental Accords: Preliminary Observations" *Global Governance* 1(2) 1995:119.

how they comply with them (the observance of international accord). The authors go further to state that “...without better knowledge about the implementation of and compliance with international accords, it is impossible to assess their effectiveness in protecting the global environment or to evaluate the merits of proposed accords.”¹¹

Jacobson and Weiss continue this discussion by defining implementation as “...measures that states take to make international accords effective in their domestic law” and in going beyond implementation, they define compliance as “...to whether countries in fact adhere to the provisions of the accord and to the implementing measures that they have instituted.”¹² They further observe that measuring compliance is more difficult than measuring implementation and that the first step to understanding effectiveness is to learn about implementation and compliance.¹³ Since the Commission only makes recommendations on issues referred to it, this approach would appear to be somewhat problematic but is thought provoking for this study’s purpose of defining IJC success in relation to outputs and outcomes from its work. In this respect, the IJC is involved with monitoring state compliance of measures agreed upon in relation to the GLWQA. However, because of the IJC’s limited authority - yet not having the power of final arbitration or the ability to sanction noncompliance but just reporting it - getting the parties to the table to discuss disputes becomes the key factor to defining success.

The International governance literature’s focus on the implementation of international agreements, therefore, demonstrates the problem in trying to understanding

¹¹Ibid., 121.

¹²Ibid., 123.

¹³Ibid., 124.

the IJC's performance in this context. Perhaps this literature is more useful for the purpose of this study by its discussion of the many contextual, statutory, and organizational variables involved in the diplomatic process. These factors include the character of the activity, the character of the accord, country characteristics, policy history, leadership, access to information, the role of non-governmental organizations (NGO's), actions of other states, and the role of international governmental organizations (IGOs).¹⁴ While such variables certainly affect policy implementation, they would also seem to affect policy formation – in fact, it is fair to say they shape the whole policy process. It is in this respect that the international governance literature has something to say about the policy formative processes that affect or influence the performance of international agencies like the IJC. Inclusive to the policy process, we ask if these domestic factors influence the IJC's ability to reach consensus and bring the parties to the table?

Weiss makes the distinction between successfully negotiating international agreements and "...making the agreements operate effectively."¹⁵ Again Weiss views effectiveness as a process that includes successful negotiation, implementation, and compliance followed by monitoring of both binding and non-binding legal instruments.¹⁶ Factors influencing effectiveness include a country's economic and social culture, the

¹⁴Ibid.

¹⁵Edith Brown Weiss, "International Environmental Law: Contemporary Issues and the Emergence of a New World Order" *The Georgetown Law Journal* 81(3) 1993: 695.

¹⁶Ibid., 697.

structure and operation of its bureaucracies, the availability of technical expertise and local technical capacity, ready access to information, the role of non-governmental organizations, the functions and powers of the secretariat established by the agreement, whether the country participated in the negotiations of the agreement, the influence of other parties to the convention, the incentives in the agreement to encourage compliance, and the provisions for monitoring and reviewing country performance under the agreement. To conscientiously study all these variables in relation to the IJC would outline a demanding research agenda; however, relevant to this study is the emphasis on contextual variables here which stress domestic political conditions and processes that influence the decision-making of governments that are party to or engaged in the process of creating international agreements.

This stress on domestic policy processes as part of the set of factors affecting the effective performance of international agencies suggests that some additional insights on policy performance of international organizations may be gleaned from the literature on domestic policy formation. This is perhaps the main contribution to be drawn from the governance literature to structure the applied case studies in this book. Therefore, the governance literature has raised significant issues for this study to focus on; namely, the stress on domestic factors in the international negotiation processes and the importance of contextual variables in explaining outputs and outcomes of international agencies. These suppositions in the literature takes us to the next step to discover any relative propositions in the public policy literature.

Comparative Policy Approaches

This linkage between the international relations literature and comparative policy literatures is not unprecedented. In a study concerning smelter air pollution traveling across the U.S. - Mexican border, Helen Ingram and Suzanne Fiederlein draw on foreign policy and comparative policy literatures in order to demonstrate that often “foreign policy is an extension of domestic politics.”¹⁷ Using Theodore Lowi’s framework of issue arenas, the authors identify issues and domestic interests and actors as one explanatory variable and stages of the policy process as another. In their findings the authors note that domestic interests impact agenda setting, policy formulation and implementation processes of international agreements.

As Ingram and Fiederlein argued, there is a strong domestic dimension in much of foreign policy that could be explained using the public policy framework.¹⁸ Another noted author, William Zimmerman, goes further to argue that all policy types have a domestic impact though the impact may not be equal across all interests in society.¹⁹

Factors specifically influencing the Commission’s successes and failures on a case by case basis have not been addressed within the context of this type of policy approach.

As indicated by Ingram’s work, Theodore Lowi’s issue arenas approach has elements

¹⁷Helen Ingram and Suzanne Fiederlein, “Traversing Boundaries: A Public Policy Approach to the Analysis of Foreign Policy” *Western Political Quarterly*, 29 (March 1989): 742.

¹⁸*Ibid.*, 726.

¹⁹William Zimmerman, “Issue Area and Foreign-Policy Process: A Research Note in Search of a General Theory,” *American Political Science Review*, 67 (December 1973): 1204-12.

worthy to consider.²⁰ Lowi's approach to explaining the dynamics of public policy stipulates that policy determines politics. This approach stresses the effects of domestic policy considerations on the politics of public policy and the crafting of national and international policy outcomes. As gleaned from the governance literature, the stress on domestic influences would make the power arenas approach applicable to the case studies at hand. We ask in our case studies if the nature of issue itself matters.

The importance of contextual variables in explaining international agency outputs and outcomes points us to look at what the institutionalist scholars can contribute to the case studies. Douglas Ashford's structural approach to policy analysis focuses on the explanatory power of the state and its institutions.²¹ It emphasizes the importance of contextual variables as noted by Weiss in her discussion of how to get at effectiveness at the international level of analysis. Others following the institutionalist explanatory trajectory are James Q. Wilson and Susan Hansen. Focusing primarily on regulatory policy, their research emphasizes the increasing importance of government agencies and institutions in the decision making arena.²² Both these authors combine issue arenas and contextual explanations that provide guidance in the form of known propositions for this

²⁰Theodore Lowi, Douglas Ashford and James Q. Wilson, *The Politics of Regulations* (New York: New York Basic, Inc., 1988).

²¹Douglas Ashford, "The Structural Analysis of Policy or Institutions Really Do Matter" in Douglas E. Ashford (ed.) *Comparing Public Policies* (Beverly Hills: Sage Publications, 1988).

²²"[T]he larger the role of government—the more diverse the range of interests that must be reconciled and thus the greater the scope of administrative discretion—defacto if not de jure"; James Q. Wilson, *The Politics of Regulation* (NY: Basic Books 1980), 392.

study.

Drawing on the work of these various authors may lead us to a productive approach to understanding the success of the IJC by examining and comparing its work in different issue arenas, as well as the structural variables and the importance of governmental agencies and routines in the dispute settlement and negotiation processes. Common to both power arenas theory and these institutionalist approaches is their use of policy as an independent variable to explain politics.

Applied to the IJC, for example, Lowi's suggestion that perceptions may determine how interests are aggregated and significantly interact within a particular area of policy formation may prove fruitful for this study's purpose. Various scholars have noted, for instance, that the character of the policy issue may exert effects on international organizations similar to those observed in the domestic politics of modern industrial democracies where such international organizations are comprised of a limited number of participating governments (Mumme, 1985; Mumme and Moore, 1990; Ingram and Gillilan 1995). For example in the North American context, the behavior of the U.S.-Mexico International Boundary and Water Commission is heavily influenced by the distributive character of U.S. water policy.²³ Following this reasoning, a project like the Garrison Dam, the topic of the second case study with strong distributive elements, may

²³ Stephen P. Mumme, "Symposium: Water Resources and Public Policy" *Policy Studies Review* 5 (2)1985: 349-450; Mumme and Scott T. Moore, "Agency Autonomy in Transboundary Resource Management - the United States section of the International Boundary and Water Commission," *Natural Resources Journal* 30(3) 1990: 661; Helen Ingram and David M. Gillilan, *Divided Waters: Bridging the U.S.-Mexico Border* (Tucson: University Of Arizona Press 1995).

be classified and analyzed for its political resemblance to classically distributive policy dynamics. The topic of the first case study, Great Lakes diversions issue, by comparison, is more readily classified as a regulatory issue and can be analyzed and compared from this perspective. Therefore, comparing these two issue arenas gives us more variation in our case studies with which to explore the IJC's successes and failures.

Following up on Weiss' suggestion to use contextual variables in the quest to unmask effectiveness, Douglas Ashford, representing the institutionalist approach, views the state as an autonomous policy making entity, defining it as the sum of its preceding policies. As Ashford argues, the state has the capacity to act independently in determining politics and policy outcomes in particular issue-areas. In his approach, Ashford creates an understanding of policy formation based on historical, cultural, and institutional analysis. His approach invites the analyst to consider the character of institutions, administrative practices, and policy context in accounting for policy outcomes. This allows the analyst to consider more than just societal characteristics.

Along this same line of thought, Wilson introduces two typologies that offer themselves to exploration in this study.²⁴ In his book on bureaucracy Wilson offers a simple, elegant comprehensive theory of such behavior that is based on empirical observations and theoretically takes into account top-down and bottom-up influences. Organization matters. How clearly the mission and tasks are defined matters. Constraints and agency people matter. He also stresses compliance or shirking, discretion, funding,

²⁴James Q. Wilson, *Bureaucracy: What Government Agencies Do and Why they Do It* (New York: Basic Books, 1989).

and leadership as important factors for agency performance. His stress on internal agency characteristic's would further add to a comprehensive analysis of the Commission's performance on the two case studies.

Of interest, Wilson discusses the type of agency - in this case an international organization - and the type of agency constituency. The four types of agencies are productive, procedural, craft, and coping.²⁵ These four categories are based on outputs and outcomes - outputs being the actual work that the agency does and the outcomes being the affect that the agency's work has at large overtime. This is an important distinction for measuring effectiveness because generally it is easier to measure outputs than outcomes.

According to Wilson, a "productive" agency has measurable outputs or tasks and outcomes or mission. Secondly, a "procedural" agency produces measurable outputs only. Thirdly, a "craft" agency produces measurable outcomes only. And finally, a "coping" agency does not have easily measurable outputs or outcomes. The agency's type of environment or supporting constituencies can further differentiate these four types of agencies. Drawing on these observations, we ask in our case studies if outputs and outcomes have something to say about the organizational nature of the IJC and the disposition of the IJC's constituencies.

Wilson introduces four types of environments to further describe agencies.²⁶ These environments are based on the type of constituents that support or oppose an

²⁵Ibid., 16.

²⁶Ibid., 8.

agency-interest aggregation. An agency with little or no organized constituency interests is referred to as having a 'majoritarian' environment. This applies when no particular interest groups are continuously active on the issues linked to creating the agency in the first place. Generally this agency offers widely distributed goods and widely distributed costs so that both are low per capita. Secondly, agencies that largely benefit one interest group involve 'client' politics. Here the benefits are high per capita and the cost is low per capita. Wilson characterizes this environment as watch dogs. Thirdly, 'entrepreneurial' environment involves heavy cost to industry groups but benefit a lot of people. This type of environment includes several hostile interest groups in opposition to the agency mission and tasks because they pay for the diffused benefits. An environment with competing interest groups like labor and business is referred to as 'interest group' politics. This agency incurs high per capita cost and benefits. These two taxonomies - agency type and environment - may further an explanation of IJC performance, especially by applying the stress on agency tasks and mission to get at effectiveness.

In summation thus far, the performance of the IJC as viewed by scholars points to the agency's success in negotiating binational water issues. The IJC's shortcomings have led to reforms within the agency. Such academic assessments of the agency coupled with international, institutional and administrative complexity issues, policy types, and agency types and environs, frame this study's look at the performance of the IJC as a binational water management agency.

How can these aspects of different approaches be useful to completing this study? How can they be reconciled with each other into one coherent approach? Perhaps some

background on the study of policy as an independent variable approach would bring these streams of thought together so the study can proceed to focus on the study's purpose to explain why the IJC is more successful in some issue arenas than others. To do this, a closer look at the differences between the issues arena approach, the institutional approach, and their emphasis on using policy as a variable to explain politics would increase our understanding of where this study is going and how it will get there.

A Comparison: The Institutional and Issue Arenas Approaches

In order to utilize the most pertinent aspects of these approaches, we must first have a better understanding of the models at hand. We will begin by discussing Ashford's approach to policy since it is more generally contextual and less theoretical in nature. Then we can discuss the more theoretical - power arenas approach.²⁷ Wilson's model can be better integrated into the discussion because of his more narrow emphasis on regulatory policy and bureaucratic agencies. Keep in mind that the use of general terms is necessary to maximize applicability to varying types of nation-state systems and societies when describing these works.

The central focus of the institutional approach to policy as an independent variable is on the state. Ashford's approach is based on certain categories, e.g., the

²⁷Theodore Lowi, *American Business, Public Policy, Case-Studies, and Political Theory* (1964); Lowi, "Decision Making Vs Policy Making: Toward an Antidote for Technocracy" *Public Administration Review*, 30(3) 1970: 314-325; Lowi, "Four Systems of Policy, Politics, and Choice" *Public Administration Review*, 32(4) 1972:298-310; Lowi, "Public Policy and Bureaucracy in the United States and France" in Douglas Ashford (ed) *Comparing Public Policies: New Concepts and Methods* Beverly Hills (CA: Sage Publications, 1978:177-195.

context of the problem, the agenda, the process, and consequences to describe the whole policy making process.²⁸ This inclusive approach of the whole policy process captures the phenomenon to be studied in this book more so than approaches that focus on either policy formation or implementation alone. A word on each of Ashford's phases of the policy process enlightens the reader on significant points for comparison.

In the agenda phase of the policy process, groups and types of coalitions that form around existing institutions and political cultures are identified in the context of the issue to be studied. Describing the institutions and their role in the policy making process frames the process stage of his approach.²⁹ By also describing society's role in this process and what administrative politics look like, he then goes on to determine how institutional structures of the government facilitate group coalitions. For example, the question of whether issues and structural context are described as cross-cutting or segmented would be a point of consideration.

The final stage of the policy process involves its consequences or the inter-meshing of pre-existing policies, institutions, and policy constraints. Overall, this process of determining the significant aspects of the policy process involves describing how issues are filtered through government structures. This process results in some decision or resolution, law or regulation.

²⁸ Douglas E. Ashford, "Introduction by the Symposium Editor" *Policy Journal*, 5 (1977):534-535; Ashford, "Political Science and Policy Studies: Towards a Structural Solution" *Policy Journal* 5 (1977):570-583; Ashford, *Comparing Public Policies: New Concepts and Methods* (Beverly Hills, CA: Sage Publications 1978).

²⁹This process stage is largely addressed in relation to the IJC in chapter two of this book.

Based on Ashford's works concerning France and Britain, we can summarize the main thrust of this research as the primacy of the state in determining policy types.³⁰ His research examines multiple policy types in one country. In studying this range of policy, he evaluates the inhibiting effects of social and political consensus and the institutionalized patterns of adversarial relations among policy elites on outcomes and institution building.

For the purpose of this study, Ashford's contextual emphasis provides us with a compliment to Theodore Lowi's more theoretical approach. In the arenas approach, Lowi hypothesizes that issue perceptions are the determinants of how interests are aggregated and how interests interact politically within a particular area of policy formulation. He replaces descriptive, subject-matter categories of pluralism with functional categories. He defines policy types based on substantive expectations; therefore, policy characteristics are based on expected impacts. In explaining expected impacts, Lowi identifies the type of bargaining and type of coalitions that are likely to form around the issue phenomena, and determines who is to gain and lose. In each of these pre-defined issue arenas, he identifies significant power structures and elites. The task is to identify which appropriate institution the issue is associated with in the context of decision-making.

There are three conventionally accepted policy types which are namely

³⁰Douglas E. Ashford, *Policy and Politics in France* (Philadelphia: Temple Press 1982); Ashford, *Policy and Politics in Britain: the Limits of Consensus* (Philadelphia: Temple University Press 1981).

distributive, regulatory, and redistributive.³¹ Important to understanding the issue arenas approach is that policy types must be differentiated or specified by expectations of what the policy might achieve, not what the actual outcome is. What are these observations that lead to the classification of one policy instead of another?

Distributive policies tend to be characterized by a mutual non-interference type of political relationship. This non-interference type of politics has commonly been referred to as pork barrel politics or log rolling which represent stable coalitions or established relationships among individuals or firms or corporations without shared interests. These policies tend to be brokered, or coopted or characterized by being the result of bargaining rather than more intensive forms of political conflict. The agency involved tends to be a highly centralized bureau.

This leads us to the regulatory arena. The political unit affected most by regulatory policies are groups with a common interest. Group conflict is the result of direct confrontation between the haves and the have nots, so regulatory policy coalitions are introduced to reach a compromise on these conflicting groups' demands. Compromise would seem to be achieved more easily than when there are multiple, overlapping group memberships. With overlapping group membership, interests shift as do coalitions which produces less stable relationships than one expects with distributive type policy. These shifting coalitions and patterns of conflict are significant because these type policies tend

³¹ A fourth category, constituency or emotive symbolic, includes foreign policy issues. See Lowi, "Public Policy in France," 179 and Alexander Smith, "Toward a Comparative Theory of the Policy-Process" *Comparative Politics* (July 1969): 498-515; Ingram and Fiederlein, "Traversing Boundaries," 727-729.

to be settled through bargaining. Also important to this arena of politics is the tendency for regulatory issues to be transferred into distributive issues because often this is the best way to avoid more group conflict through spreading patronage. The agency associated with regulatory policies tend to be decentrally organized. Having tried to simplify this complex issue arena into general terms, redistributive policy follow as the finally arena to be discussed.

The redistributive issue arena is loosely based on the elitest view of the political process. This type of modern policy relationships grew out of the establishment of the welfare state. These relationships are usually based along class lines and interests with peak associations expressing similar goals. One elite tends to represent each side of the issue and policy resolutions are usually negotiated between them. If a resolution is not achieved through normal negotiations then executive agencies tend to make the decision.

Having outlined Lowi's issue arenas approach based on the type of circumstances, group relationships, and resolution scenarios, we can look at some of the relevant criticisms in the literature directed towards it.

Perhaps the most critical point of this approach concerns operationalization. Various scholars have chosen different ways to get around this problem. Kjellberg concentrates on making Lowi's model more easily operational by typology with economic dimensions.³² Peters, Doughtie and McCulloch tailors the approach to different political

³²Francesco Kjellberg, "Do Policies (Really) Determine Politics? And Eventually How?" *Policy Journal Studies* 5 (1977):554-570.

systems reinterpreting policy types based.³³

James Q. Wilson and Susan Hansen both represent an alternative interpretation of the power arenas approach by taking into account some of these criticisms and integrating an economic dimension into the schema. The authors for our purposes would seem to combine Lowi's conceptualization of policy types with operationally functional characteristics in order to distinguish policies from each other; they rely on costs and benefits to enhance the distinctions between policy types.

Wilson's conclusion after studying regulatory policy is that it is not an especially useful category for analysis "because it encompasses forms of political action that have little in common other than the fact that some agency issues or applies a rule."³⁴ He qualifies this statement by adding that when using regulatory policy types, that distinctions must be made and differences examined because that they are not endless nor random. These distinctions are based on distribution of costs and benefits, the differing motives of bureaucratic actors, changing technology, and economics of industries.³⁵

Similarly to Ashford, Wilson stresses the importance of ideas to unraveling the mystery of regulatory policy. The economics of utility maximization alone does not explain everything - ideas and interests also play a significant role in explaining the policy formation process. Additionally the concept of efficiency is important in

³³B. Guy Peters, John C. Doughtie, and M. Kathleen McCulloch, "Types of Democratic Systems and Types of Public Policy" *Comparative Politics* 9 (1977): 327-355.

³⁴Wilson, *The Politics*, 393.

³⁵Ibid.

evaluating behavior concerning the implementation process. In short, regulatory policy can not be simply reduced to economic motives and solutions - contextual variables also play an important role in explaining this policy process. Both Ashford and Wilson would seem to agree on this point.

Within the same context, Hansen's contribution is her critique of pluralist and structuralist models concerning regulatory policy formation and implementation. As she stipulates, Lowi characterizes policies in terms of winners and losers. He defines these by identifying different patterns of interest-group conflict dependent on integrated or fragmented demands and decisions. This schema is problematic for Hansen because it does not emphasize costs as much as benefits. For example, regulatory policies tend to limit the behavior of individuals by constraining their freedoms within societal settings, Lowi doesn't take these costs into consideration. She points out that within the arena of power approach - benefits of regulation are emphasized rather than individual costs. Many costs are not intended and are not incurred until later in the policy process. For example, she defines such limitations as having possible affects on competition, consumer protection, and enforcement strategies.³⁶

In addressing Hansen's criticism of Lowi's typologies, Wilson considers how costs are distributed in relations to benefits. According to Wilson, if costs and benefits are highly distributed, then there exists a majoritarian type of politics. If costs and benefits are highly concentrated then there exists a more interest-group type of politics. If costs are

³⁶ Susan Hansen, "On the Making of Unpopular Decisions: A Typology and Some Evidence" *Policy Studies Journal* 13(1) 1984: 23-44.

concentrated and benefits diffuse then there exist a client type of politics. Conversely, if costs are diffuse and benefits are concentrated than there exists an entrepreneurial type of politics.³⁷ For example using this framework, a regulatory agency that is captured by a related industry would be illustrative of client politics.

While Lowi appears to give little thought to considerations of costs concerning regulatory policy's impacts, Wilson assumes that costs and benefits are simultaneously determined. Using the United States policy process for example, Hansen observes that unseen cost may accrue after the policy formulation process perhaps when actually enforcing or implementing the policy regardless of intended benefits. Further, Hanson adds that Wilson falls short of considering alternative methods of measuring costs and benefits outside the economic arena. To explain this shortfall, Hanson suggest that beliefs and value systems should be considered especially when the "economic payoff matrix is indeterminate, and perceived costs may be more important than actual costs."³⁸

Lowi uses the separate policy characteristics of allocation and coercion to determine his four cell policy typology. Using economic references, these dimensions of policy would describe utility income and distribution of costs and benefits.³⁹ Utility refers to a stream of benefits or costs either symbolic or material. Utility includes individual income or collective community income or losses. Distribution of costs and benefits

³⁷Ibid., 3.

³⁸Ibid.

³⁹See Hansen's typology of allocative public policies based on the type of collective goods provided and the effect on individual utility or income; Ibid., 28.

describes the divisibility of the goods in society, i.e., public or private, collective or individual.⁴⁰ In addition, she asserts that political leadership, strategy, and ideology determine the relationship between policy costs and benefits. For example, in order to change the perception of regulatory impacts (costs and benefits) into distributive impacts (benefits), force and coercion are instrumental in the context of public goods. Hansen contextually adds to Lowi's characteristics of allocation and coercion by considering differences in terms of political strategies, citizen demands, societal conflict or cooperation - these contextual considerations would seem to draw on strengths from both Ashford's and Lowi's works.

Hansen seems to use these strengths when devising her six cell typology of allocative public policies. Its dimensions are divided by collective goods and individual utility. Collective goods are measured on a continuum from public goods to divisible goods while individual utility is measured from positive to negative costs and benefits. The resulting categories are positive-sum, zero-sum, and negative-sum with corresponding cells of distributive, redistributive, and coercive policies. A description of Hansen's typology can illustrate Lowi's shortcomings comparatively.

The positive-sum category describing public goods with a positive effect on individual utility or income. This includes policies in which there is resulting economic growth with collective goods such as national defense, and environmental quality. The zero-sum category describes policy in which there is no resulting economic utility with collective goods such as Carter's energy program, moderate inflation, or gasoline

⁴⁰Ibid., 5.

rationing. The negative-sum category describes the situation in which there are utility costs associated with collective goods such as defense spending, resource exploitation or exploration, and dependence on foreign oil.

Hanson also matches divisible goods with their subsequent utility costs to further differentiate between policy scenarios. Distributive policy as a divisible good has a positive impact on individual utility. She gives examples of such policies as social security (OASDI), pork barrel projects, jobs and patronage, and military contracts and bases. Redistributive collective goods are divisible with no observable impact on individual utility. Policy examples are negative income tax, AFDC, and Medicaid. Coercive collective goods that are divisible have a negative impact on individual utility and include policies concerning taxes, the military draft, speeding limits, and eminent domain. The coercive-divisible cell within Hanson's typology is significant especially to this research because of its substantive inclusions of environmental regulatory policies.

In this concentration on unpopular regulatory policies, Hanson identifies eight strategies to make the negative impacts and high individual costs less repulsive to constituencies. Such strategies would include the use of less coercive methods to make the resulting policy more digestible to the public. For example the use of floating bonds through enacted referenda make the impacts appear less intrusive. Other strategies are the use of administrative efficiency so that the public feels less put upon in complying with regulations and the use of fairness and equity when enforcing unpopular directives. The use of fiscal illusion, undercutting the opposition, or cooptation of the opposition can also make the impacts perceived as less traumatic. Timing of unpopular decisions can also be

an important tool such as making these decisions as far away from election time as possible. By using such strategies, acts constraining individual or corporate behavior for the benefit of some collective good can mask negative impacts or translate these unpopular policies into at least tolerable terms. The government's use of the IJC may also be a strategy to diffuse negative conceptions by the public on certain disputes.

It is important to note that Hansen is trying to address the question of whether a democracy can make unpopular decisions well. Her criteria differs from Lowi's approach by using actual policy outputs and outcomes to assess costs and benefits instead of Lowi's focus on perceived benefits to distinguish policy types. One would seem to focus on the policy formation process while the other focuses on implementation process. While her ruminations provide food for thought in applying the powers arena approach, her emphasis on the outputs and outcomes of the policy process would seem to narrow its applicability to the cases studies at hand.

Certain similarities and differences are apparent with these approaches. Ashford's approach is more contextual than Lowi's and focuses on the primacy of state. Lowi's approach is more theoretical and focuses on the influence of societal factors and perceived policy impacts instead of actual costs and benefits which would seem to suit the nature of the IJC's cases to be studied because of the difficulties associated with measuring actual outputs and outcomes.

Wilson and Hansen seem to meld together aspects of both Ashford and Lowi. They build on Lowi's typologies addressing several of the criticisms devoted to it. They frame this approach within the institutionalist perspective yet allow for many societal

factors affects of determining politics. Hansen and Wilson incorporate not only functional explanations but encourage contextual considerations as well. Their emphasis on regulatory policies is also advantages for our purposes but Hansen's stress on actual outputs and outcomes would only apply to the implementation side of the policy process and begs the question of whether unpopular decisions are made well by democratic regimes which is outside the scope of this book. This in tandem with Lowi's emphasis on policy formation would compliment or complete the focus on the whole policy process. Overall, all of these authors attempt to develop a middle range theory to explain differing politics based on different policies in one or more political system settings. How these strengthens can be directly applied to the case studies will be discussed after the literature review on the IJC in Chapter Three.

Approach and Methods of the Study

What approach can reveal something about the success of the IJC? In order to complete this study, I employ a comparative case study approach so to identify the important political factors influencing the IJC's performance. In its use of case method, this study applies established explanatory approaches to illuminate and account for the behavior a particular institution, the IJC, has in two distinctive policy areas. This applied comparative use of the case study method is, following Eckstein's well known typology of case studies, a variation of the disciplined configurative study - a type of case study that applies known theoretically based propositions to the analyses of one or more cases

in order to account for or explain the behavior under analysis.⁴¹

From a more practical perspective, this study is to a large extent a heuristic exercise for purposes of understanding the IJC; that is, to the extent that the IJC's behavior in the two cases under consideration resembles patterns only hinted at by the international governance literature and suggested by the institutionalist and issue-arenas approaches to comparative public policy, one may reasonably suppose that the variable relationships posited by these explanatory frameworks might partially account for the IJC's past performance, help anticipate future performance, and indicate potential or needed policy reforms at the level of the Commission.

Thus far discussed are a few known theoretically based propositions. In summation, these propositions are based on the literatures already discussed highlighting what is known about the IJC as a binational water management agency and its performance record. The institutional arrangements of the IJC - consensus and no means of appeal - contribute to IJC success as a binational water management agency. The government's unwillingness to refer issues which lie within the IJC mandate - to the IJC for study or amelioration inhibits the IJC's ability to address a range of more contemporary issues related to its mandate. The piecemeal approach the governments have had towards water pollution of the Great Lakes increases the urgency of a binational agreement between the governments; therefore, the success of the IJC as a binational water management agency depends on a comprehensive, integrative, multipurpose

⁴¹Harry Eckstein, "Case Study and Theory in Political Science" in Fred Greenstein and Nelson Polsby (eds), *The Handbook of Political Science Readings* (MA: Addison-Wesley 1975), 99.

approach to border/water issues. What has not been focused on in the literature is that the character of the issue itself may affect the ability of the IJC to reach consensus. This will be the main contribution to the literature on what is known about the success of the Commission.

What can be studied from the international governance literature is Weiss' proposition that effectiveness is a process that includes the whole policy process. Further the stress on domestic political conditions and processes that influence the decision-making of governments party to international agreements allows us to link the two strains of literature in this study. From Weiss' work we can posit that international and diplomatic agreements depend on domestic forces to achieve successful negotiations.

From the comparative policy literature, we have identified two propositions to base this heuristic study of the IJC. Domestic policy considerations affects the politics of public policy and the crafting of national and international policy outcomes. The character of the institutions, administrative practices, and policy context account for policy outcomes and, thus affect institutional performance.

From the public policy literature, limitations constraining evaluation of agency performance is notable. The type of agency and the type of environments constituting constituency support determine the degree to which effectiveness can be measured. Are IJC's 'outputs' (tasks) and 'outcomes' (mission) observable? How does this affect the ability to determine IJC's performance and thus suggest change? This study will be examining two references in relation to its mission.

The two case studies have been selected for their substantive policy differences, in order to explore a broader range of potential influences on the IJC. The cases used here are the Garrison Diversion Unit Project Reference of 1975 (hereafter referred to as Garrison) and the Great Lakes Diversions and Consumptive Uses Reference of 1977. Because of the Garrison's focus on water use by farmers in North Dakota verses the water uses effect on residents of Manitoba, this case reflects a distributive type of politics affecting the IJC functions - to use Lowi's issue arenas classification. This case demonstrates the reluctance of the two governments to refer an issue to the IJC as well.

The Great Lakes Consumptive Uses Reference approximates a regulatory type of politics in contrast to use Lowi's perceived benefits schema. The issue's constituency is hypothesized to reflect a regulatory interest. This reference focused on the management of the Great Lake waters by studying the impacts of water levels in and around the specified areas. This case is particularly relevant today because it has been resurrected for a new assessment in 1999. The Great Lakes Diversions and Consumptive Uses Board has been given six months to do a reassessment of water levels and use. They reported on this issue in March of 2000.

Canada referred the Garrison issue to the IJC and the U.S. ten years after the U.S. Congress authorized its construction. Thus began a division between a U.S. pork barrel project benefitting a small number of North Dakota farmers and various groups in Manitoba that feared contamination of Lake Winnipeg and the whole Hudson water basin from run-off of the new dam and water project. This case is explored in Chapter Four to follow.

Concerning the first case study, after a 1976 report to the governments on “Further Regulation of the Great Lakes” which discussed all natural and artificial factors affecting the hydrology and hydraulics of the Great Lakes system, the Great Lakes Diversions and Consumptive Uses Board was created to study the possibilities of diversions management to alleviate extreme Lake levels. This case study is described in Chapter Four. These two cases are not perfect and do not exhaust all the cases that might be considered, but they do capture a wide range of variation among IJC references. Variation to be examined is regional - along the international boundary, and secondly, these cases capture critical issue differences in policy type - distributive and regulatory.

In the development of the two case studies, I rely on secondary literature that discusses the IJC’s performance, government documents and archives to illustrate the sequence of events and view points of interested parties, and finally, interviews as appropriate to IJC staff, non-governmental organizations and other relevant government officials. These sources will comprise the results of the disciplined configurative study using comparative case study analysis to determine the success of the IJC.

Chapter Development

The following section describes the flow of chapters that develop the study. The Introduction of Chapter One has included the rationale for this study of the IJC as a binational water management agency, the debate over the effective performance and role of the IJC, and the aim to understand the IJC’s success and shortcomings as an international conflict management agency. Comparative policy and to a lesser degree,

international governance, are the relevant literatures reviewed. Also discussed were the methods of study. The comparative case study approach is employed to identify the important political factors influencing the IJC's performance. In review, this approach follows Eckstein's well known typology of case studies, a variation of the disciplined configurative study - a type of case study that applies known theoretically based propositions to the analyses of one or more cases in order to account for or explain the behavior under analysis.

The International Joint Commission of Chapter Two discusses the Commission as an institution. To do this the chapter reviews the Boundary Waters Treaty of 1909, how the Commission is set up and how it operates with its Study Boards, Advisory Boards, and Task Committees. Also an overview of the relevant agencies and departments of the United States and Canadian governments involved in some way with the Commission's mission are described. This lays the foundation to delve into the literature on the Commission in general.

The International Joint Commission: Debate and Controversy of Chapter Three elaborates on the debate and controversy among scholars concerning the IJC's performance. The focus is on the main elements of controversy and the perceived deficiencies in the Commission's diplomacy. This Chapter ends with specifying what the studies expect to find in regards to policy types and their associated politics, agency and constituency types.

There is an extensive literature on the Great Lakes and this case study narrows the literature to focus on diversions, fluctuating water levels, consumptive uses and the

importance of the IJC's role to managing them. The Political Context for Lake Levels Diplomacy: Binational, Federal and State-Provincial Considerations of Chapter Four describes both internal and external influences on the Commission. Regulating Great Lakes Water Levels of Chapter Five completes the 1977 reference case study by focusing on the IJC's role on the issue and the execution of the reference. The Political Context for the Garrison Diversion Project Brokerage: Binational, Federal, State-Provincial Considerations of Chapter Six explores political influences surrounding this reference issue. Distributing Missouri Waters through the Garrison Diversion Project: IJC's Role and the Execution of the Reference of Chapter Seven explores the IJC's role as broker and the politics surrounding the project.

Because of the impact extreme levels either high or low can have on both countries, the issues of the Great Lakes Diversions and Consumptive Uses Reference of 1977 has become an ongoing issue. In September of 1999 and again in March of 2000 another report on water levels on the Lake Ontario - St. Lawrence system was issued by the IJC. Important to the water level's report is the St. Lawrence Board of Control and the Great Lakes Regional Office of the IJC. Chapters Six and Seven on the Garrison Diversion Unit Project Reference of 1975 describe the political context surrounding the issue, the IJC's function as broker, and the process of reference guided by our framework of analysis. Recently the predicted flooding of Devil's Lake reminds us of the importance of the Garrison Reference and how lesson's learned from it may effect future references such as proposed construction of an inlet and outlet in North Dakota that may affect Manitoba's water supply. These two case studies provide us with a range of issue

variation in combination with political influences to analyze IJC performance.

Conclusions of Chapter Eight analyzes the two cases comparatively. The discussion of effectiveness comments on issues related to comparative policy, and to a lesser degree, the international governance literatures. In this final chapter, concluding observations are made based on the two case studies and IJC performance with the addition of a discussion on the future of the institution with the new trinational institutions created under the North American Free Trade Agreement and the IJC as a possible model of reform for the U.S. and Mexico's International Boundary and Water Commission.

CHAPTER TWO THE IJC: AN INSTITUTIONAL APPROACH

Introduction

During its ninety year tenure the Commission has excelled at its mission. Perhaps the most significant changes to the Commission have come with the Great Lakes Water Quality Agreement of 1978 and its protocols. This Agreement has broadened the scope and role of the Commission beyond procedural changes. For instance, the Commission is now considered the watchdog of the Great Lakes on water pollution. Further, the 1987 Protocol adds the task of monitoring the progress of airborne pollutants and groundwater effluence that affect the Great Lakes Basin.¹ The governments have resisted referring air pollution issues to the Commission, however. The use of both temporary and permanent boards have enhanced its capacity to prevent and resolve disputes and promote cooperation. The establishment of the Windsor office was accompanied by increased funding and staffing.

To achieve a better understanding of how the Commission performs today and where it is going in the future, first an examination of the Treaty itself is in order. This chapter focus on understanding the Commission's formal mandate, how it functions in

¹Chad Day, "Institutional Framework for Transboundary Inland Water Management in North America: Mexico, Canada, The United States and Their Binational Agencies," unpublished 1997, 35.

the complex mix of domestic institutions in both the U.S. and Canada. To accomplish this, we describe the Commission's formal mandate, organization and structure, decision making rules, and procedures setting the stage to discuss the debate and controversies surrounding the IJC as a political entity.

The 1909 Boundary Waters Treaty

The Formal Mandate

The Treaty between the United States and Great Britain is related to questions arising between the peoples of the United States and the Dominion of Canada concerning boundary waters. Provisions of said Treaty concern five areas; namely, jurisdiction and sovereignty, special agreements, definitions of terms, the question of pollution which has developed into the concept of water quality management, and diversions commonly referred to as water apportionment. These provisions provide a starting point for this discussion.

The jurisdiction and sovereignty of the United States and Canada are central to the debate surrounding IJC effectiveness. What authority does the Commission have? In Paragraph one of Article II of the Treaty, the Parties agree that any use and diversion of waters are subject to their own jurisdictions but "any interference with or diversion from (the) natural channel...resulting in injury on the other side of the boundary, shall give rise to the same rights and entitle the injured parties to the same legal remedies as if such injury took place in the country where such diversion or interference occurs."²

²The International Joint Commission, United States and Canada, Rules of Procedure and Text of Treaty (Ottawa, Canada and Washington, D.C. 1965), 2(1): 14.

Paragraph two clearly states that the Commission must function within the parameters of not offending either party's sovereignty while executing its tasks and missions.³ The obstacle of sovereignty is embedded in Article II of the Treaty and will become a focus of debate concerning its performance when the Commission tries to exercise its authority.

Article VIII sets the parameters of its authority by which the Commission operates. Paragraph one states that the IJC's jurisdiction is over "all cases involving the use or obstruction or diversion of waters with respect to which Article III and IV..." requires IJC approval.⁴ This statement implies quite a lot of authority on the part of the IJC. However, Paragraph two reinforces party sovereignty by stating the principles of equal and similar rights to use of waters on each country's own side of the boundary. Paragraph three orders priority of uses as domestic and sanitary purposes, navigation, power and for irrigation purposes. Paragraph four protects existing uses of water on either side of the boundary - reinforcing domestic control over uses. Article III, Paragraph one, establishes the existence of the Commission.⁵

Definitions and Terms

Article XIII refers to any special agreements between the parties to be honored or any mutual arrangements coming out of 'concurrent or reciprocal legislation' by the

³Ibid., 2(1):13.

⁴Ibid., 8(1):16.

⁵Ibid., 3(1):14.

Congress or Parliament. This article could be interpreted as undermining the jurisdiction of the IJC by circumventing its mechanism for settlement. If the Commission had powers to initiate its own inquiries or was trusted with negotiating terms of a settlement then it might become the vehicle of resolution without the parties having to enter into special agreements.

The overview of jurisdiction and sovereignty introduces two terms that are central to this discussion. Boundary waters and navigation are defined within the text of the Treaty. For the purposes of the treaty, boundary waters are defined in the second paragraph as:

the waters from main shore to main shore of the lakes and rivers and connecting waterways, or portions thereof, along which the international boundary between the United States and Dominion of Canada passes, including all bays, arms, and inlets thereof, but not including tributary waters which in their natural channels would flow into such lakes, rivers, and waterways, or waters flowing from such lakes, rivers and waterways, or the waters of rivers flowing across the boundary.⁶

These waterways are the jurisdiction of the Commission in its quasi-judicial role in relation to approval of orders for use and obstruction of boundary waters.

Navigation is also central to this discussion on the Commission's mandate. Shipping is a major concern with one-hundred billion ton-miles of freight annually passing through the Great Lakes System.⁷ Navigation is defined in Article I as "...free and open for purposes of commerce to the inhabitants and to the ships vessels, and boats of

⁶Ibid., 13; Carroll, *The Garrison Diversion Unit*, 31-32.

⁷Helen Sellinger, interview by author, 23 July 2001, GLERC, Ann Arbor: MI.

both countries equally, subject, however, to any laws and regulations of either country...”⁸

In Paragraph two, free navigation is extended to Lake Michigan, even though it is within the U.S. boundaries, and all canals connecting boundary waters. Navigation still plays an enormous role in today’s commerce even with advancements in transportation since the early twentieth century.

Article IV regarding Applications of approval to the Commission states that “...boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property of the other.”⁹ This article introduces another important concept to the debate and controversy surrounding the effectiveness of the IJC as a binational water management agency. Most notably this foresight to reference pollution of boundary waters has been developed into strategy of water quality management. This concept is presently still evolving as the strategy of ecosystem system management links the health of water, air, land and species together for the focus of the upcoming century.

Until the 1960's this provision on water quality management was applied only to complaints and surveys on pollution in the boundary waters which includes the Rainy Lake System, the Niagara River, the St. Mary’s River, St. Clair River, St. Claire Lake, the Detroit River, the Red River, and the Great Lakes.¹⁰ In 1964 the parties referred the question of deteriorating conditions in the lower Great Lakes to the Commission. Its

⁸Ibid., 1(1):13.

⁹Ibid., 4(2):14.

¹⁰Day, “Institutions,” 44.

report in 1970 led to the Great Lakes Water Quality Agreement of 1972 which was later revised in 1978 and further protocols added in 1987. This Agreement refined the original vaguely stated pollution provision of Article IV; namely, by specifying the control of the process of eutrophication in the lower Great Lakes. It also set water quality standards and regulations for the control of toxic substances discharged into the lake waters.

Article II of the GLWQA states that, “The purpose of the Parties is to restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes Basin Ecosystem.”¹¹ In order to achieve this purpose, “...the Parties agree to make a maximum effort to develop programs, practices and technology necessary for the better understanding of the Great Lakes Basin Ecosystem and to eliminate or reduce to the maximum extent practicable the discharge of pollutants into the Great Lakes System.”¹² The Commission has been given the role of monitoring goals and implementation. The GLWQA has led to further controversy over the role and authority of the Commission in trying to clean up the Great Lakes. Perhaps the greatest controversy coming from this additional provision of the Treaty surrounds the introduction of the term ecosystem.

Ecosystem as defined by Article I of the Agreement is as follows:

Great Lakes Basin Ecosystem” means the interacting components of air, land, water and living organisms, including humans, within the drainage basin of the St. Lawrence River at or upstream from the point at which the river becomes the International boundary between Canada and the United

¹¹The International Joint Commission, *United States and Canada, Revised Great Lakes Water Quality Agreement of 1978 as Amended by Protocol* (Ottawa, Ontario: signed 18 November 1987), 2(1):4.

¹²*Ibid.*,.

States.¹³

A more thoroughly discussion of controversy surrounding the term ecosystem follows in the next chapter.

Paragraph one of Article V limits the diversion of waters from the Niagara Rivers so not to affect water levels of Lake Erie. It is intended to limit injury to investments made by already existing power companies licensed in New York and Ontario.

Paragraphs two and three state that the only permitted diversions from the waters above Niagra Falls are those authorized by the U.S. government for the State of New York for power generation at a specified rate. According to Paragraph two and four, the Canadian government must authorize the Province of Ontario to divert a certain amount of water above Niagara Falls for power use. Even though this section was terminated by the governments on 27 February, it is worth noting for their intent to protect water levels and control the amount of diverted waters for power use and specified withdrawals.. The fifth paragraph exempts diversions of water for sanitary or domestic purposes and for service of canals for navigation. These functions again reinforce the intent of the Commission to avoid interfering with domestic policy areas.

Lastly, another important principle mentioned in the Treaty's provisions is equal apportionment of water. Article VI concerns the St. Mary and Milk Rivers and their tributaries in Montana, Alberta, Saskatchewan. These waters are to be treated as one stream for the uses of irrigation and power. They are to be 'apportioned equally' between the two counties. Further it allows the U.S. passage through Canadian territory by

¹³Ibid., 1(1):3.

channels of the Milk River but 'any injury resulting to property in Canada' as specified in Paragraph two will be compensated as stated in Article II. Measurement and apportionment of waters are to be conducted by properly authorized officers of the governments under the direction of the IJC. Paragraph three hints at the dependence of the IJC on parties to provide personnel. Implied from this is that the Commission will not have its own staff to independently conduct measurements specifically but could imply other tasks as well. It reinforces the Commission's dependence on the parties for resources.

Summary of Concepts and Principles

After discussing the provisions of the Commission's formal mandate from the 1909 Treaty, and the GLWQA, certain concepts and principles have been highlighted. Principle of equal and similar rights as well as riparian rights and equality of apportionment of water are notable. The principle of riparian water rights further protects the notion of sovereignty of each country, and control of municipalities over certain policy areas, thus limiting the jurisdiction of the IJC. The notion of equal apportionment also protects each country from infringement on their domestic policy areas to an extent that neither is injurious to the other.

What is easily generalizable at this point about the Treaty is that it is a legal document implying authority to the Commission and binding the parties to what is agreed upon in it. It is concerned especially with preserving each countries' legal use of the waters including navigation. It specifies and orders the legitimate uses and prioritizes

them. Most striking is that it seeks to protect property and citizens from an act that one country does resulting in injury to the other and that it links pollution and injury to health. It clearly limits the jurisdiction of the Commission so as to prevent it from becoming a supranational entity. It vehemently protects the sovereignty of each country again and again. The roots of controversies surrounding the Commission can be traced to many of these Articles of the Treaty. The vagueness of the Treaty has given it the flexibility to survive over the years and it also leaves room for expansion of the IJC authority in its interpretation to which its efforts have been thwarted by the government.

Organization and Structure of the IJC

This description of the Commission's organization and structures includes its four main areas of formal responsibility. The Treaty outlines three of these tasks as processing Applications of Approvals, References, and performing Arbitration between the U.S. and Canada. Its fourth main function involves monitoring and surveillance of water levels, air quality, water quality and remedial programs from specific applications or references and most notably the Great Lakes Water Quality Agreement 1978. The Commission's jurisdiction and functions have been enhanced and more refined by nearly 30 additional treaties, agreements, and protocols, including the Lake of Woods Treaty of 1925, the Columbia River Treaty of 1961, as well as nearly 50 references and numerous decisions on applications related to the use of boundary waters.

Article III of the Treaty regards Applications of Approval. Paragraph one establishes the Commission as a joint body to approve, along with the governments of

Canada and the United States any ‘uses, obstructions, and diversions’ that affect the ‘natural level or flow of boundary waters on the other side.’ Paragraph two makes it quite clear that the ‘provisions are not intended to limit or interfere with the existing rights of the Governments’ or that the Commission should ‘undertake and carry on governmental works in boundary waters for the benefit of commerce and navigation’ and it is not to interfere with water used ‘for domestic and sanitary purposes.’ This article reinforces the atmosphere of sovereignty in which the Commission has been established and must operate within. Canada’s Senate Committee on Foreign Affairs described these tasks as a “semi-judicial function of approving applications to alter the level of flows of boundary waters and of rivers that cross the boundary.”¹⁴

Article IV further refines the Commission’s role in Applications. Paragraph one specifies that projects on one side of the boundary that increase the natural level of boundary waters on the other side of the boundary need approval for the Commission. Paragraph two states that ‘the boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property of the other.’ This is the basis for the Commission’s water quality functions of surveillance and monitoring. It also reinforces the protection of property of each country from projects in one country that would affect water levels in the other. It underlines the importance of riparian water rights in each country.

Further regarding this arbitration clause, Article IX covers the Commission’s task

¹⁴ Senate Committee on Foreign Affairs, Canada., *Canada-United States Relations: The Institutional Framework for the Relationship* (Ottawa, Ontario: December 1975), 1: 40.

of investigating issues and making recommendations to the concerned parties. Paragraph one states the following:

...other questions or matters of differences..involving the rights, obligations or interests...Shall be referred from time to time to the International Joint Commission for examination and report, whenever either...(party) shall request that such questions or matters of difference be so referred.¹⁵

This passage highlights another controversy concerning the ability of the Commission to initiate references. Clearly the Treaty is limiting the references to those deemed suitable by the governments only and not the Commission itself; therefore, the Commission has no discretion to initiate its own references. Paragraph two can be summarized as “the function of investigating and making recommendations to the two governments on specific boundary problems referred to it by either or both governments. In practices this has meant references which are formally agreed to by both governments.”¹⁶

The arbitration task of the Commission has never been invoked but is important especially for reformers seeking to enhance IJC capabilities. This clause was important to the Canadians who wanted to establish a tribunal organization. Its non-use also demonstrates that the United States acquiesced to Canadian demands but that it has not been willing to use the Commission to its full extent.

Article X, Paragraph one, regards references and issues of disagreement on the ‘rights, obligations or interests’ of the parties. Approval is required by the Senate in the U.S. and the Governor in Council in Canada in order for the disagreement to be referred

¹⁵The International Joint Commission, United States and Canada, *Rules of Procedure and Text of Treaty* (Ottawa: Ontario and Washington, D.C. 1965), 9(1):17.

¹⁶Senate Committee on Foreign Affairs, *Canada-United States Relations*, 40.

to the Commission for investigation. The Commission is authorized to investigate and report upon the facts and circumstances of the questions and matters referred as limited by the terms of the reference agreed to by the parties. In principle this gives equal standing to the governments.

Since the 1970's the most important area of functional expansion for the Commission has been water quality. This issue area of concern is based in Article IV of the Treaty and the Agreement involves the monitoring and surveillance of water levels, water quality and specified remedial programs. The purpose of the Great Lakes Water Quality Agreement as revised in 1978 is to 'restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes Basin Ecosystem.'

Expansion of Powers under the GLWQA

Under the Great Lakes Water Quality Agreement, the powers of the Commission are greatly enhanced. Article VII specifies the powers, responsibilities and functions of the International Joint Commission to include, pursuant to article IX of the Boundary Waters Treaty, the following responsibilities:

...collation, analysis and dissemination of data and information supplied by the Parties and the State and Provincial Governments relating to the quality of boundary waters of the Great Lakes System and to pollution that enters the boundary waters from tributary waters and other sources.¹⁷

The IJC is charged with the collection, analysis, and dissemination of information.¹⁸

¹⁷International Joint Commission, *United States and Canada, Revised Great Lakes Water Quality Agreement of 1978 as Amended by Protocol Signed November 18, 1987* (Ottawa, Ontario and Washington, D.C. 1987), 7(1a):11.

¹⁸*Ibid.*, 7(1b):11.

Also in Article VII, the Commission is given the authority to publish any report, statement or other document prepared by it in the discharge of its functions under this Reference. It also has the power to independently verify any data or information given it by the parties or state and provincial governments. In order to verify and gather data on referred issues, the Commission has been authorized to carry out these responsibilities through the Water Quality Board and Science Advisory Board established under Article VIII of this Agreement.

The requirement of the Commission to make at least biennial reports to the federal and subnational governments on progress towards achieving objectives¹⁹ is significant to the IJC's role of surveillance and monitoring progress and compliance in achieving the pollution abatement in the Great Lakes. Further the Commission has the discretion to publish "any report, statement or other document prepared by it in the discharge of its functions under this Reference."²⁰ This leads us to the incorporation of public participation into the structure of the organization.

In Article VII, the specified responsibilities of the Commission include the power to conduct public hearings and to compel the testimony of witnesses and the production of documents. This incorporation of public participation into the procedures of investigating referred issues has greatly increased the legitimacy and popularity of the Commission. It has also opened the governments to public scrutiny concerning the clean up of the Great Lakes. Opening the Commission to public participation has increased its

¹⁹Ibid., 7(3):12.

²⁰Ibid., 7(4):12.

visibility and often criticism on its lack of authority to do more in the area of pollution abatement.

To advise the Commission, the Agreement establishes the Great Lakes Science Advisory Board (SAB). It is made up of an equal number of members from Canada and the United States as well as representatives from each state and provincial governments. Also in Article VIII, the Great Lakes Science Advisory Board is established to provide advice on scientific matters referred to it by the Commission or the Water Quality Board (WQB) in consultation with the Commission. It is comprised of managers of the Great Lakes research programs and recognized experts on the Great Lakes water quality problems and related fields. Both these boards have enhanced and maintained the IJC's reputation of expertise, impartiality, legitimacy, and competency. They provide the scientific knowledge necessary for the Commissioners to make informed decisions on referred issues. We will explore the influence of the IJC's reputation as an internal constraint on its performance in relation to the case studies.

Complexities Within the Commission

Having discussed the provisions and functions of the Commission, the discussion can now turn to the structure itself. The Commission is comprised of six members, three appointed by each country. A majority vote of the standing commissioners provide the formal decision making process. The IJC operates as two national sections. Each section is responsible to its national government for policy guidance and approval. Under the Treaty's Rules of Procedure, each country selects a leader to coordinates the affairs of the

national sections. Commissioners serve at the pleasure of their own governments and have no fixed terms. It is independent of the governments and its "...Commissioners do not represent, take instructions from, or report to the government that appoint them."²¹ This composition of the Commission members is important to its reputation as an impartial arbiter.

In Article VII of the Treaty, the parties agree to 'establish and maintain' the Commission. The U.S. President and the Governor in Council appoints three of the six commissioners. It is clear that it is the duty of the governments to 'maintain' the Commission from this clause. This may be the basis for the General Accounting Office's (GAO) recommendation for the State Department and Environmental Protection Administration (EPA) to provide feedback to IJC recommendations in order for it to maintain its effectiveness.²² The GAO report argues, that in order for the Commission to effectively function, it must have feedback from the governments. The vagueness of the 'establish and maintain' clause could be construed to include many tasks, including necessary communications between the Commission and its contracting parties.

Commission Communications: Reports, Boards, and Hearings

Following this same line of discourse, Article XI of the Treaty concerns

²¹ L. H. Legault, "Notes from an Address," *Watershed 2000 Conference* (Vancouver, B.C.: Water Environment Federation July 2000), 1, [Http://www.ijc.org/comm/legault_july2000.html](http://www.ijc.org/comm/legault_july2000.html),

²² United States General Accounting Office,, *Report to the Chairman, Committee on Governmental Affairs*, "Need to Reassess U.S. Participation in the International Joint Commission," U.S. Senate, State Department (Washington D.C.: U.S. Government Printing Office, June 1989).

communications and availability of records. All reports and decisions are to be filed with the Secretary of State or the Governor General. All communications by the commission are to be addressed to these offices as well. This article clearly places the Secretary of State and Governor General as the recipient of IJC reports and decisions; thus it follows that, the onus of communication on these filed documents fall to these offices. According to the GAO 1989 report, these entities have a record of not responding to IJC recommendations, thus impeding its effectiveness to function as a successful bilateral water management agency in the context of the GLWQA.

The IJC's personnel interacts with the public as a source of information. Article XII of the Treaty concerns appointments of staff, technical experts and boards used by the IJC to fulfill their mission. More importantly, the Commissioners are sworn in to uphold the Treaty 'faithfully and impartially.' This impartiality has become an agreed upon factor in the discussion on why the IJC has such a successful record and will be explored as an influence on the Commission's performance in the case studies.²³

Temporary boards conduct investigations for the Commission and tender advice to the governments. In the Treaty, Article VII, Paragraph two, allows the Commission to employ engineers and clerical assistants from time to time. From 'time to time' implies that these employees are of a temporary nature thus reflecting on the IJC's dependence on the two governments for resources.

Paragraph three goes on to grant the Commission power to administer oaths for

²³The Commissioners of the 1970's took this vow seriously enough to suggest reforms to strengthen the IJC as discussed in the next chapter.

testimony and provide an opportunity for all parties to be heard. This could be interpreted by reformers as a basis to call for increased public involvement in the Commission's affairs and to establish the base for a constituency and its legitimacy. Accordingly the IJC has the ability to adopt rules of procedures in accordance with 'equity and justice' and to 'examine' agents or employees as necessary. In Part II of the Rules of Procedures, Rule Twenty-two provides the adopted procedures on the use of witnesses at hearings.

According to Chairman Legault, permanent boards are established to assist the Commission in overseeing 'implementation of orders of approval for constituent projects and to maintain on-going surveillance and references.'²⁴ In order for the agency to conduct investigations for references, Part III of the Rules of Procedure, Rule Twenty-eight, was adopted and reads as the following:

...The commission may appoint a board or boards, composed of qualified persons to conduct on its behalf investigations and studies that may be necessary or desirable to report to the Commission regarding any questions or matters involved in the subject matter of the reference.'²⁵

The rule goes on to specify that under normal conditions these boards will have an equal number of members from each country. Finally, the Commission will make the board's findings available to the governments and interested persons prior to the final hearing. These boards enhance the IJC's capacity to communicate, prevent, and resolve disputes and to promote cooperation between federal, state, local, and private interests.

In relation to Great Lake boards and the Windsor office, Article VIII of the

²⁴Legault, "Address," 1.

²⁵The International Joint Commission, United States and Canada. *Rules of Procedure and Text of Treaty* (Ottawa, Canada and Washington, D.C. 1965), 3(28) 1:11.

GLWQA created the Great Lakes Regional Office of the Commission and established two boards to be used to exercise the powers and responsibilities of the Agreement; namely, the Great Lakes Water Quality Board (WQB) and the Great Lakes Science Advisory Board (SAB).

The Great Lakes Regional Office, in Windsor Ontario, provides a public relations functions including information on programs, public hearings, administrative support, and technical assistance to the two boards. In the Agreement's addendum, "Terms of Reference for the Joint Institutions and the Great Lakes Regional Office," specific duties and organization of the Office and Boards are outlined.²⁶ The Agreement specifies its function to provide administrative support and technical assistance for the boards and public information service for programs. The Director, as appointed by the Commission with the approval of the parties, prepares an annual budget . The position alternates between a Canadian citizen and United States citizen.

The WQB is liaison between, and coordinator of, Great Lakes Basin institutions with relevant jurisdictions to achieve the ecosystem approach to problem solving. These duties of the WQB include making periodic recommendations on development and implementation of programs, to assemble and evaluate information from the programs, identify deficiencies in scope and funding of programs, and evaluate adequacy and compatibility of the results. Further it evaluates the appropriateness of programs in relation to socio-economic factors and advises the Commission on progress and

²⁶International Joint Commission, United States and Canada, *Revised Great Lakes Water Quality Agreement of 1978 as Amended by Protocol Signed November 18, 1987* (Ottawa, Ontario 1987), 8(3):13.

effectiveness of programs through recommendations. The WQB may be a point of leverage for interest group influence.

The Great Lakes SAB advises, and reports periodically to, the Commission and WQB. In its outreach capacity, the Board is expected to 'seek out analyses, assessments and recommendations from other scientific, professional, academic, governmental or intergovernmental research on the Great Lakes Basin Ecosystem. It is responsible for developing recommendations on research and scientific knowledge related to identification, evaluation and resolution of problems concerning water quality of the Great Lakes. By reviewing scientific knowledge, the SAB investigates 'the impact and adequacy of research and reliability of results and its dissemination.' It identifies research programs for international cooperation and relevant research needs. Further, it solicit and coordinate programs in these jurisdictions.

Other boards and public hearings.

Other examples of IJC boards are the St. Mary's Board, Consumptive Uses Board, and Lake Rainy Board. After conflicting interpretations of Article VI of the Treaty in the early 1920's, the parties, along with the suggestion of the IJC, established the St. Mary's and Milk Rivers Board. It had an engineer from each country and operated under the oversight of the Commission to advise national reclamation agencies on placing gauging stations and assigning seasonal water deliveries as specified under Article VI. The International Great Lakes Diversions and Consumptive Uses Study Board was established

by the 1977 Reference.²⁷ Outside the Great Lakes system, other boards exist to regulate water levels. Through the 1938 Rainy Lake Convention, the IJC established the International Rainy Lake Board of Control to regulate boundary waters in the watershed on the Ontario-Minnesota border. Issues that require the on going regulation of water levels in this boundary area are navigation, aquatic vegetation, fish and wildlife, tourism, and shoreline property.²⁸

Chairman Legault comments that,

At the present time the Commission has nine permanent boards of control which supervise the day to day implementation of Commission orders of approval for the construction and operations of dams, hydro-electric power stations and other structures...Many of these boards perform the difficult and thankless task of reconciling important competing interests within the requirements of the Commission's order....(and) prevented these issues from escalating into serious disputes between the two countries.²⁹

Other existing boards concern the Columbia River, Kootenay Lake, Osoyoos Lake, Lake of the Woods, Lake Superior, the Niagra River, the St. Lawrence River, and the St. Croix River. These boards may also be a point of leverage for the public to influence the Commission.

A related function of boards is to conduct public hearings. The appended Rules of the Treaty Part I specifies that hearings are conducted by the whole Commission or by

²⁷ International Great Lakes Diversions and Consumptive Uses Study Board, 1981, *Great Lakes Diversions and Consumptive Uses: Report to the International Joint Commission*. Ottawa, Ontario and Chicago, Illinois: International Joint Commission, p.1.

²⁸ Chandler, Jim ad Rudy Koop, "International Joint Commission to Review Water Levels Regulation in Rainy Lake Watershed," *Focus*, (June/July 1995), 21-22.

²⁹L. H. Legault, "Notes from an Address," 2.

one or more Commissioners from each section. Testimony is also to be received and arguments heard. In Part II of the Rules of Procedure, Rule Twenty-three outlines the specifics of hearings. Besides the Commission fixing the times and place of the meetings, the secretaries are to be given written notice of the hearings to the applicant, the Governments and all those giving testimony. Notice is to be published in the Canada Gazette and Federal Register. Most importantly, all hearings are to be 'open to the public.' It also allows for the witnesses to be examined and cross-examined by the Commissioners. Further evidence may be submitted at, or subsequent to, the hearing. A verbatim transcript is to be recorded. This allowance of public hearings is tantamount to the reputation of the IJC and provides a basis for its legitimacy and accountability to the people and their governments. This contributes to the IJC reputation as an impartial and independent organization.

Government Support

Germane to maintaining these IJC structures and facilitating its mandate is the support of the governments. In Article VII of the Treaty, the governments are responsible to maintain the Commission's effectiveness. Article VIII addresses the responsibilities of the government jointly to fund the IJC. The salaries and personal expenses of the Commission and secretaries are to be paid by their respective governments as well as 'any necessary joint expenses' incurred by it. This secures the budgetary dependence of the IJC on the Parties. This points to the controversy surrounding the dependence of the IJC on the two governments for resources. The IJC may achieve some modicum of independence

on a temporary basis through its investigations and boards. Perhaps this is why the establishment of a Windsor Office in the GLWQA was taken with such enthusiasm by the Commissioners in 1978.

There is also a provision for funding in the GLWQA. Article VIII of the Joint Institutions and Regional Office specifies that the 'Commission shall submit an annual budget of anticipated expenses to the Parties for their approval.' Canada and the United States are both responsible for half of this budget. This is notable because international agreements without provisions for funding are not likely to be implemented.

Consensus and Impartiality

Scholars agree that the Commission's ability to make consensual decisions and recommendations is a major factor in its record of success adding to its reputation as an impartial decision maker. It has avoided the tendency to make decisions based on nationalistic lines by its processes of appointments and is perceived to base its decision on the facts of the issues not the politics of the times. The Treaty speaks to discretion, enforcement, as well as actual decision making rules and processes.

According to the Treaty's Rules of Procedure Part I, decisions by the whole Commission are made with at least a concurrence of four Commissioners. In practice the Commissioners make decisions by consensus. The Commissioners have the power to suspend, repeal or amend the Rules of Procedure with a concurrence of four Commissioners and the informed parties. In general 'the Commission may at an time, adopt any procedure which it deems expedient and necessary to carry out the true intent

and meaning of the Treaty.’

Decision making and processing of references are discussed in Article IX of the Treaty. According to Paragraph one, the Commission has no discretion to initiate its own references. At the center of controversy about strengthening the IJC’s effectiveness is the ability to initiate investigations. This bears directly on the two case studies in the following chapters. Paragraph two goes on to authorize the IJC to “...examine into and report upon the facts and circumstances of the particular questions and matters...” including the Commission’s “conclusions and recommendations” as appropriate and restricted by whatever terms the parties deem necessary.³⁰ In Paragraph three, these ‘conclusions and recommendations’ are not to be considered ‘a decision’ or carry an ‘arbitral award.’ This states the intent to restrict the authority of the IJC by limiting the weight of its decisions and excluding an arbitral role for it concerning references.

Paragraph four states that reports are to be made jointly to the parties; where there is disagreement on a case, the minority should report to each respective government or jointly report to both parties. Paragraph five specifies that if the Commission is evenly divided (on national lines) then it can make separate reports to their respective governments. Again this clause respects the sovereignty of each country.

In Rule Twenty-six of the Rules of Procedures,

“Where a question or matter of difference arising between the two governments involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other along the common frontier between the U.S. and Canada is to be referred to the Commission

³⁰The International Joint Commission, United States and Canada. *Rules of Procedure and Text of Treaty*, Ottawa, Canada and Washington, D.C. 1965, 9(2):17.

under IX of the Treaty, the method of bringing such questions or matters to the Attention of the Commission and invoking its action ordinarily will be as set forth in this rule.”³¹

References that are by consent of both governments should include the question to be examined as fully as possible and any restrictions or exceptions to be imposed on the Commission. References are to be presented to the permanent offices in that country. And further, any drawings, plans of survey or maps should be submitted to the office as well.

As for information gathering on References, Rule Twenty-eight specifically address the Advisory Boards’ role. It state that

The Commission may appoint a board or boards, composed of qualified persons to conduct on its behalf investigations and studies that may be necessary or desirable to report to the Commission regarding any questions or matters involved in the subject matter of the reference.³²

According to Rule Twenty-nine of the Treaty concerning hearings and reports on references, notice is to published in the Canada Gazette and Federal Register as in the case of Applications. Hearings under these conditions are also open to the public and interested parties unless deemed not so by the Commission. Verbatim transcripts are also to be made of said hearings.

This section focuses on the terms and power of IJC decision making as specified in the Treaty and Rules of Procedures. Concerning Applications in Article VIII, Paragraph five, the parties agreed to give the Commission the ‘discretion’ to suspend

³¹Ibid., 2(26-1):27.

³²Ibid., 28(1):11.

requirements of equal use for temporary diversions.³³ Paragraph six further gives the Commission discretion over remedial or protective works to compensate the other party against injury of any interest by use or diversions of the waters. These provisions imply possible economic-legal solutions to disagreements as Antony Scott further develops in his suggested reforms described in the next chapter.

Paragraph eight concerns the IJC's decision making power. The Commission has the 'power to render a decision' on these matters. This connotes IJC authority on diversions and uses of boundary waters. If consensus is not achieved and the IJC is 'evenly divided' on a question or issue presented to it by the parties, separate reports are to be made by the Commissioners and given to their respective governments. If the parties reach agreement then they are to produce a 'protocol' in writing and present it to the Commissioners who in turn are to try to carry out the agreement. Again this implies some kind of vague enforcement power along with decision making.

Further, either government may on its own initiative seek approval of the IJC for use, obstruction or diversions of waters in respect to Articles III and IV of the Treaty. To note the Parties must submit applications with the necessary information needed for a decision by the Commission. Also an individual may submit an application to their respective governments involved with the use, obstruction or diversion of waters. The

³³Where such diversion can not be made advantageously on account of local conditions, and where such diversions do not diminish elsewhere the amount available for use on the other side.

government may then submit the application to the Commission for approval.³⁴

Part of the process of Applications involves gathering information. According to Rule Twenty-one, the Commission has the right to 'consult' with interested parties or persons on the method of inquiry to pursue. Further in Rule Sixteen, any d parties can submit a response to an application within thirty days. Rule Eighteen requests additional information if the application or reply is unclear or incomplete. Rule Nineteen gives the Commission 'the right to reduce or extend the time frame to dispense statements in the public interest.'³⁵

The final part of this discussion on the structure and organization of the IJC concerns the unused power of arbitration. Article X outlines decision making rules in these cases. Unanimous decisions, disagreement among Commissioners and the case of evenly divided vote are scenarios provided. Paragraph two gives the majority of the Commission the power to render a decision and jointly submit it to both parties. Paragraph three states that if there is disagreement or the Commissioners are evenly divided on a decision then they may make a joint report to each government or separate reports to their respective governments. In these cases of disagreement, the Parties may chose an umpire according to Article XLV of the Hague Convention for pacific

³⁴As stated in Rule 13 of Part II of the Treaty, copies of the request and orders are required to be sent to the secretaries as specified. Then according the Rule 14, the governments authorize the Commission to proceed with the Application of Approval.

³⁵Rule 15 specifies that the date and times of hearings and reports of applications be published in the Canada Gazette and Federal Register. In Rule 20 interested persons are given the option of being represented by counsel at the hearing.

settlement of international disputes.³⁶ Such an umpire has the power to render a final decision on the referred inquiry if the Commission fails to do so. This article has contributed to the controversy over an intended power of the Commission that has not been exercised.³⁷ In closing, under Rule Thirty of the Treaty allows the Commission, with the governments' approval, to adopt rules on how to proceed in matters of arbitration.³⁸

Summary of Commission Complexities

In general, operational procedures of the IJC involve a small secretariat and professional staff. It has been authorized by Treaty and subsequent Agreements to gather the best technical experts and officials available from all levels of government or the private sector in both countries for its boards and hearings to conduct its mission.³⁹ The conduct of hearings in their localities, inclusion of public participation, using the facts instead of politics to decide issues, and the pragmatic use of precedent are part of establishing the IJC 's perceived reputation as an impartial and effective agency.⁴⁰

³⁶The Hague Convention dated 18 October 1907.

³⁷ Dworsky commented that the United States only agreed to the inclusion of the article to appease the Dominion of Canada's demand of an arbitral role for the Commission to further put Canada on equal footing with the United States.

³⁸The International Joint Commission, United States and Canada, *Rules of Procedure and Text of Treaty* (Ottawa, Canada and Washington, D.C. 1965), 30:12

³⁹Senate Committee on Foreign Affairs, Canada, December, *Canada-United States Relations: the Institutional Framework for the Relationship* (Ottawa: Ontario 1975), 1: 41.

⁴⁰William R. Willoughby, *The Joint Organizations of Canada and the United States*, Toronto: University of Toronto Press 1979, 56-57; Day, "Institutions," 41.

In conclusion Chairman Legault sums up the business of the Commission in the following statement:

It is uniquely placed to provide the structures that would help all levels of government to meet the growing challenges of environmental management in the watersheds shared by Canada and the United States. Its permanence, equality of membership, independence and impartiality, and binational but unitary nature have served both countries well in the past. So have its traditions of consensus-building, joint fact-finding, public participation, and engagement of local governments. These features can also serve both countries well in the future.⁴¹

The appointment process, equal representation, and decision by consensus frame the structure of the IJC. The agency's reputation of impartiality is promoted in the appointment process and the pledge of the Commissioners when taking office. Public participation has increased the perception of legitimacy and popularity with results being open to public scrutiny. The use of boards has helped it maintain its reputation of expertise, legitimacy, and competency - thus maintaining its niche of power.

Institutional Frameworks: Canada and the United States

The objectives of the 1909 Treaty as set out in its preamble are to settle pending disputes and prevent future one.⁴² The Commission provides the opportunity and institutional arrangements for international cooperation on transboundary issues through flexible mechanisms based on the Treaty's shared principles and values.

Early in the Commission's history, disputes mainly involved applications

⁴¹ L. H. Legault, "Notes from an Address," 4.

⁴² William R. Willoughby, *The Joint Organizations of Canada and the United States* (Toronto, Buffalo, London: University of Toronto Press 1979), 6.

concerning private utilities. These applications were primarily requests for diversions of water to develop power or irrigation. More recently, The Commission has focused on economic and engineering studies in order to develop boundary waters or for remedial steps to clean up the waters.⁴³ According to Chairman Legault, the Commission is now ‘putting into practice’ an integrated, ecosystem watershed management approach.⁴⁴

It is important to understand the setting in which the IJC operates with such a broad range of concerns. Visualize layers of statutes, agencies and practices at the international, national, and sub-national levels to frame this understanding. The following description summarizes the institutions that cooperate or compete with the IJC in both countries.

Canadian Water Institutions

Canada, like the United States, is a federation with a central government and ten regional or provincial governments. There are two additional territories with provincial-like governments. Not unusual, the Canadian constitution and division of powers is subject to interpretation. That being, there is no expressed protector of the environment as such but in practice this task is jurisdictionally shared between the federal Parliament and the provincial legislatures. The division of powers between these two tiers of government is complex and subject to numerous agreements and protocols.

Most provinces, as well as the federal government, have intergovernmental

⁴³Ibid., 18.

⁴⁴ L. H. Legault, “Notes from an Address,” 4.

relations departments. Each level of government has its own taxation system. The disparity of wealth is an important factor involving provincial environmental care-taking. This is compensated for by equalization of payments from the federal government to poorer provinces. These payments aid in provincial and municipal governments compliance with water management programs. One province may need more federal assistance to comply with water quality standards than another province.

Since water management issues hold the lion's share of focus for this research, there are two leading agencies involved with the creation, implementation and enforcement on this issue. They are Environment Canada (EC) and the Department of Fisheries and Oceans (DFO). One can not ignore also the involvement of provincial agencies in this process. A summary of what these two agencies do and their interaction with provincial agencies follows.

The background of Canada's water management is as vast as its landscape. The British North America Act of 1867 and the Constitution Act of 1982 provide ownership of the waters flowing through the provinces to them for most purposes. However, the central government has exclusive rights over fisheries, navigation, foreign relations and Native and federal lands. It can intervene in order to keep the peace and maintain good government. Both level of governments have the right to make laws concerning agriculture especially irrigation. When a conflict arises, the federal government has authority over the provinces.

Environment Canada

In practice, Environment Canada holds the main responsibility for administering water programs. Since Canada is the steward for nine percent of the world's renewable fresh water supply, this is a most important responsibility.⁴⁵ Canadians are also the second highest users per capita of water in the world. Therefore it follows that Environment Canada has an awesome task of maintaining water quality as the leader in federal water policy.⁴⁶ It was created in 1971 in response to increasing public interest and pressures concerning environmental issues. Its role is to bring all layers of government into a more efficient structure under its mission of sustainable development. Sustainable development aims to "restore the integrity of national ecosystems, advocate sustainability in resource use, protect both cultural and natural heritage, and promote environmental stewardship."⁴⁷ Environment Canada's mandate is to,

Preserve and enhance the quality of the natural environment, including water, air and soil quality; conserve Canada's renewable resources, including migratory birds and other non-domestic flora and fauna; conserve and protect Canada's water resources; carry out meteorology; enforce the rules made by the Canada-United States International Joint Commission relating to boundary waters; and coordinate environmental policies and programs for the federal government⁴⁸

Environment Canada has sought to achieve sustainable development through the use of

⁴⁵ [Http://www.ec.gc.ca/envpriorities/cleanwater_e.htm](http://www.ec.gc.ca/envpriorities/cleanwater_e.htm) , 1.

⁴⁶Day, "Institutions", 14; see P. H. Pearse, F. Bertrand, and J. W. Maclaren, *Currents of Change: Final Report, Inquiry on Federal Water Policy* (Ottawa, Ontario: Minister of Supply and Services Canada or Environment Canada 1985).

⁴⁷Day, "Institutions," 14; see Bruce Mitchell and Dan Shrubsole, 1994, *Canadian Water Management Visions for Sustainability* (Cambridge, Ontario: Canadian Water Resources Association 1994), 37.

⁴⁸[Http://www.ec.gc.ca/introec/mandate.htm](http://www.ec.gc.ca/introec/mandate.htm) , 1; Department of Environment Act.

decentralization, regional flagship projects and adoption of an ecosystem approach.⁴⁹ The latter approach is consistent with the IJC's promotion of ecosystem management strategies in the GLWQA of 1978.

The three divisions for water management within the EC are the Meteorological Service (formerly known as Atmospheric Environmental Service), Environmental Protection Service, and Environmental Conservation Service. These service programs are organized into four 'Business Lines' - Clean Environment, Nature, Weather and Environmental Predictions; and Management, Administration and Policy - which set national direction and objectives for clarity in reporting and tracking of progress towards goals.⁵⁰ Programs are based on the results they are intended to achieve.

Clean Environment manages programs concerning domestic and international sources of pollution. Functionally these programs are carried out by the Environmental Protection Service under the Assistant Deputy Minister. This service division administers the Canadian Environmental Protection Act (CEPA) and works on technology advancement, strategic priorities in relation to national programs.⁵¹ The role of the EC is to represent Canada's interests in the development of international agreements and accords to reduce pollution in relation to environmental programs.

The Nature Business line focuses on conservation of biodiversity for a healthy

⁴⁹Day, "Institutions," 14.

⁵⁰[Http://www.ec.gc.ca/introec/mgmtframe.htm](http://www.ec.gc.ca/introec/mgmtframe.htm) , 1.

⁵¹[Http://www.ec.gc.ca/introec/mgmtframe/chap6_e.htm](http://www.ec.gc.ca/introec/mgmtframe/chap6_e.htm) , 3; Programs focus on climate change, smog, depletion of the stratospheric ozone layer, and reduction of toxic substances in the ecosystem.

ecosystem. Programs concerning this conservation are under the auspices of Environmental Conservation Service. This service division manages environmental reporting, ecosystem conservation, biodiversity, and the Canadian Wildlife Service. It strives to build shared sustainability strategies for nationally significant ecosystems. It also contributes to the understanding of how an ecosystems functions and helps develop partnerships between communities in this capacity. It executes federal responsibilities for managing wildlife, water, and wetland resources. Most notable to this research is its role of “representing Canada’s interests in international arenas dealing with wildlife, ecosystem health and biodiversity,” and “providing federal leadership in conserving and protecting Canada’s water resources.”⁵²

Programs under the Weather and Environmental Predictions business line are administered by the Meteorological Service under its Assistant Deputy Minister. This service directs atmospheric monitoring and water surveys, policy and corporate affairs, atmospheric and climate sciences, and atmospheric environmental predictions for services, clients, and partners. These programs address hazards like high water conditions, and more long term conditions such as seasonal changes and climate change.⁵³ Most important for this research, it targets areas including the boundary waters of the Great Lakes and St. Lawrence water basin. These programs aspire to anticipate environmental hazards and events so that Canadians may prepare for, or adapt to, the after effects of catastrophic events.

⁵²Ibid., 4.

⁵³Ibid., 5.

The Management, Administration, and Policy business line provides support services for the administration of the other departmental objectives in the areas of management, leadership, and coordination of strategic policy as well as communications and partnership between layers of government.⁵⁴ Program functions include promoting citizen awareness, participation, and clarification of Canadian environmental interests internationally.

EC regional offices were created during the 1970's to decentralize the ministry from its Ottawa base. According to Pearse, Bertrand, and MacLaren, these offices encourage ministries to observe regional concerns, stimulate communications between provinces and municipalities, and advocate liaisons with local agencies.⁵⁵ The Office of Enforcement was created in July 1991 to ensure consistency and uniformity in enforcement across the country but did not address uniformity in collection of data.

Environment Canada has undergone major changes since its creation in 1971. Not only has it undergone restructuring and decentralizing through the regional offices but its adoption of sustainable development strategy, though noble, has also changed how the environmental issues are handled within it. This strategy has put the environment on equal footing with economic matters but this holistic approach has also made water issues just one of many priorities. Environment Canada's mission of sustainability requires it to be an expert on all components of the ecosystem- not just its original areas of focus such

⁵⁴Ibid., 8.

⁵⁵ Day, "Institutions," 15; see P.H. Pearse, F. Bertrand, and J.W. MacLaren, *Currents of Change: Final Report, Inquiry on Federal Water Policy*, Ottawa, ON: Ministry of Supply and Services Canada or Environment Canada 1985, 154.

as water. In practice the Department has less personnel and funding to cover more areas of concern.

Water management was not an active priority legislatively until the 1950's. Until then water issues mainly concerned agriculture and fishing. On through the 1960's, water management evolved around finding solutions to flooding and water supply pressures. Examples of this would be the Canada Water Conservation Assistance Act of 1953 on provincial water storage.⁵⁶ Most project activities during this time revolved around hydro-power developments as in British Columbia and Ontario.

Through the 1960's and 1970's provincial activities started to involve water pollution management, e.g., Ontario's Environmental Protection Act of 1971 and the Federal Canada Water Act and Environmental Contaminants Act of 1975. Following these trends was the signing of the Great Lakes Water Quality Agreement in 1972 between the United States and Canada and subsequent revisions in 1978 and added protocols in 1987. The federal Government then passed legislation requiring environmental assessments in 1973 with the provincial governments enacting similar legislation.

During the 1980's Canadians broaden their views of water to include a global outlook focusing on boundary problems such as acid rain, climate warming, ozone depletion, species extinction, and destruction of the rain forests. In the 1990's, restructuring to accommodate this new outlook occurred. Based on these changes, the IJC

⁵⁶Reid D. Kreutzwiser, "Water Resource Management: Canadian Perspectives and the Great Lakes Water Levels Issue," in Bruce Mitchell (ed) *Resource and Environmental Management in Canada* (Toronto: Oxford University Press, 1995), 268-269.

and Canadian institutions looked much different during the Garrison Dam Unit Project reference of the 1970's and the Consumptive Uses reference of the 1980's than it does today.

The Canadian Environmental Protection Act (CEPA) was amended in 1999 after a five year review and extends its jurisdiction to protect biodiversity. The CEPA Management Committee was established pursuant to the 1990 Memorandum of Understanding between the EC and Health Canada over toxic substances.⁵⁷ This committee oversees EC and Health Canada programs on toxic substances. Since 1990 it has been broadened to include related health issues. Part of its mandate is to oversee programs and avoid program duplication among different levels of government.

Department of Fisheries

Another institution to consider with water issues in Canada is the Department of Fisheries and Oceans (DFO). Some form of the DFO has been in operation since the 1800's but its present structure was established in 1979 as stipulated in the Government Organization Act.⁵⁸ The Department is responsible for the policies and programs to support the following:

Canada's economic, ecological and Scientific interests in the oceans and freshwater fish habitat; for the conservation and sustainable utilization of Canada's fisheries resources in responsive to the needs of Canadians in a

⁵⁷[Http://www.ec.gc.ca/CEPARRegistry/gene_info/](http://www.ec.gc.ca/CEPARRegistry/gene_info/) , 1.

⁵⁸Government Organization Act, 1979, S.C. 1978-79, c.13.

global economy.⁵⁹

The DFO's mandate is broad as seen in this excerpt from the 2000 Estimates Plans. The mandates includes management and protection of marine and freshwater fisheries resources, facilitation of marine transportation and commerce, support for other federal institutions and their objectives, and support of research on climate change and biodiversity.⁶⁰ In order for the DFO to accomplish this demanding mandate, it requires both federal, provincial, corporate, and public cooperation.

A closer examination of these long-term priorities reveals the relevance of the DFO to the International Joint Commission. Under managing and protecting fisheries resources "it is essential that effective international arrangements be in place that will prevent foreign over-fishing and safeguard resources under international treaties."⁶¹ In protecting the marine and freshwater environment, the DFO recognizes the importance of working with clients, partners and all levels of government to protect both ecosystems. The Department's commitment to marine safety includes preventing loss of life as well as damage to property. This sentiment is also expressed in the Boundary Waters Treaty.

Like the EC, the DFO is decentralized into six regional offices with six Assistant Deputy Ministers who are responsible for eleven business lines. These Deputies are in

⁵⁹Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services, *Fisheries and Oceans 2000-2001 Estimates Part II Report on Plans and Priorities* (Ottawa, Ontario: Canadian Government Publishing 2000), 3, [Http://www.ncr.dfo.ca](http://www.ncr.dfo.ca) .

⁶⁰ Ibid.,4.

⁶¹Ibid., 7.

charge of “establishing national objectives, policies and procedures, and standards for their own business lines.”⁶² Program areas are concerned with fisheries operations, regulatory and international affairs, and science.

As the fourth largest department in the federal government, the DFO has about eight-thousand-eight-hundred full time employees with a planned expenditure for 2000-2001 of one billion-four-hundred-thousand Canadian dollars.⁶³ As a decentralized department, eighty-nine percent of its employees work outside the national capital region. The DFO at times is the only federal presence in the five coastal provinces. The DFO is structured so that all levels of government have some responsibility in fulfilling its commitment to sustainable develop and protection of Canadian waters. The atmosphere it must work in is one of abundance and scarcity with a complex decision making process. Industrial growth and pollution are a constant pressure on this fragile environment. Public awareness urges the Department on to produce results using an ecosystem approach with integrated management towards the goals of sustainable development. Like the IJC, increased communications, public consultation, and public participation enhances the Department’s credibility, legitimacy, and effectiveness as an agency committed to protecting Canada’s precious resources.

Important to the relationship between the DFO, EC and other federal agencies and

⁶²Ibid., 4; These directives apply to the Newfoundland Region in St. John’s, Newfoundland; Maritimes Region in Dartmouth, Nova Scotia; Gulf Fisheries Management in Moncton, New Brunswick; Laurentian Region in Quebec City, Quebec; Central and Arctic Region in Winnipeg, Manitoba; and the Pacific Region in Vancouver, British Columbia.

⁶³Ibid., 8.

departments that affect the IJC is DFO's responsibility for administration, implementation and enforcement of the Fisheries Act. In the past, the DFO delegated protection of freshwater fisheries to the provinces but after numerous Supreme Court decisions, the Department has been found to be responsible for fish habitat and management throughout all of Canada, not just the coastlines.⁶⁴ With recent funding and personnel cuts, this additional responsibility has been difficult to incorporate into its structure.⁶⁵

Secondly, protecting Canadian waters through the Fisheries Act requires scientific proof that pollutants are harmful to fish unlike the simpler requirement of the Environmental Protection Agency in the United States that only the presence of pollutants be detected in waters. Tension between the DFO and the EC's Environmental Protection Service is growing because of the DFO's role as ultimate statutory authority over water pollution. It is here that the two authorities' mandate (EC and DFO) conflict over fisheries' health and water quality.⁶⁶ It is important to under the nuisance between these agencies and the provinces.

Provinces differ in size, population, and density as well as economic

⁶⁴Day, "Institutions," 17; Canada, Department of Fisheries and Oceans, *Administration and Enforcement of the Fish Habitat Protection and Pollution Prevention Provisions of the Fisheries Act: Annual Report 1993-1994* (Ottawa, Ontario: Communications Directorate, Department of Fisheries and Oceans 1995), 1.

⁶⁵Day, "Institutions," 17.

⁶⁶ Ibid.; see P.H. Pearse, F. Bertrand, and J.W. MacLaren, *Currents of Change: Final Report, Inquirey on Federal Water Policy* (Ottawa, Ontario: Ministry of Supply and Services Canada or Environment Canada 1985).

diversification, water use, industrial development and natural ecosystem habitat. With the awareness of this diversity among the provinces, each pass water policy legislation and design the duties of their respective Ministry of Environment based on their special needs and circumstances. Importantly each provincial ministry does have some authority over its own resources. Common also to every province is the acceptance of the federal ideal of sustainability and the ecosystem approach to water management.⁶⁷

Since the 1970's special problems related to interprovincial water issues led to joint water management agreements between the federal and provincial governments. Such issues encompass hydrological, transportation, and navigational type of agreements for improvements. More recently these linkages have been used to accommodate broader issues such as water quality, quantity and conservation. The provinces have increased collaboration with the EC and DFO in hopes of creating a more efficient management of water resources throughout Canada.⁶⁸

These cooperative efforts have been complicated by economic circumstances. During the 1990's all provinces were faced with reorganization due to federal funding designed to downsize the government in general. One reaction to this has been the development of partnerships between provincial ministries and Environment Canada along with groups such as the Canadian Institute of Planners and the Canadian Federation

⁶⁷Day, "Institutions," 17; Bruce Mitchell and Dan Shrubsole, *Canadian Water Management Visions for Sustainability* (Cambridge, Ontario: Canadian Water Resources Association 1994).

⁶⁸Day, "Institutions," 18.

of Agriculture.⁶⁹ Through such partnerships, the provinces could integrate water programs and improve water management. Privatization and increased municipal control over water supply, treatment, and delivery are other tried strategies.⁷⁰

One other area of significance to the provinces and the IJC is hydroelectric power generation. Canada and the United States are both major users of hydroelectric power and Canada is also a major exporter of hydroelectric power to the U.S.. The Canadian national government's role in this industry is constitutionally restricted to nuclear energy and international and interprovincial trade; therefore, hydroelectric power generation is primarily managed by the provinces. A few dominant utilities generate, transmit, and distribute power in each province. As of the mid-90's, there were seven crown corporations owned by the provinces, two corporations were municipally owned and two were territorial crown corporations.

The National Energy Board regulates bilateral trade and commerce in this industry.⁷¹ The Board uses a system of permits to authorize and regulate exports. In the U.S., some states have regulatory bodies that also oversee utilities within their jurisdiction. Legislation and joint institutions have been created by Canadian federal and provincial governments to mitigate environmental and social impacts for shared river basins as well as bilateral organizations such as the IJC.

⁶⁹Ibid.,; see Bruce Mitchell and Dan Shrubsole, *Canadian Water Management Visions for Sustainability* (Cambridge, Ontario: Canadian Water Resources Association 1994).

⁷⁰Day, "Institutions," 18; Mitchell, "Water Management," 37.

⁷¹Day, "Institutions," 18-19.

In sum, throughout this description of water management authority in Canada, it becomes obvious that several agencies and departments are involved based on issue area. The EC has a role in water quality, habitat restoration, and conservation management while the Department of Fisheries and other ministries provide support according to statute. Working along side these major federal players are provincial environmental ministries, control boards, and industrial and public groups. These are all players in the quest to management resources, especially water related ones, throughout Canada.

Reallocating funding and staffing have streamlined management and forged federal and provincial partnerships. As a by-product, leadership roles in pressing water issues is increasingly unclear. With DFO's statutory responsibility over Fisheries, the EC no longer has the capability of intense research with the Inland Waters Directorate. The impacts of this are still forthcoming. What is still to be seen is whether the scientific knowledge necessary for effective domestic and binational water management will be compromised in favor of economic efficiency. Having reviewed relevant water management agencies in Canada, the discussion turns to description of the institutions in the United States.

Water Management Institutions in the United States

The primary U.S. agency established for the task of implementing monitoring and enforcing the national's environmental protection laws is the Environmental Protection Agency but this discussion would be incomplete to just focus on this one agency. An overview of some existing departments, committees, and agencies illustrates the tangle of

executive and legislative environmental involvement and the resulting piecemeal approach to the environment.

Under the Executive branch, the President selects the heads of departments. There are presently fifteen in President George Bush's cabinet. The heads of these departments individually advise the president. Also included in the executive branch are dozens of governmental agencies often created to protect their mission from pressure of Cabinet agencies constituencies.⁷² The EPA's administrator is not a member of the President's Cabinet.

The Environmental Protection Agency and Legislation

Like the EC, the EPA is central to the U.S. commissioning of environmental protection and natural resource conservation and it is the primary federal environmental regulatory agency with headquarters in Washington, D.C. Its mission is to protect human health and safeguard the air, water and land that make up the natural environment of the country.⁷³ It does this through integrating research, monitoring progress, standard setting, and enforcement activities. It also coordinates and supports research and anti-pollution activities of state and local governments, private and public groups, individuals, and educational institutions. It also monitors the operations of other federal agencies in

⁷²Under the executive branch is the Department of Agriculture, Department of Energy, Department of Health and Human Services, Department of Transportation, the Department of Justice, and the Department of the Interior that oversee some aspect of environmental protection and natural resource conservation and thus may interact with the IJC on some level of binational water management.

⁷³[Http://www.epa.gov/history/org/origin/mission.htm](http://www.epa.gov/history/org/origin/mission.htm) , 1.

respect to how their operations impact the environment.⁷⁴ Further, the EPA plays a significant role in the operations and implementation of The North American Agreement of Environmental Cooperation, U.S. - Canada Environmental Cooperation, the Great Lakes Water Quality Agreement, U.S. - Canada Cooperation on Transboundary Air Pollution and their related organizations.⁷⁵

The EPA was created under the Reorganization Plan #3 of 1970. Duties from other departments were transferred to its control upon its creation in order to streamline resources under one agency.⁷⁶ By transferring these duties, the EPA oversee all aspects of the federal laws pertaining to environmental protection and natural resources and acts to coordinate and utilize resources more judiciously.

The laws that establish the EPA's authority are numerous. Some of those laws pertaining to water management include the following: the 1980 Clean Water Act, 1972 Marine Protection, Research and Sanctuaries Act, 1970 National Environmental Policy Act, 1988 Marine Protection, Research and Sanctuaries Act; 1990 Pollution Prevention Act, 1976 Resource Conservation and Recovery Act, 1974 Safe Drinking Water Act,

⁷⁴[Http://www.epa.gov/history/org/origin/overview.htm](http://www.epa.gov/history/org/origin/overview.htm) , 1.

⁷⁵[Http://www.epa.gov/ngisp3/nrmp/history/topics/canada/index.htm](http://www.epa.gov/ngisp3/nrmp/history/topics/canada/index.htm) , 1.

⁷⁶For example, some of these transferred duties that pertain to water management specifically are from the Department of Interior's Federal Water Quality Administration, Federal Water Pollution Control Act, Water Pollution Control Advisory Board; from the Department of Health, Education, and Welfare's Environmental Health Service, Environmental Control Administration including the Bureau of Water Hygiene; the Atomic Energy Commission under the Atomic Energy Act of 1954, and the Council on Environmental Quality functions established from the National Environmental Policy Act of 1969 that relate to ecological systems;
[Http://www.epa.gov/history/org/origin/duties.htm](http://www.epa.gov/history/org/origin/duties.htm) , 1-2.

1986 Superfund Amendments and Reauthorization Act.⁷⁷ These examples stress the the EPA's pivotal role in regulating the environment.

Under these federal regulations, the EPA is responsible for issuing permits for the discharge of pollutants into navigable waters. To accomplish this task it works with other entities such as the Coast Guard, the Army Corp of Engineers, and state agencies. For example, the EPA is responsible for regulating waste dumped into the oceans by coordinating cleanup of oil and chemical spills into waterways along with the U.S. Coast Guard. (The Coast Guard is an arm of the military but it is authorized to be used by the Department of Transportation in this capacity.) Further, the EPA issues permits in coordination with the U.S. Army Corps of Engineers, a division of the Defense Department, for dredging and filling of wetlands.

In relations to state partnerships, the EPA establishes effluence guidelines to control discharges of certain pollutants.⁷⁸ It guides states' water quality regulations by setting national standards and criteria. It aids states in building waste treatment facilities by administering Federal grant programs. The EPA is also responsible for setting national drinking water standards. Having outlined some of the EPA's tasks, what are the roles of some of the federal departments and their related services in this endeavor?

The Council on Environmental Quality (CEQ) plays a role in reviewing the effectiveness of federal programs. In addition the CEQ makes recommendations to improve environmental quality and mediates inter-agency disputes related to the

⁷⁷[Http://www.epa.gov/history/org/origins/laws.htm](http://www.epa.gov/history/org/origins/laws.htm) , 1-3.

⁷⁸Day, "Institutions," 23.

implementation of the National Environmental Policy Act. It played an active role in the review of the Bureau of Reclamation's Environmental Impact Statements (EIS) concerning the Garrison Diversion Unit project in North Dakota before the governments referred the matter to the IJC. In 1979, NEPA provisions were expanded to require federal agencies to conduct EIS in relation to boundary issues thus expanding its role to transboundary water management.⁷⁹

The Natural Resources Conservation Services (NRCS) runs voluntary programs for the Department of Agriculture concerning water and conservation. It is charged with assisting farmers, ranchers, and private landowners with conserving and protecting natural resources.⁸⁰ Some of its programs include Conservation Technical Assistance, Snow Survey and Water Supply Forecasting program, and River Basin Surveys and Investigation.

Another important organization to public water works projects is the Army Corps of Engineers (USACE). It regulates all construction projects in navigable waterways within the U.S. It cooperates with the EPA to regulate transportation and dumping of dredged materials in these waters. It plays a significant role in water resource development projects. It develops and builds dams, reservoirs, levees, harbors, water ways and locks among other things to protect from flooding, generating hydroelectric power, and improve water quality.⁸¹

⁷⁹Ibid., 25; see 1979 Executive Order 12114; <http://www.whitehouse.gov/ceq>.

⁸⁰Ibid., 26.

⁸¹Ibid., 27; <http://www.hq.usace.army.mil/history/brief2.htm>, 1-9.

The Department of Energy (DOE) created in 1977 is authorized to research and develop energy technologies and the marketing of federal hydro electric power. The DOE cooperates with the US ACE, Bureau of Reclamation, and the International Boundary and Water Commission in marketing and transmitting hydro power throughout the western US. Further, the DOE's Office of Environment, Safety and Health has independent oversight of compliance for federal environmental laws. The DOE's Office of Environmental Management manages environmental restoration and monitors the preparation of Environmental Impact Statements (EIS).

The management of natural resources comes under the auspices of the Department of the Interior. Within the department, the Bureau of Land Management was established in 1946 to administer public lands. The Federal Land Policy and Management Act of 1976 establishes policy guidelines and criteria for multiple and sustained use of public lands.⁸² The U.S. Fish and Wildlife Services (FWS) oversees National Wildlife Refuges and is responsible for conservation and management of resources including fresh water fisheries. As the lead federal agency in partnerships, FWS works with the states to conserve, protect and enhance fish and wildlife along with their habitats. The FWS works in cooperation with the states, provinces, and Canada to promote hatcheries for the Great Lakes Fisheries.

These departments and agencies are designed to assist the states in developing the capacity to achieve national environmental standards by implementing regulations.

⁸²Ibid, 28; Brit Allan Storey, "Evolution of the Bureau of Reclamation: an Insider Historian's Perspective on the Legacy and the Challenge," presented at the Colorado Water Workshop (Gunnison, CO July 2002).

Important to the federal role in this process is that the laws are consistently implemented throughout the states. The states vary in resources and specific environmental concerns and most importantly vary in their fiscal, managerial and political dimensions.

Through legislation the Congress has aimed to foster a relationship between the states and the EPA to accomplish environmental goals.⁸³ The EPA establishes national environmental standards within federal guidelines and the states develop their operational capacities to comply. These partnerships have been slow to develop due to disagreements over roles, program emphasis, and adequate state resources. GAO annual reports have consistently noted the variability in states compliance with EPA programs.⁸⁴ As the problem of unfunded mandates persists, more substantial support is needed than guidance and coercion from the federal government to gain objectives. Other ways to achieve environmental goals and support state efforts are through the use of commissions.⁸⁵

Organizations specific to water management can be traced to the Interstate and River Basin Compact Commissions. Compacts represent formal agreements between state governments on relevant water resource issues that require federal approval.

⁸³ Congress' legislative and oversight role in environmental issues included numerous Senate Committees such as Agriculture, Nutrition, Forestry, Appropriations; Commerce, Science, and Transportation; Energy and Natural Resources; Environment and Public Works Committee; Governmental Affairs committees. The House of Representatives have committees involved with environmental protection which are Agriculture, Appropriations, Commerce, Government Reform and Oversight, Resources, Transportation and Infrastructure as well as Science committees.

⁸⁴Day, "Institutions," 34-35.

⁸⁵ Great Lakes Commission, "Interstate Partnerships in Water Resource Management," *Advisor* (1996), 4-6.

Commissions are established to administer the agreements. These commissions generally coordinate water management activities, resolve disputes, provide a forum of observation for interested parties, recommend priorities for water projects and develop comprehensive plans for resource management.⁸⁶ The Great Lakes Commission is one example.

The Great Lakes Commission was established in 1955 by interstate compact; the participating states are Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin. It has a long established informal relationship with Canada's federal and provincial governments. The Commission's primary responsibilities include advising federal, state, and binational agencies on policies, programs and legislative matters along with giving testimony before Congress and Parliament on related issues.⁸⁷ It has been successful in promoting cooperation and consensus by providing linkages between concerned parties.

In addition to state representation, the GLC facilitates input from from a multitude of federal and state/provincial interests in this one policy area.⁸⁸ From the regional level, there are observers representing the Council of Great Lakes Governors and the Great

⁸⁶Day, "Institutions," 35;

⁸⁷see <http://www.glc.org> ; GLC, *Advisor*, May/June 2004, 17(3):2; *Great Lakes Basin Compact*, 1955, Ann Arbor, MI see Article IV; GLC, 1995, *Strategic Plan for the Great Lakes Commission*, Ann Arbor, MI.

⁸⁸ Federal U.S. observers include the U.S. Geological Service, the Army Corps of Engineers, Fish and Wildlife Service, National Park Service, EPA, Natural Resources Conservation Service, U.S. Coast Guard, and the St. Lawrence Seaway Development Corporation. Other observers representing the Canadian federal and provincial governments are Environment Canada, Department of Fisheries as well as agencies representing the provinces of Ontario and Quebec and the Chippewa/Ottawa Treaty Fishery Management Authority.

Lakes Sea Grant Network and the IJC represents bilateral concerns. These various interests illustrate the multiple jurisdictions involved in water management of the Great Lakes. In order to control for this complexity, coordination of these jurisdictions is key to improving effectiveness for the management of Great Lakes' natural resources.

Another facet of government that is becoming increasingly involved in natural resource management in both the U.S. and Canada are tribal governments. Congressional legislation and court decisions are shaping the role of Indigenous peoples in water quality and water management which could have transboundary implications for the environment. There are more than five hundred recognized tribes just in the U.S.. Amendments to the U.S. Clean Water Act give the Tribes status similar to states in relation to water quality issues. Consequently seventy-seven tribes are now qualified to issue water quality standards and administer related water programs.⁸⁹ Inclusion of Tribal water rights expands the support base for achieving shared goals but adds to jurisdictional constraints.

In regards to judicial decisions, the Winters Doctrine protects the use of water on Indian reservations necessary to irrigate certain acreage.⁹⁰ Since claims for water use by Tribes pre-date state claims, the courts are in the process of settling disputes on use and apportionment. Such decisions could have repercussions for environmental management practices for entire ecosystems, e.g, the Great Lakes Basin.

⁸⁹Day, "Institutions," 37-38; 33 U.S.C, 1251-1387 (1988).

⁹⁰ *Winters v. United States*, 207 U.S. 564 (1908); qualified by *Arizona v. California*, 373 U.S. 546 (1963); Day, Institutions," 38.

Comparative Institutional Summary

Having shared a common British colonial heritage, both countries are rooted in the rule of common law. However, fundamental differences exist in the constitutional arrangements of the governments of Canada and the United States which involve separation of powers and federalism. Canada as a constitutional monarchy operates differently from the United States as a republic. In the U.S., the states and national governments are divided into three branches - the legislative, executive, and judiciary - each having functions specified in their respective constitutions. The head of state for the U.S. is the President who is elected by the electoral college. Comparatively, Her Majesty the Queen of England as formal head of state has delegated all her powers to the Governor General as stated in section nine of Canada Constitution Act . The Governor General is largely ceremonial and is appointed on the advice of the Prime Minister for a five year term. Similarly, the United States and Canada have federal systems with powers divided between the states or provinces and the national government. Any powers not delegated to the federal government in the U.S. Constitution, nor prohibited by it to the states, are reserved for the states or to the People (Tenth Amendment).

Different environmental water management practices have evolved from these difference democratic arrangements and traditions. Having said this, the U.S. federal government's authority to regulate interstate commerce (Article I Section 8, Clause 3) has led to it becoming the main environmental regulator. However, the states under general policy have powers to protect public health, safety and welfare and therefore retain some independent authority to issue environmental protection laws applicable to citizens and

residents. In comparison, Canada divides its legislative powers between the federal government and provincial legislatures (sections 91-95) with residual powers going to the federal government so that water management is not seen as a single federal power. As stated before, the Canada's Constitution Act does not directly address environmental protection, however, in practice it is a shared jurisdiction between federal and provincial governments whereas the U.S. has tried to create administrative partnerships with the states.

Significant to the role of the IJC in relation to the U.S. government on environmental protection are the differences in the countries' approaches. Canada's federal and provincial governments have adopted an ecosystem approach based on sustainable development with the federal government shoring up the main responsibility by statute with the Canadian Environmental Protection Act. Whereas, the United States federal government as main protector of the environment approaches this task in a more piecemeal fashion.

In summation, the IJC functions as set forth in the Treaty are administrative, quasi-judicial, arbitral and investigative in nature. The additional functions of monitoring and surveillance were included in the Great Lakes Water Quality Agreement of 1978. However, the IJC's investigative role has evolved into its most dominant role. Further the IJC as a joint institution supplements other channels of contact between the two governments. How the IJC operates as a political entity is important to understanding our proceeding case studies. Further understanding can be gained through reviewing the literature on the debates and controversies surrounding the IJC. Viewing these functions

within the context of the domestic politics of each country is the focus of the next chapter.

CHAPTER THREE:

THE IJC AS A POLITICAL ENTITY: CONTROVERSY AND DEBATE

Introduction

In the late 1970's and early 1980's, the debate concerning the International Joint Commission (IJC) centered on the necessity of revising the original Treaty to enhance the Commission's performance. This debate raises the question of whether the Treaty is still relevant to solving the increasingly complex environmental problems that have developed over the last century and are still left unresolved today. The focus of the controversy today has been built on these past debates about the institution's effectiveness as binational water management agency. Can the Commission and its related institutions deal with upcoming issues of the twenty-first century?

At the request of the Canadian and U.S. governments, the IJC issued a report in 1997 on the environmental challenges of the twenty-first century. An address by then Chairman of the Canadian Section, L. H. Legault, includes the following excerpt:

...major forces such as population growth and climate change will have major impact on water supply and demand in Canada and the United States in the 2000's. Thus, the quantity and quality of resources will become critical issues and will increase the likelihood of disputes between the two countries in their shared transboundary watersheds.¹

Mr. Legault's assessment of the upcoming challenges of the twenty-first century are

¹Notes from an Address by L. H. Legault Chairman of the Canadian Section of the IJC at *Watershed 2000 Conference* (Vancouver, B.C.: Water Environment Federation, July 9-12, 2000 at [Http://www.ijc.org/comm/legault_july2000.html](http://www.ijc.org/comm/legault_july2000.html)), 2.

crucial to the debate and controversy surrounding the IJC. This Commission chair points to the ongoing need for the existence of a bilateral agency to diffuse critical issues between the two countries. The continued existence of the IJC as this agency depends on its ability to successfully mitigate increasing complex issues with conflicting point of views on how to manage shared watersheds.

Success: Perceived Obstacles and Attributes

These comments by Chair Legault serve as an introduction to the debate and controversy surrounding the performance of the IJC. Mr. Legault has pointed to the increasing need for such an agency and establishing the necessity for the continued role of bilateral agencies in water management. How the IJC is perceived by the governments and the peoples are crucial to its ability to function. From the literature on the IJC, we expect to identify possible obstacles that inhibit IJC performance to use for further investigation in the case studies in relation to explaining the degree of their success.

Don Munton's analysis is centered around assessing operational, jurisdictional, and structural reforms in enhance the capabilities of the IJC. The IJC must operate within an atmosphere of highly protective, politically charged sovereign states.² Based on this, certain assumptions can be made in relation to how the governments perceive the IJC as an institution. Given the IJC is a independent body of non-elected officials, then if given enough authority could it become a potential threat to responsible, democratic

²Don Munton, "Paradoxes and Prospects" in *The International Joint Commission Seventy Years On*, eds. Robert Spencer, John Kirton, Kim Richard Nossal (Center for International Studies, University of Toronto Press, 1981) 60-97.

government? If government leaders perceive the IJC may become too powerful, then this might thwart any attempts to expand the Commission's authority or to live up to its mandate.

In actuality the Commission's powers have only slightly been expanded since it came into operation in 1912 so it is unlikely that any major movement to reform its structures, operations or jurisdiction will happen in the near future. Even with jurisdictional and structural reforms, as seen in the Great Lakes Water Quality Agreement, this problem of politics is not addressed.

With the effects of underlying features of cooperative binational relations and the role of the IJC in a complex binational setting, the political support of the governments for the Commission becomes a key obstacle to the IJC living up to its potential. With more responsibility and support, the Commission could achieve the ultimate goal of reducing if not avoiding transboundary environmental damages altogether. Are the governments and the people of these two countries ready for the IJC to take a leading role on the environment in general and water management specifically?

Concerning the IJC's role in the GLWQA, when citizen demands increase pressure on the governments to act on problems and the importance of sovereignty dissipates, then Windsor Office maybe able to play a larger role in Great Lakes restoration. As this new role of the IJC as watchdog for the Great Lakes develops, there is hope it may eventually be expanded to include all of the boundary waters. These deliberations are central to understanding how the IJC operates as a political entity.

When the governments limit the role of the IJC, then they limit its effectiveness as

a binational water management agency. Within these limits are preconditions for effectiveness, i.e., political will of the governments.³ Reciprocal interest, as cleaning up the Great Lakes, and the linkage of environmental issues, as clean air to clean water, can encourage such cooperation. The linkage of issues promote cooperation which is assumed in the concept of ecosystem management introduced in the GLWQA. One major obstacle to cooperation is the complex inter-jurisdictional setting that the IJC must work.

As seen in the IJC's past record of success, an agreement was reached concerning the Great Lakes because all interested parties gained protection of their resources and the political will was present. In other words a reciprocal interest existed for the concerned parties to the degree that an agreement was achieved. On the other hand, the IJC was not given the chance to negotiate an agreement over the Niagara River toxic pollution problem nor acid rain. Perhaps, the necessary political will and reciprocal interests were not present at that time to promote cooperation or technical uncertainty and conflicting politics prevented the parties from using the IJC as the vehicle for resolution.

Politics, sovereignty, and political will are identified in the literature as obstacles to IJC success. Even with these hindrances of politics, sovereignty, and political will - the IJC has been successful in the issue area of approvals for water levels and flows. The IJC has been successful in these areas because the Commission can act as an independent entity in these cases and functional organizations, like the IJC, work best when drained of political content which can be achieved in the event that the parties have already worked

³David LeMarquand, "Preconditions to Cooperation in Canada-United States Boundary Waters," *Natural Resources Journal*, Spring 26(2) 1986: 221-242.

through major contentious political policies and bilateral orientations.⁴

Lake management issues on water quality are full of “vigorous political life.”⁵ This perception of the issue may be a point of contention - management issues are regulatory in nature. However, it is important to perceptions that each issue is treated equally the same by the IJC. Problematic issues that are highly politically charged are the management of the Great Lakes water quality, acid rain, water exports, and toxic pollution. Although the applied principle of equality is paramount to both countries, the type of issue may play a role in this success, as explored in the preceding case studies.

Technical issues are an interesting point raised by David LeMarquand.⁶ If uncertainties exist around the technologies to be used for a variety of water management issues, then perhaps interest group pressures increasingly mobilize some elites. In fact, the U.S. and Canadian reliance on different technical assessments of various projects and issues may lead to a dispute which places the issue on the IJC’s agenda. When there is disagreement on technical issues among experts then politics may become the deciding factor in disputes. The bearing of technical uncertainties directly affects the IJC’s use of boards in that the boards try to resolve them.

By focusing on aspects of implementation of agreements, features of the Commission that contribute to its reputation as a binational water management agencies were revealed as its independence, impartiality, and earned confidence of both

⁴Ibid., 240.

⁵Ibid..

⁶Ibid., 241.

governments and their peoples.⁷ These attributes need to be reinforced for the IJC to continue and develop in its role. If the Commission is to survive today's increasing complex issues, then it must demonstrate its continued capacity to adapt to new social values, related physical situations and maintain its independence. It needs to maintain the wide public confidence it has achieved by reestablishing the public belief in its impartiality and autonomy.⁸ The IJC needs to maintain its noted strengths in today's changing conditions if it is to successfully transition into a larger role concerning binational water management.⁹ Like preconditions to success (LeMarquand 1986), certain policies in the U.S. and sentiments in Canada prohibited the development of the IJC's role in water disputes (Sewell and Utton 1986). Many Canadians fear that shortsightedness for economic gain will be to environmental resources in the future.

Studying features of successful cases for the IJC is also important to further our understanding and the utility of the IJC. The IJC has the ability to stay independent from national policies of the U.S. and Canada.¹⁰ Flowing from its independence is its ability to be impartial when making recommendations - that is not allowing agency experts from either country to report findings based their feelings for their country of origin. The

⁷ Leonard B. Dworsky and Albert E. Utton, "Assessing North America's Management of its Transboundary Waters," *Natural Resource Journal* 33(2 Spring 1993), Part 2.

⁸ *Ibid.* 454.

⁹ This changing role may prove significant when describing the IJC's constituencies and its evolution to a watchdog type agency.

¹⁰ Munton, "Paradoxes and Prospects," 82-83.

degree of confidence that the governments have in the Commission's ability to investigate and gather information on a broad range of issues referred to it effects case outcomes. To achieve this confidence, the Commission follows pragmatic, impartial and scientific parameters when executing its functions.

Further, the IJC has earned an international reputation of expertise in the area of boundary water issues which has attributed to establishing its legitimacy as a binational water management agency. With this expertise, the Commission uses its technical advisory boards when issuing assessments in inventive ways. It has been able to staff these boards with highly qualified officials from both countries thus reinforcing its reputation of expertise. The IJC has structurally maintained these points that have become the status quo for disposing of cases. The IJC, by continuing to act within its prescribed jurisdiction and authority, will be able to maintain its reputation for the future.¹¹

Controversy and Debate on Reforms

Since its inception, the IJC's has struggled to grow within the U.S. and Canadian domestic settings generating a cloud of controversy.¹² How the authors frame the debate allows us to describe the controversy and set the stage for the focal case studies. These

¹¹Munton, "Paradoxes and Prospects," 82-83.

¹² See William R. Willoughby, *The Joint Organizations of Canada and the United States* (Toronto: University of Toronto Press, 1979), 27-28; John E. Carroll, *Environmental Diplomacy* (Ann Arbor: University of Michigan Press 1983) 123-124; United States General Accounting Office, "Need to Reassess U.S. Participation in the IJC," Report to the Chairman, Committee on Governmental Affairs, U.S. Senate, State Department (Washington, D.C.: Government Printing Office, June 1989); Chirakaikavaan Joseph Chacko, *The International Joint Commission Between USA and Dominion of Canada* (NY: AMS Press 1968) 348; Munton, "Paradoxes and Prospects," 77-80.

particular authors all draw on the institutionalist approach to comparative studies and international relations. What varies are the institutional characteristics that they focus on and thus their conclusions.

In the late 1970's and 1980's, the debate centered on the necessity of revising the original treaty to enhance the Commission's powers. Prior to this, the Commission sustained a record of success in accomplishing its limited mandate. With the introduction of the Great Lakes Water Quality Agreement, researchers dove into a new realm of possibilities for the Commission that exceeded its previous role. Researchers explored whether the Treaty was still relevant in solving increasingly complex environmental problems through bilateral negotiations.

What is central to analyzing joint institutions of Canada and the U.S. are the ingenious ways North American institutions deal with country inequalities.¹³ Unfortunately, these lessons has been overlooked by other bilateral and international institutions that could benefit from these ways of coping with inequalities in country relationships. Through an institutionalist approach, William Willoughby concludes that there is no need to revise or renegotiate the 1909 Treaty because the Commission itself has revised procedures and practices over the years to avoid institutionalizing inequalities. The flexibility of the original Treaty along with these revised procedures, formalized in 1964, allows for the continuation of the IJC's record of success in assisting

¹³John W. Holmes, "Forward," in William Willoughby's *The Joint Organizations of Canada and the United States* 1979 (Toronto: University of Toronto Press 1979), i.

the two governments on an broad range of environmental problems.¹⁴

Further in his analysis, he raises another facet of the debate which involves the Commission's ability to initiate its own references and investigations. For instance, why did the two countries wait so long before referring the Garrison Project to the IJC? As specified by the Treaty, both governments must submit an issue to the Commission before it may begin its review process. This has resulted in the Commission having the image of reacting to issues instead of initiating their own involvement.¹⁵ However, Willoughby points out that because the Commission is available to the governments for problem solving and information gathering - and not dictating domestic policy - it and the Treaty have survive and functioned as a respected and successful organization. It is because of these institutional arrangements that the two countries cooperate on a range of issues.

Also using an institutionalist perspective, LeMarquand joins the debate on the future of the IJC by framing the discussion around the role of the IJC in bilateral relations. "A recurring theme since the 1970's is that the IJC is not living up to its potential. It has proven itself a capable, independent and impartial body."¹⁶ He concludes that with more responsibility and support the Commission could reduce or avoid transboundary environmental damages altogether.

¹⁴Willoughby, *Joint Organizations*, 52.

¹⁵*Ibid.*, 54.

¹⁶LeMarquand, David "The International Joint Commission and Changing Canada-United States Boundary Relations" *Natural Resources Journal*, Winter 1993, 33 (1):59.

The Boundary Waters Treaty is inadequate to today's conditions, but it would be counter-productive to reopen it; ...impossible to negotiate as good a treaty today...sufficiently to allow the Commission to expand its role into the environmental field. No reform should be made to confer upon the IJC management, regulator and enforcement authority for the Great Lakes that would give the IJC supranational authority to bind the governments.¹⁷

He also stresses the importance of the principle of equality when studying issues of dispute.

Dworsky traces the evolution of the referred issues and the broaden perspective of the Commission. This perspective has evolved to include economic, social and institutional elements of the boundary waters and the impacts of climatic change, world food supply and demand, and structural shifts in the economies. He raises questions of whether the “water institutions now in place are adequate to deal with the emerging water issues, both within the individual countries and with respect to waters they jointly own.”¹⁸

Munton drawing on J. L Brierly (1963) and Arnold Heeney (1967) addressed the seventieth anniversary of the IJC. This eloquently expresses the IJC's dilemma:

At the ripe old age of three score years and ten, when many institutions have passed the point of redundancy, the need for the IJC is increasing. Indeed, the IJC is still being recognized internationally as one of the most ambitious examples of a joint boundary water authority. But its future does remain something of an enigma. Almost no one, it seems wants just to leave it alone. Over the years a host of observers have found it in need of restructuring, reforming, expanding, strengthening, even narrowing and weakening,...What accounts for all this attention? Its success is one

¹⁷Ibid..

¹⁸Leonard Dworsky, “The Great Lakes: 1955-85,”*Natural Resource Journal* 26(2 Spring 1986):291.

factor...Paradoxically perhaps, its limitations also attract attention.¹⁹

Dworsky frames the debate by seeking answers to these questions. The author envisions the IJC's future role as perhaps a "major binational bridging agency for the Great Lakes"²⁰ The IJC's role would be as a major facilitator for consultations on goals, issues and problems concerning the U.S. and Canada. The IJC if strengthened could perform a major 'intelligence function' of binational cooperation. If the IJC took the initiative on the Great Lakes ecosystem issues, it would better be able to respond in a more timely fashion which has been a major criticism of its work. Important to establishing this initiative is better public communication to gain required mobilization of political support, i.e., expression of political will and commitment to the environment. The Commission could play a major role in facilitating information sharing between publics and agencies which would aid in implementation strategies as well.²¹

Sewell and Utton frame the debate around identifying key issues, assessing experiences to date, and suggesting lines of action to correct deficiencies.²² The authors comment that the IJC was established as an institution to facilitate a joint review of issues that are not settled informally or independently - diplomatically or unilaterally. The Commission's mandate and structures have remained constant while its *modus operandi*

¹⁹Munton, "Paradoxes and Prospects," 60; Dworsky, "The Great Lakes," 317.

²⁰Dworsky, "The Great Lakes," 326.

²¹*Ibid.*, 327.

²² W. R. Derrick Sewell Derrick and Albert E. Utton, "Getting to Yes' in "United States-Canadian Water Disputes," *Natural Resource Journal* 26(2 Spring 1986):201-206.

have changed over the years - this echoes Willoughby's assessment. Its perspective evolved from a narrow focus on water diversions and navigation issues to an increasingly broad environmental perspective. Dworsky also focuses on this development of a broad perspective. The Commission has a long record of achievement in arbitration of disputes and advanced mechanisms for collecting data, facilitating the exchange of information and undertaking planning and developing of resources of a given river or lake on a cooperative basis. Questions are raised as to whether these mechanisms are adequate to handle the problems that are now emerging and will certainly appear in the future.

With all this scholarly attention focused on analysis and reform of the Commission, one might ask why the IJC is considered so successful? To answer this question, scholars point to its strengths and weaknesses. Both the framing of the debates and factors for success are central to understanding the roots of reform. In the on going debates, authors prescribe a range of reforms. These reforms are central to understanding the controversies surrounding the Commission.

Strengths and Weaknesses of the Commission

The image of the Commission is predicated on international perceptions of its effectiveness to avoid conflicts along the boundary or to facilitate an agreement between the two governments on issues and matters of difference arising between the U.S. and Canada. These perceptions are generated by its successful record and reinforced by its strengths and weaknesses.

Willoughby notes the importance of the IJC's image to its record of success. This image depends on the parties' confidence in the ability of the Commissioners to achieve

consensus. One proposal to improve the Commission's image was to strengthen the qualifications of the Commissioners.²³ Before 1929, the practice of appointing and dismissing Commissioners was based on politics. Lame duck politicians, especially in the United States, were often appointed. After 1929, however, the appointments were selected more for their technical qualifications. Appointment criteria based on whom you know was balanced by what you know. This practice of using experts reinforces the reputation of the IJC as a respected international institution. Standardizing qualifications, like the International Boundary and Waters Commission,²⁴ is still an issue of debate today. Another change that has become standard practice is that each section chair has become a full time position. These measures have enhanced the image of the Commissioners as able to effectively process most referred issues.

Staff funding and the establishment of a permanent headquarters also enhanced the image of the IJC as a successful institution. Until 1973, the Canadian section of the Commission was larger and better funded than the U.S. government section. Because of this, the Canadian section had more resources available to them and, thus, a better understanding of the issues than their American counterparts. After the Great Lakes Water Quality Agreement, and since 1973, the staffs of each section have been jointly financed and have one permanent regional office. These revisions reduced the differences between the capabilities of each section and, in response, the Commission is perceived as more independent than before the GLWQA.

²³Willoughby, *Joint Institutions*, 54.

²⁴United States General Accounting Office, "Need to Reassess U.S. Participation in the IJC," Report to the Chairman, Committee on Governmental Affairs, U.S. Senate, State Department (Washington, D.C.: U.S. Government Printing Office, June 1989).

Besides the image of the agency, another part of this debate concerns the evolving role of the IJC through the decades. As the Commission's strengths developed so do its roles as a third party advisor, a fact finder, an environmental assessor, and a project evaluator.²⁵ The Commission is also effective as a gatekeeper that keeps certain types of issues off the binational agenda. It also acts as a consensus builder between the two nations. It is successful at generating information for public response and at identifying governmental needs. It effectively uses objective evaluations to pressure the governments into being more politically accountable to its citizens by assessing progress in policy implementation on bilateral environmental issues and specifically pollution abatement in the Great Lakes.

Past cases bring an international perspective to the IJC's role as mediator of policy. The Commission's use of study boards brings experience and contributes to its legitimacy as a binational water management agency. (Dworsky 1986) Its regularly scheduled meetings create an informal network of government officials that shares knowledge of the issues and in turn builds consensus. These observations on the role of the IJC reinforce the importance of cooperation to the accomplishment of agency mission and mandates.

The modus operandi of the Commission, e.g., decision by consensus, is the basis for its sense of independence and impartiality.²⁶ Further, the Commissioners are not afraid to explore implications of issues that are referred to them, even though, those issues may not be politically palatable to the governments.

²⁵LeMarquand, "Preconditions,"221-242.

²⁶Dworsky, Utton, Allee, "The Great Lakes"; LeMarquand, "Preconditions."

Substantive issue areas, in which the IJC has played its most successful role, are irrigation and navigation (Sewell and Utton 1986). Until most recently, these types of issues monopolized the agenda. As discussed in Chapter Two, other successful areas of operations for the IJC are issues related to hydroelectric power generation, the apportioning of water, and water management concerning construction. Related cases in these areas are involve monitoring the St. Lawrence Seaway, regulating the Great Lakes, and controlling flows on the Columbia River. Further, in the apportionment of St. Marys and Milk Rivers, the IJC was able to rally the support of the public and the governments by creating a mechanism to successfully address distributive issues of apportionment.

By highlighting some of the Commission's successful features, we can derive common traits. In sum, the IJC is consistently seen as an independent negotiator, impartial in its deliberations, and an expert on technical recommendations. These traits contribute to its legitimacy as a binational water management agency.

Within the debate on the controversies of reforming the IJC, various weaknesses of the Commission form the basis of many recommendations to improve the IJC's performance. Among these weaknesses, the Commission is dependent on the governments for technical personnel and funding resources (Willoughby 1979) even with the GLWQA provisions. As demonstrated by the Point Roberts reference, it has been difficult for the IJC to expand its role into other non-traditional issue areas (Munton in Spencer 1981: 79-80). As limited by the Treaty, it cannot initiate its own references and, thus, it cannot fully develop a role as watchdog for the environment beyond the Great Lakes.²⁷

²⁷ LeMarquand, "The International Joint Commission."

As specified by the Treaty, the IJC's recommendations and conclusions are not binding and, thus, the governments do not always act on them; however, the governments have acted on fifty-two percent of the recommendations (U.S. GAO 1989). Since its decisions do not carry the weight of final arbitration, communications between the important domestic environmental agencies, the EPA and the EC, and the Commission are susceptible to break downs. Without feedback from these agencies, the Commission cannot accurately assess current needs along the boundary.

Finally its reputation, as an important asset to its success, is dependent largely on the quality of appointments. Thus, it may be important for reformers to focus on what the Commission does well instead of concentrating on the expansion of its role.

Circumstances framing the issues may undermine the strengths of the IJC and accentuate its weaknesses. Canadian cooperation with the IJC is jeopardized by the indifference of the American political process to Canadian concerns and objectives.²⁸ In the Twentieth Century, shifts in population concentrations and increased use of boundary waters by municipalities and industry south of the Canadian border contributed to an asymmetry between the U.S. and Canada in relation to their economies. Domestic policies tended to dominate boundary water uses. These circumstances still present obstacles for the IJC and may undermine its ability to work effectively.

The governments often circumvent the Commission through the use of domestic programs that are independent of a cooperative effort and result in less referral to, and the erosion of confidence in, the IJC (Dworsky 1986). Likewise, the governments often work independent of each other to achieve some economic benefit instead of working

²⁸LeMarquand, "Preconditions," 225.

cooperatively towards shared benefits (LeMarquand 1986). Such practices have led scholars to ask why the IJC is not used to its full capacity.

There are also circumstances that politicize issues and, thus, weaken the status of IJC. Dworsky, Utton, and Allee (1995) reiterate findings that the governments often ignore the IJC's recommendations and conclusions that contribute to this condition. As noted in several Canadian papers, citizens want to know why the governments have not reached Great Lakes program standards on toxic pollutants.²⁹ Related to this failure to implement recommendations, Dworsky, Utton, and Allee (1995) conclude that present institutions may not be adequate to provide implementation necessary to protect citizens against persistent toxic substances.

After the GLWQA, the Commission urged the governments to push forward with installing the ecosystem approach and, further, they argued that broaden, not narrowing analysis, is necessary to make progress on Great Lakes pollution abatement.³⁰ Not going forward with the ecosystem approach as specified in the 1978 Agreement reflects poorly on the IJC's competency on overseeing programs. Even though it is the task of the governments to implement restoration, the IJC is in charge of progress oversight of implementation. When negative publicity arises from lack of governmental action, the IJC is also linked to inadequate performance. Further, changes in regulatory processes must be made to control persistent toxic chemicals reinforcing the need to embrace an

²⁹International Joint Commission, *Tenth Biennial Report* (Ottawa, Ontario and Washington, D.C. 2000).

³⁰International Joint Commission, *Fourth Biennial Report* (Ottawa, Ontario and Washington, D.C. 1989); Leonard B. Dworsky, Albert E. Utton and David J. Allee "The Great Lakes: Transboundary Issues for the Mid-90's" *The University of Toledo Law Review* Winter, 26 (2 Winter 1995):368-369.

ecosystem approach.³¹ The public will hold the governments, as well as the IJC, responsible for not following through with agreed upon measures to protect the health of citizens and the environment.

The current debate on the IJC's performance is framed by its strengths and weaknesses. The scope of the Commission's role in binational water issues is defined by the governments' perceptions of its utility. Having an understanding of the character of the IJC as a political entity based on its strengths and weaknesses along with its perceived role allows us to review calls for reform.

Transforming the IJC

Suggested reforms to improve the Commission's performance grew out of applied research or studies requested by the governments. Early proposals to strengthen the IJC's authority culminated in the GLWQA. In the 1960's, there were calls to transform the Commission into a supranational organization, international court, or Great Lake Authority.³² These types of conceptual reforms would endow the IJC with authority to manage aspects of the boundary waters and with powers comparable to a domestic administrative or regulatory body. Such a body could have the power to license and enforce its recommendations. These suggestions went beyond the supervisory role the GLWQA established for the Commission.

³¹The International Joint Commission, *Sixth Biennial Report* (Ottawa, Ontario and Washington, D. C., 1991); Dworsky et al, "The Great Lakes Mid-1990's, 361.

³²Included in this category are Peter Smederman, James K. Barnett, Donald C. Arbitblit, Arnold Heeney, Walter A. Lyon, Frederick Jordan, Richard Bilder see Munton, "Paradoxes," 65-91; and Leonard Dworsky, Albert Utton, and David Allee, "The Great Lakes," 347-385.

Even in the tumultuous 1960's, elected officials were concerned about reforming the IJC. Public pressures to clean up the Great Lakes were mounting and solutions included the consideration to strengthen the role of the IJC at least in regards to the Great Lakes. This was a precursor to the negotiations that ultimately produced the Great Lakes Water Quality Agreement.

The Commission already has quasi judicial authority on obstructions and diversions under Article II of the 1909 Treaty. Why not have corresponding powers with transboundary pollution? To address this controversy, establishing the IJC as an international environmental court would give the Commission powers to prevent or minimize transboundary problems and would give authority to the most objective, most expert, and least political agency. This restructuring to achieve powers of an international environmental court, would remove politics as an obstacle to effectiveness and efficiency. However, the consequences might undermine its strengths and neither government has the desire to give up crafting domestic policy solutions to such an environmental organization.³³

Members of the boards could be recruited from each country's water management experts. The IJC would have the authority of a regulatory and public works agency but with supranational status to manage all problems concerning the Great Lakes and their tributaries. "Roughly, the organization would consist of an executive body

³³Munton, "Paradoxes" 66-67; for more see Richard Bilder, the University of Wisconsin Law School, "Controlling Great Lakes Pollution," 1972; Charles B. Bourne "Canada and the Law of International Drainage Basins," in Macdonald, Morris, and Johnston, eds, *Canadian Perspectives on International Law and Organization*, 488-9; and Paul A. Share, "Pollution of the Great Lakes: A Study of International Environmental Control Efforts," *Wayne Law Review*, (November 1972), XIX: 165.

which might be called the Great Lakes Authority...”³⁴ Conversely, Mr. Heenev³⁵, a Canadian diplomat and Chair of the IJC, argued that the Commission should have more legal authority to investigate and supervise but not enforce rulings.

Ideally the Commission would be vested with jurisdiction over all matters of the boundary and transboundary effects of air pollution, including initiating investigations and coordinating bodies to be involved in the study without waiting for a reference. Thus, the governments would surrender control over a portion of the budget, staff, and facilities necessary for the IJC to investigate without a formal referral from them. The Commission would be empowered to supervise implementation of its recommendations by users of the resources under study. It would report offenders to federal attorney generals of the national governments for action.

With such proposals limiting the discretion of the national governments, the IJC would effectively have enforcement powers or at least expansion of its supervisory and monitory powers. These suggestions are perhaps somewhat feasible, given the domestic setting, but would in practice act similar to a supranational organization, thus, not avoiding the pitfalls of other similar proposals by reformers Barnett, Arbitblit, and Lyon. To illustrate this point a Canadian law professor, Fredrick Jordan, said “...reporting of violations to the federal Attorneys-General to be effective would necessitate the two

³⁴ Walter A. Lyon, “Report on Water Pollution Control in the Great Lakes - A Proposal,” Pennsylvania Department of Environmental Resources, Bureau of Sanitary Engineering, 1971, p. 6, quoted in Munton, “Paradoxes” 67.

³⁵ Arnold Heenev, *The Things that are Caesar's: Memoirs of a Canadian Public Servant*, with a Foreword by John W. Holmes and edited by Brian D. Heenev (Toronto and Buffalo: University of Toronto Press 1972).

governments securing legislation which would give statutory effect to the standards for quality control enunciated by the IJC...”³⁶

Jordan further suggested the parties amend the Boundary Waters Treaty to include air pollution on the same level of importance as water quality. He recommended granting the Commission supervisory powers over implementation of its recommendations. Since 1969, air pollution’s effects on the Great Lakes have been addressed in the 1987 Protocols of the GLWQA but its role is not as prominent as it is concerning water quality. These type reforms would seem to require further cooperation between the IJC and domestic interests for strategies to work. Environment Canada and the U.S. EPA, while working with the IJC, have not shown the willingness towards outside supervisory powers in relation to their internal affairs that are necessary to accomplish the GLWQA goals much less these reforms.

Just before the United Nations conference on Human Environment signing in Stockholm 1972, Richard Bilder commended the IJC on its success in dealing with a “wide range of problems” but attributed this to the IJC’s insulation from domestic political pressures.³⁷ However, the more politically important the problem of transboundary water pollution becomes to the client governments, the more dependent the IJC becomes on them to perform well (Dworsky 1986: 320). That is, as these transboundary problems rise to the top of domestic agendas, the IJC becomes more

³⁶Fredrick Jordan, “Recent Developments in International Environmental Pollution Control” *McGill Law Review* 15 (1969): 300-301, quoted in Munton, “Paradoxes” 68-69.

³⁷ Richard Bilder, “Controlling Great Lake Pollution: A Study of the United States-Canadian Environmental Cooperation,” 70 *Michigan Law Review* (1972): 469, quoted in Dworsky, “The Great Lakes: 1955-1985” *Natural Resource Journal*, 26(2 Spring 1986): 320.

susceptible to political pressures to find solutions. Depending on the issue, a more politicized IJC might enhance the IJC's effective performance. Regardless of the effect of politicization on the IJC, we can agree that politics can influence its performance.

Measures to minimize the effects of politics need to be considered if the authority of the Commission were to be expanded. Such measures might include establishing a mechanism to issue permits for watershed management, to eliminate the recurrent problems of jurisdictional conflict, duplication, and lack of coordination; and further to encourage effective decision making in a broad context for complete analysis and balancing of policy alternatives.³⁸ The governments would need to be committed to these goals. The Tenth Biennial Report of the Commission stresses the importance of the degree of governmental commitment to accomplishing goals of the GLWQA.

Suggested reforms include the Commission initiating its own investigations - a much debated issue then and now. The IJC findings could then have conclusive status of fact in court enforcement proceedings. This would address the criticism that the IJC's recommendations are not always responded to, much less enforced by, the governments (U.S. GAO 1989). Peter Smedresman suggested restructuring the IJC to become the ultimate regulator with national courts providing enforcement and, thus, leaving implementation to the respective domestic courts and agencies.³⁹ This would avoid the Commission's involvement in directly enforcing its decisions.

Proposed obstacles to effective water management include the following: diffused public interest; different views on national priorities; inadequate domestic

³⁸Dworsky, "The Great Lakes," 1986: 37, 320-321; Munton, "Paradoxes," 66.

³⁹Munton, "Paradoxes," 69.

legislation and enforcement; practice of special interest politics; fragmentation of responsibilities within and among the governments; organizational jealousies; lack of understanding of the human relationship to the environment; and failure to establish an institutional structure adequate for current and future challenges.⁴⁰ These hindrances are important to keep in mind when assessing various reforms.

More reforms were proposed from a group of professor in the fields of resource managing and engineering at the Canada-United States University Seminar sponsored by the University of Waterloo and Cornell between 1971-1972. The group envisioned that the Commission would have an active role in mediation and agreed upon joint activities and, further, that conflicts would be resolved through discussion and consultation. The IJC would need a permanent bureaucracy for surveillance, information gathering and dissemination, data interpretation, and have enough flexibility to anticipate future problems and to assist in solving them.⁴¹

The IJC could be given the authority to make preliminary examinations or assessments of potential pollution problems along the boundary on its own initiative and suggest to the governments that a reference be made for investigation. The IJC could be given the authority to publicize all its recommendations. The latter suggestion of publication was incorporated into reforms in the GLWQA but the ability of the Commission to initiate its own references is still controversial today. In response to these suggested reforms, and urged on by the crises building in the health of the Great Lakes in

⁴⁰ Ibid., 321-323; Munton "Paradoxes" 70.

⁴¹ A similar proposal was offered by Gibson Pratt and published as "Pollution of the Great Lakes: a Joint Approach by Canada and the United States" in *California Western International Law Journal*, 2 (Winter 1971).

the 1970's, the GLWQA incorporated some structural changes without superceding the authority of domestic governmental agencies.

Proposed reforms continued even after the signing of the Great Lakes Water Quality Agreement. There were strategies to strengthen the Commission to serve as the principal agency for coordinating federal, state, provincial, interstate, local and non-governmental plans for development of water and land resources in the Great Lakes Basin. Other priorities would be data collection and investigations. This notion of a Great Lakes regional planning body was also discussing in the October 1972 meeting of local officials from both countries in Niagara Falls, Ontario. According to a State Department Memorandum from H. D. Collins on November 7, 1972 - the proposal was withdrawn when no reciprocal funds were offered by Ontario from the Canadian Government.

Anthony Scott, a professor of Economics at the University of British Columbia in his address to the International Law Association's Committee on International Water Resources Law in Vancouver in 1977, put forth the idea to reduce the Commission's workload by limiting the generality of references to sharper, more focused issues, i.e., functional reductionism. This could be achieved by seeking cooperative solutions by local jurisdictions when possible to avoid IJC involvement. He also elaborated on reforms to cut the time necessary to draft references and write reports.⁴² Such proposals would narrow or intensify the IJC's focus.

However, if a new structure is given too much authority then the reforms are unlikely to work because of infringement on national sovereignty of the two government. Canada and the United States are not likely to give up jurisdiction over domestic policies

⁴² Munton, "Paradoxes" 72, 91.

even with a shared resource like the Great Lakes. If the structure is given too little authority then it will be seen as ineffective and irrelevant. The Commission even with its reputation as an effective bilateral water management agency's utility could diminish if its authority is not taken serious by the client governments. The result might be the governments not referring issues to it or heeding its recommendations even less as they have been criticized for in the past.

The idea of a joint planning and coordinating agency is attractive because it is practical. However, if the conditions prerequisite to such a political agreement were in place, then the environmental problems it was designed to solve would be well on their way to a solution already. Without a change in political will to solve these types of problems, politics still remains an obstacle to good resource management and is still a complicating factor even with new structures or reforms. Even with reforms, little might change in regards to the Commission's performance and use unless the political will reflecting commitment to such goals materializes.

Scholars raise the question as to whether extant mechanisms are adequate to handle emerging boundary problems of today.⁴³ For the IJC to be a more effective binational organization, there needs to be major changes in attitudes and modifications to institutions so interested parties can reach 'yes' on boundary water management issues by stressing cooperation instead of intransigency. This demonstrates a shift in the focus on the type of reforms being proposed, that is, from structural and operational quick fixes to those concentrating on cooperation and encouraging public input.

⁴³ W. R. Derrick Sewell and Albert E. Utton, "'Getting to Yes' in United States-Canadian Water Disputes," *Natural Resource Journal* Spring 1986, 26(2): 201-206.

Other critiques of the Commission focus on the commitment of the governments to resolve issues that they refer to the IJC for advice. The U.S. officials do not usually respond in writing to the IJC on progress of recommendations.⁴⁴ In the U.S. these recommendations are referred to the State Department, the Environmental Protection Agency, Department of Agriculture, and the Army Corps of Engineers. The General Accounting Office's report in 1989 concludes that the lack of feedback on these recommendations hamper the IJC's effectiveness. As a result, the Commission responded that they were missing necessary governmental input to develop more meaningful reports.

Responses are not required from the Canadian and the U.S. governments on the Commission's recommendations by the Treaty or the GLWQA. As a result, the governments are often reluctant to formally respond. According to the GAO's 1989 report, EPA officials are reluctant to respond since it requires them to choose between allegiance to national and binational programs.

The report goes on to recommend formal feedback for the following reasons: to ensure greater accountability between the two client governments by documenting positions on important issues; to improve the Commission's accountability to the governments, thus, increasing the quality and timeliness of reports and better managing of resources. Formal responses might also mean greater accountability for the time spent on the Commission's technical boards by agency personnel. Further, agencies might better assess the nature and extent of their involvement on the Commission's tasks and

⁴⁴ United States General Accounting Office, "Need to Reassess U.S. Participation in the IJC," Report to the Chairman, Committee on Governmental Affairs, U.S. Senate, State Department, June 1989.

implications for time spent in the future. Even this apparently simple procedural reform to aid the Commission's effectiveness through requiring agency feedback to recommendations is politically problematic for the two parties to act upon.

During the 1990's critiques shift towards how to achieve progress on ecosystem goals of the GLWQA. Reforms centered on the ecosystem approach, as adopted by the GLWQA and by the Canadian government for restructuring of the EC, as the appropriate framework for the Commission. According to Dworsky the governments might benefit from expanding the IJC's role in water management issues throughout North America.⁴⁵

If the IJC's role was expanded jurisdictionally then the countries could establish a permanent institution for international discussion of technical foreign policy questions at the IJC's offices. If their investigations were given more weight, then the IJC might be given a leading role in comprehensive planning of water resources.⁴⁶

Leonard Dworsky has a career commitment to studying the Commission. His collaborative work suggests more radical changes to the IJC. In his focus on the Great Lakes management, he produced an "interdependence matrix" for the Basin to structure reforms.⁴⁷ The Study Board's 1981 report and the IJC's 1985 report were useful to identifying the problems associated with institutionalizing an ecosystem approach.⁴⁸

Coordination of agencies is a problem. For example, the establishment of an IJC's

⁴⁵Leonard B. Dworsky, "The Great Lakes: 1955-1985" *Natural Resource Journal*, Spring 1986, 26(2): 317-318.

⁴⁶Ibid., 318.

⁴⁷Ibid., 329.

⁴⁸ International Joint Commission, *Great Lakes Diversions and Consumptive Uses: Executive Summary* (Ottawa, Ontario and Washington, D. C. 1981); International Joint Commission, *Great Lakes Diversions and Consumptive Uses; Final Report 1985*, (Ottawa, Ontario and Washington, D.C. 1985).

“permanent International Great Lakes Technical Information Network Board would solve the problem of coordination of domestic implementing agencies.”⁴⁹

Further, in moving towards this goal of establishing an ecosystem approach to boundary issues, the Great Lakes Charter (see Chapter Five) was signed by basin states and provinces and called for the use of similar formats to collect and maintain data on major water uses, diversions, and consumptive uses; uses for navigation, recreation, hydroelectric power, and water allocation. To formalize this approach, the governments could create technical and advisory boards about ecosystem management. Also, Dworsky suggested the need to widen public awareness and involvement in bilateral efforts.

In 1993, Dworsky continued his crusade for the instituting of the ecosystem as the approach for the IJC and agencies of the United States and Canada for managing the Great Lakes. Could this be done by strengthening extant institutions or creating new one? He concludes by saying that, “no structural change in the Great Lakes management institutions should be made until the nature of needed change becomes better defined.”⁵⁰

Has the atmosphere along the boundary reached a critical level to allow for an implementation role for the IJC? Would expanding the IJC’s scope and role or narrowing its focus to a prescribe issue area be more palatable to the client governments?

According to David LeMarquand (1995), reforms should focus on what the IJC does well like its traditional approval functions of monitoring programs to ensure compliance, investigations on a one-time basis, and ongoing responsibilities based on

⁴⁹Dworsky “The Great Lakes”1986: 331.

⁵⁰ Leonard B. Dworsky , “Ecosystem Management: Great Lakes Perspective” *Natural Resource Journal* Spring 33(2 Spring 1993), Part 2: 362.

past references. Further, reforms should not propose new functions nor alter the relationship between the Commission and its client governments.

Critics of the IJC's performance point to the lack of political interest in giving the Commission a freer, more active role in managing environmental issues. This might include formalizing and expanding its 'watchdog' role by allowing it to set the bilateral agenda by bringing emerging issues to the attention of the governments and determine environmental quality objectives on the boundary. A more active role would involve revising orders of approval to meet changing circumstances and calling the governments to task for failures in meeting environmental objectives. David LeMarquand argues against giving the IJC regulatory power of a supranational nature because such an institution would not be politically accountable to the public.⁵¹

In sum, moderate recommendations for greater effectiveness depend on the quality of appointed Commissioners, better staffing and funding, formalization of qualifications of Commissioners, increased public participation and information dissemination. These reforms reinforce government accountability and increase public pressure for compliance with recommendations without expanding the IJC's authority. Instituting the ecosystem approach to Great Lakes issues, and possibly to other areas along the boundary, requires a broad commitment by the governments.

Don Munton (Spencer 1981) and William Willoughby (1979) represent a school of thought that reform is a gradual process for the two governments. By giving the Commission increased authority, sovereignty and domestic jurisdictions will be affected

⁵¹ David LeMarquand, "The International Joint Commission and Changing Canada-United States Boundary Relations," *Natural Resources Journal* 33(1 Winter 1993): 91.

The two countries seemingly are not willing at this point to acquiesce to an international organization that would infringe on their domestic policy arenas to solve shared resource problems.

As previously discussed, factors contributing to the IJC's successful record are independence, impartiality, confidence, and expertise. Required maintenance for the existing authority of the Commission means avoiding activities or reforms that undermine these factors. Don Munton and David LeMarquand might agree that the Commission should steer clear of activities that diminish confidence by the two client governments in its ability to perform. The Commission can avoid crises of legitimacy by limiting its focus to areas of previously established expertise; however, the governments control the issues referred to it. Importantly, the Commission should maintain its touted advisory board system. This system enables it to sustain its expertise that reinforces international perceptions of accomplished organization.

In comparison, David LeMarquand stresses narrowing the focus of the Commission to what it does best. Dworsky, Utton, Allee, and Sewell go a step further to endorse changes in structures and procedures to allow for the incorporation of the ecosystem approach. These reforms build on earlier calls to strengthen the performance of the IJC. These authors represent different approaches to the IJC's future.

Key to generating a range of reforms was the catalyst of the GLWQA of 1978. This Agreement provides the impetus for more recent critiques. Prior to 1972 suggested reforms to expand the Commission's role and mandate culminated in the signing of the GLWQA. The Agreement reflects strides towards strengthen the IJC through a range of moderate reforms.

Common Factors

What can be learned from the literature to make the study of the Garrison Project and the Consumptive Uses Reference meaningful to an understanding of the Commission's success? One factor in common to all the debates and controversies from the reform literature is their desire to make the IJC a more effective organization. Drawing out the commonalities in this literature will provide a basis for determining what factors have not been studied already in relation to the Commission's success.

The elements of the Commission's success in bilateral water management are stressed throughout the literature. The Commission's ability to remain independent from domestic policies and politics of the United States and Canada has contributed to its reputation as an impartial negotiator when making its recommendations even though it is dependent on its client governments for resources and referral of issues. This factor of impartiality is also reinforced by the methods of appointments and its means of decision making outlined in the Treaty, Rules for Procedures, and the GLWQA and its protocols. As noted, appointments to the Commission, and boards as well, require equal representation from both countries. This factor along with the Commission's use of consensus to make decisions also reflects well on its reputation for fair considerations.

Further attributing to its success is the Commission's reputation for its expertise in water management issues. Since it draws on the governments' for its resources, it has a plethora of experts from private and public domains to make appointments. This earned expertise is based on its record of mitigating tough boundary issues. This expertise is the

basis for the governments' confidence in dispute settlement. The governments are willing to refer issues and approvals for its consideration based on its successful record. The public's confidence has been a by-product of the IJC's efforts to increase public awareness of issues and to call for increased public comment and participation especially since the GLWQA was negotiated. Finally, because of its reputation, it has been perceived as a legitimate means to ameliorate boundary disputes between the United States and Canada.

Deficiencies have been the inspiration for reforms. Since the 1970's, the Commission's reputation has come under scrutiny by governments, environmental organizations, and the public. This has centered around its failure to respond to perceived threats as the public has become increasingly concerned about public health and the environment. Jurisdictional and functional expansion brought on by the 1978 GLWQA only raised the standards for success. As discussed in the literature review, the inability of the IJC to accommodate the agreed upon ecosystem approach into its operations is first among many criticisms.

Secondly, its dependence on the governments for resources has been viewed as a threat to its independent status. This dependency is complicated by the fact that the governments do not respond to many of its recommendations. Thirdly, many moderate and radical reformers have suggested the need for additional authority and the ability to initiate its own references, thus setting the binational boundary agenda. LeMarquand has discussed the Commission's need to refine procedures so to avoid untimely reporting on references. Most reformers would agree that the lack of funding, staff, and other resources

have hampered the ability of the IJC to live up to its potential.

The incremental approach the Commission has been forced to take is perhaps one of the earliest criticisms of its work as Willoughby notes. Its modus operandi is susceptible to this piecemeal approach to studying environmental issue disputes because it must rely on the governments to refer issues and approvals to it. After the signing of the Great Lakes Water Quality Agreement, Dworsky became prominent in developing this incremental criticism into a campaign to fully institute the ecosystem management approach into the framework of the Commission and domestic structures in so far as their involvement with implementation of IJC recommendations are concerned. Since the 1990's, Canada has been struggling to refocus and restructure its environmental institutions towards sustainability and the ecosystem approach - thus away from a piecemeal approach so prevalent to environmental issues in the twentieth century. Willoughby's criticism of the IJC as being a reactionary institution is based on this non-preventative and crises driven, ad hoc approach.

This ad hoc approach is also related to the Commission's dependency on the governments. The IJC was not designed as an environmental watchdog. It was designed to resolve disputes that the governments place on the agenda through the reference process. With the GLWQA, it perceives its new role more and more as the watchdog of the Great Lakes environment but it can not live up to this role if it can not prevent environmental catastrophes. With the IJC's new perceived role has come increased expectations by the public. According to the 1978 Agreement, it can only monitor and report on government progress on achieving environmentally safe standards. As the 1989

GAO Report documents, the Commission's recommendations often go neglected; therefore, it remains dependent on the governments and public to set the environmental agenda.

This new perceived role taken from the GLWQA has urged reforms for more authority on the part of the IJC, specifically involvement in the implementation and agenda setting processes. Some of these reforms have recommended strengthening its quasi-judicial, investigative and fact finding functions. As Dworsky comments, this would better equip the Commission to prevent boundary crises. The simple call for the IJC to publish its recommendations as noted in the 1975 Senate Committee Report on Foreign Affairs has enhanced its ability to encourage public and governments supports for putting its concerns on the agenda. Dworsky noted the need to create an Ecosystem Study Board. It would compliment the work of the Water Quality Board and the Science Advisory Board. These measures would increase the authority of the IJC and enable it to voice its concern to a wider audience.

Having discussed characteristics of the Commission, what delineates these schools of thought on reform provides the basis for the need for insight from the public policy literature that may be relevant to structure the case studies. What seems to make some reforms more radical than others is a question of whether new institutions are necessary to fill this new role of environmental watchdog. The main question being asked is whether the IJC can incorporate new institutions into its structure based on its mandate or whether new institutions need to be created outside the IJC's domain. Before the GLWQA of 1978 was negotiated, the question of creating new structures outside of the

IJC was more of a possibility. However, with the Agreement, its mandate has been expanded so to accommodate the possibility of new structures within the IJC. In other words the rules of the game have changed.

Based on this distinction, Munton's recommendations to let the IJC evolve within the status quo becomes a viable option as well as Dworsky's suggestion of a Ecosystem Management Study Board or LeMarquand's refinement of IJC procedures to aid effectiveness. Dworsky seems to define IJC limitations based on the commitment to instituting the GLWQA. Whereas, others seem to define the boundaries of authority expansion based on successes of the future that depend on what has worked in the past. Dworsky's and other proposals for change do not seem so radical when considering the Commission's limitations.

On the other hand if the IJC's structure is not able to accommodate new institutions based on what has worked for it in the past, then what is the alternative? There are two institutions that are worth noting in relation to this alternative approach to bilateral boundary relations. There are two existing state-provincial cooperative initiatives; namely, the Gulf of Maine Agreement and Action Plan and the British Columbia/Washington Environmental Cooperation Agreement and Initiative.³⁶ Both these initiatives aim to solve binational problems at the regional level instead of using federal or the IJC's bilateral mechanisms for resolution.

The Gulf of Maine Agreement dates back to 1989 and is also known as the Agreement on Conservation of the Marine Environment of the Gulf of Maine. It was

³⁶Chad Day, "Institutional Framework," 49-50.

signed by the premiers of New Brunswick and Nova Scotia and the governors of Maine, New Hampshire and Massachusetts. It is the first attempt in North America to use regional cooperation to solve shared environmental problems.³⁷ The Council meets biannually and has two representatives from each province and state. It is committed to the preservation of environmental quality of the Gulf of Maine.

Another example is the Environmental Cooperation Agreement between the Province of British Columbia and the State of Washington.³⁸ It was signed in May of 1992 by the premier of B.C. and the governor of Washington. It also encourages regional cooperation to achieve environmental protection. The two signing members set the agenda on shared environmental issues to be focused on in their action plans. There are representatives from environmental agencies from both state/province as well as federal observers from Environment Canada and the U.S. Environmental Protection Agency. It meets biannually and has the power to create subcommittees on special issues. Both these institutions seem to mirror successful decision making characteristics of the IJC. They also are sensitive to the principle of equality.

These are both examples of alternative institutions that can work on regional issues without invoking international treaties and organizations. However, whether such institutions can rally the resources, expertise, public support necessary to cope with increasingly complex environmental issues has yet to be seen. Pursuing regional

³⁷Gulf of Maine Council on the Marine Environment, *The Gulf of Maine Action Plan 1991-2000*, July 1991.

³⁸Day, "Institution Framework" 49-50.

alternatives to transboundary environmental protection or relying on international treaty is a question that must be asked in relation to IJC reforms. Regional cooperatives do not have the record of success the Commission has accrued but remain an option for managing boundary issues in a decentralized fashion which harkens back to twentieth century incrementalism perhaps. With these alternatives in mind, the discussion can proceed to focus on what insights can be gained from the public policy literature to better understand IJC success.

Theoretical Insights for the Analysis of the IJC's Success

The review of the substantive literature has revealed some propositions about the IJC and consistent factors contributing to its success. What is missing in these largely contextual assessments of the Commission and its effectiveness as a bilateral water management organization, is to apply insights from the comparative public policy literature. The assessments are in general suggestive of structural, functional, or procedural reforms. LeMarquand may be the exception, by focusing on the principle of equality and preconditions for cooperation to structure his analysis which is based on process assessments not substantive observations alone.

The scholarly literature highlights consistent obstacles hindering the IJC's performance. Disagreement centers around the amount of reform needed, how to achieve reforms and the focus of reforms. These disagreements evolve out of the general question of whether IJC's institutions are satisfactory to solve today's increasingly complex environmental issues along the border. Munton represents a structural maintenance

approach to the IJC which suggests letting it continue to function as it is. LeMarquand represents a school of thought focusing on what the Commission does best based on its past performance. Dworsky represents reformers that seek to implement facilitating steps to institutional capacity building based on the new mandates expressed in the GLWQA.

In order to go beyond these institutional perspectives on substantive reforms, we can look for theoretical insights to apply to the case studies. Let us return to the Governance and Comparative Public Policy literatures to find these insights.

Both the governance and the institutionalist literatures point to the need to focus on the political context of the IJC to gain further understanding about its organizational success. To do this we look into the domestic political conditions and processes that influence the decision-making of governments party to international agreements.

Both Weiss and Ashford point to the structure and operations of the client countries' bureaucracy, the availability of technical and local expertise on the issue, the functions and powers of the institutions established to mediate disputes, and the need to identify the reciprocal interests at stake. These theoretically based factors can be framed specifically in relation to IJC performance.

More specifically, Ashford focuses on the importance of the state, the character of the institutional administrative practices, and the policy context in order to better understand politics.³⁹ His proposition that the state has the capacity to act independently in determining politics and political outcomes in particular issue-arenas may have a bearing on understanding the impacts of the complex domestic political settings that the

³⁹Discussed in Chapter One.

IJC operates in. The IJC literature reviewed above discusses the United States and Canadian governments' role in the bilateral process; however, it does not systematically order the importance of these factors as they occur in particular issue areas.

For example, we should ask how do domestic agendas limit the IJC's ability to resolve environmental conflicts and manage environmental problems? Subsequently, this study asks how the binational context of the IJC affects its capacity to deal with different types of policy issues that are placed on its agenda. Reformers cite politics as the main obstacle affecting IJC performance. How do the various levels of institutional authority affect policy outcomes when considering the IJC's recommendation processes? Therefore, this study aims to more specifically look at how domestic agendas affect the IJC's operations in its binational context.

In order to do this, we must go beyond perceptions of the IJC as impartial - indifferent to country loyalties and interest group pressures - and analyze the role of politics in the process of dispute settlement. It is essential to trace the avenues of influence on the Commission's decisions.

It is important to note in framing this study that the Commission bridges the policy formation and implementation processes in Canada, the United States, and the international community, thus allowing us to draw from both international and comparative literatures for guidance. In the preceding review of the IJC literature, the agenda setting process and the implementation processes are highlighted but the Commission's role in the whole policy process is not emphasized.

Subsequently, we can narrow this approach further by applying other comparative

public policy analysts' approaches. Theodore Lowi's power arenas approach provides us with a typology to further refine our research questions.⁴⁰ This refinement is simply to ask what types of policy solutions does the Commission best provide its clients in the binational context. In what policy arena is it most likely to be able to play a constructive role in dispute settlements? However in focusing on organizational processes, he does comment that a functional organization such as the IJC works best on issues drained of political content. He further adds that lake management water quality issues, to the contrary, are 'full of vigorous political life.'⁴¹ Generally issues such as lake management are considered regulatory.

In this study, each of the cases represents a type of politics associated with a particular power arena. Because this bilateral process starts with the referral of the issue to the IJC by the host governments, the issue is already defined by its expected impacts. The Garrison case represents a distributive issue and the Consumptive Uses Reference represents a regulatory issue.

Additionally, as seen in the case of the United States-Mexico International Boundary and Water Commission (IBWC) - another binational boundary water management agency - there exists a heavy behavioral influence on this Commission from the distributive character of U.S. water policy.⁴² So it follows that if the Garrison case resembles a distributive arena then this distributive behavior in U.S. water policy may

⁴⁰Ibid..

⁴¹LeMarquand, "Preconditions," 7.

⁴²See Mumme 1985; Mumme and Moore 1990; Ingram, Laney, and Gillilan 1995.

also influence the IJC's performance. This may also hold in the Canadian case. What is the nature of Canadian water policy and how might it influence the process? If the Consumptive Uses case resembles a regulatory type arena, then the IJC may not be as effective in settling this type of dispute.

To further narrow our research questions and hypotheses, James Q. Wilson provides another typology concerning agency types and environs. These can also serve as a guide in revealing the domestic influences on the IJC's process of recommendations.⁴³ The author looks at the type of organization involved by determining its missions and tasks and the context in which it operates. This approach may further refine the nature of the how the IJC operates within its binational setting.

It is worth noting that the IJC mission's and tasks have been described in the substantive literature but assessments as to its agency type and constituency affects on its behavior have yet to be explored in this context. Knowledge of organizational types, in turn, helps us understand the operational limits of agency design and may further illuminate an explanation on why the IJC is better equipped to perform some functions as opposed to others. Based on Chapter Two's overview of the Commission's mandate, it would seem to be a procedural agency with more easily measurable outputs and less easily measured outcomes. As for constituency type, it is technically true that the Commission's official clients are the United States and Canada. When the IJC was

⁴³Discussed in Chapter One.

created, there were no particular interest groups continuously or actively linked to it.⁴⁴ It had widely distributed goods accompanied by diffused low costs. Therefore, we would expect its constituency environ to be majoritarian according to Wilson's typology. This cannot be assumed at the start, however.

In this study we need to explore whether the IJC's environ has changed. Have the benefits it provides and associated costs increased in value since its inception? Because of the perceived injuries to health emanating from the pollution along the border and especially the Great Lakes, is there more at stake now than ever to protect shared resources? Is the IJC's supporting constituency becoming more of what Wilson characterizes as a client type or watchdog? We specify our research questions in the next section.

Analytical Focus of the Case Studies

Having arrived at these questions based on the relevant theoretical literatures, what factors should we examine in the case studies? First, we can explore factors associated with the context of the IJC; secondly, we can explore factors associated with the nature of the issues referred to it. Finally we can look at the domestic influences that determine its agency type and supporting constituency to reveal what issues are best decided by the IJC.

Our criteria for policy success is the Commission's ability to get the parties to the

⁴⁴The exception would be navigational and hydro-power interests - however, these interests were not organized into what we consider interest groups.

table to reach consensus on the disputed issue.⁴⁵ With the definition of success, we must confront the more general question of how the IJC's binational context affects its ability to reach consensus on disputed issues. Weiss points us to probe domestic processes. To do this, we can look to Ashford for specifics. He examines public policy by analyzing the context of the problem, the agenda, the process of decision making, and the consequences of the process for the issue under consideration and the actors involved. We use this broad policy process to frame the case studies analysis.

In review, the agenda phase identifies the groups involved in the issue and types of coalitions that form. Concerning the IJC, the issue under investigation has already been defined before it reaches the IJC's agenda by the process of referral. In lieu of this, what is of significance to the process of issue disposition is the interaction of actors and interest groups at different access points to the IJC when they are trying to influence its information gathering tasks.

To continue, the process phase describes the institutions and their role in dispute settlement as well as society's role in this process. This would involve looking at institutions specifically involved with the cases - for example, the North Dakota and Manitoba governments as well as citizen farming groups or other concerned citizen groups that had a stake in the completion of the Garrison Dam Project. In the final stage of the policy process, the inter-meshing of pre-existing policies, institutions, and policy constraints is addressed. It is also important to look at how the institutional structures

⁴⁵ This is reminiscent of Sewell's and Utton's discussion of how to get to yes on boundary issues; see W.R. Derrick Sewell and Albert E. Utton 1986 "Getting to Yes in United States-Canadian Water Disputes" *Natural Resources Journal* 26(2):201-206.

facilitate group coalitions that form around the issue and how issues are filtered through the Commission's structures, for example the Consumptive Uses Board, resulting in some decision, resolution, law, regulation or in the case of the IJC recommendations.

The whole process may be affected by technical uncertainties. An issue may reach the agenda based on disagreements between country experts on technical points of contention. This is especially likely when there is no universal standard of data collection across the border. The Commission's board system resolves issues of technical uncertainties and disagreements. When an issue can not be resolved because technical uncertainties still exist as in the Consumptive Uses case, then do groups trying to influence the Commission play a more prominent role in the dispute settlement?

To explore these questions, Chapter Two describes the structures and operations of the Commission in general as well as the procedures for processing approvals and references. It also describes the governmental institutions that interact with the IJC. This overview of the Treaty and the context in which the Commission operates lays the foundations to examine more closely the specific interactions of actors and interest groups in relation to each case under investigation.

The character of the issue itself may have some significance to the IJC's performance. In order to do this, we look at expected impacts of policy, the type of bargaining involved in the issue, the type of coalitions that form around the issue, who gains and who loses in the process, and the nature of the power structures and the elites who deliberate the issue.

Lowi's typology is based on allocations of benefits' scope and impact and the

likelihood of coercion - either immediate or remote - involved with each arena.

Distributive issues are likely to have a specific benefit and an impact on the individual (firm or corporation). The politics surrounding the issue tends to be described as involving stable coalitions and patronage practices are likely to exist. In the U.S., congressional committees tend to be the key decision makers that broker or coopt an agreement. A centralized agency or bureaucracy tends to be institutionally involved in the process as well.

The regulatory arena is described in terms of what group will benefit and what group will not from any action on the issue. Groups coalitions will be less stable among in society when compared to the distributive arena and involve a decentralized agency. Of course these expectations will have to be tailored to the parliamentary system of Canada as well as the U.S. Even though there are problems with clearly distinguishing these attributes among the case studies, this provides a guide for expectations and hypotheses.

To further refine our approach, Wilson distinguishes policy arenas by using the distribution of costs and benefits, which Susan Hansen notes are not necessarily, simultaneously incurred. Also from the public policy literature, Hansen notes that there are other factors to consider than economic when considering costs and benefits of an issue. Both Wilson and Hansen point to the importance of identifying different motives of bureaucratic actors involved in the process.

Further, in Hansen's study on unpopular decisions, she uses actual outputs, instead of expected impacts, based on the type of collective goods, public or divisible, that are involved with the issue. The effect on individual utility or income should be

considered when determining policy types. Thus, we must ask the question of whether water levels are a public good. In which case then, would the Consumptive Uses reference resemble Hansen's zero-sum category? Would the Garrison reference then resemble a distributive policy having a positive impact on individual utility while being a divisible good? If so, could the Garrison Dam project have been privatized? Even though the issues have already been defined to some extent by the time they are referred to the IJC, these other considerations can still be explored as significant to IJC success.

To complete the description and analysis of the Commission's politics, Wilson's agency and constituency types may provide some further insight into what groups form and interact to influence the IJC. What access points are pursued in this task? He argues that organizations and people matter. The nature of leadership, the source of funding, the degree of discretion are all important factors to consider to fully understand the nature of an organization. Defining agency tasks and missions should also be considered. By making these considerations we can identify access points of influence. Having hypothesized that the IJC is a procedural agency with a majoritarian constituency, we may anticipate how the IJC will behave and respond to its political environment.

Conclusion

In conclusion, this study aims to contribute to what is known about the IJC by drawing on insights of the public policy literature. Using factors drawn from these insights can help shape our understanding of how the IJC works. Leverage points in domestic political processes that affect the Commission's work must be analyzed. This

study shows that public policy considerations really matter in determining how the IJC resolves issues by detailing the bilateral and domestic processes involved as much as possible. The focus is on how the IJC responds to its political setting. To do this let us now turn to the study of the IJC as regulator in the Great Lakes Diversions and Consumptive Uses Reference of 1977.

CHAPTER 4: A HISTORY OF, AND BACKGROUND ON,
THE GREAT LAKES DIVERSIONS AND
CONSUMPTIVE USES REFERENCE

Introduction: A Problem of Regulation

In response to the release of the IJC's 1976 report on the 1964 reference, *Further Regulation of the Great Lakes*, the Canadian Secretary of State for External Affairs and the U.S. Secretary of State sent identical letters to their respective sections of the IJC on 21 February 1977. The letters requested the IJC, pursuant to Article IX of the Boundary Waters Treaty of 1909, "...to examine into and report upon the effects of existing and proposed diversions within, into or out of the Great Lakes Basin, and the effects of consumptive uses on Great Lakes water levels and flows."¹

The Commission responded by establishing the International Great Lakes Diversions and Consumptive Uses Study Board on 3 May 1977. The Board was instructed to consider the possibilities of diversion management to regulate lake levels. It would be responsible for gathering relevant government and non-government input and to inform the public on these matters. Changes in water use required investigation into socio-economic and environmental impacts. Investigation into alleviating extreme water

¹ International Joint Commission, *A Report to the Governments of the United States and Canada under the 1977 Reference*, January 1985, Appendix A, 51.

levels in the Great Lakes by diverting water to arid regions was also to be considered.

The Board in turn established a Working Committee and three Subcommittees: Diversions, Consumptive Uses, and Environmental Evaluation. The already established International Lake Erie Regulation Study Board, and its technical subcommittees, would carry out many of the computations on behalf of the Board. This cooperation maximized the use of available professional resources, avoided duplication studies, and ensured comparability of data and results. As part of this process, the Board published a series of newsletters to keep the public informed on its progress and conducted public workshops throughout the basin. The IJC responded to the Governments' request with a final report in January 1985. Therefore, examining this reference through the lens of policy regulation provides an opportunity to look at the IJC's role and performance in this unique issue area.

Aims and Analytical Expectations

This Chapter has two aims. First, it introduces the reader to Great Lakes' water issues by providing the reader with background information on the issues explored in the Great Lakes Diversions and Consumptive Uses reference of 1977. Secondly, the chapter aims to provide the reader with contextual information to frame the case study. The effect of political context on the IJC's performance as a binational, environmental organization is a factor that has not been explicitly addressed in the scholarly literature though politics and government willingness have been identified as obstacles to success. This chapter describes the issues associated with diversions and consumptive uses then focuses on

concurrent events, institutional characteristics, political backgrounds, and fiscal support as contextual indicators to describe the atmosphere in which the IJC operated in the 1970's and 1980's.²

Based on observations from the governance and comparative policy literatures, we intend to derive the potential significance of domestic influences and political context on the IJC's ability to reach consensus and bring the parties to the table for consultation. In reviewing past works on international organizational effectiveness, Oran Young observed the need to study actual experiences of environmental regimes as an approach to understanding performance. This, along with Young's discussion on procedural effectiveness pointed us towards a working definition of IJC success; namely, bringing the parties to the table toward issue resolution.³

After describing the history of diversions and problems associated with them, we consider other domestic and international events concurrent with the reference. We anticipate the possibility that these other events might supplant the government's attention on regulating fluctuating water levels within the Great Lakes Basin. These other priorities provide focal references in which to view the Commission's operations in light of domestic agendas.

² Harold K. Jacobson and Edith Brown Weiss, "Strengthening Compliance with International Accords: Preliminary Observations" *Global Governance* 1(2) 1995: 119-124.

³Oran R. Young, *International Governance: Protecting the Environment in a Stateless Society* (Ithaca and London: Cornell University Press 1994), 141 John E. Carroll and Roderick M. Logan, *The Garrison Diversion Unit* (Montreal: C.D. Howe Research Institute and DC: national Planning Association 1980), 36.

We expect party affiliation and goals in connection with the politics that formed from the distributive nature of the reference issue may color the willingness of the governments to refer the issue and follow through with IJC recommendations thus affecting the Commission's efficiency in disposing of the case. To do this we explore leadership and political party affiliation as two basic components of domestic institutions by looking at federal, state, and provincial elections. We gather this election data in order to explore the possibility that party competition, or lack thereof, between domestic institutions may effect IJC processes and outcomes in Chapter Five.

We expect that the background of the Commissioners and their tenure might reinforce the reputation of impartiality and independence. We expect to find linkages between differences in administrations and levels of funding of binational operations based on the assumption that liberal administrations better support environmental causes than conservative ones. We anticipate that the fiscal support to the Commission may indicate the governments' willingness to support IJC processes of investigation thus reinforcing notions on the Commission's strengths and weaknesses. This chapter will not be able to draw conclusions on the significance of these factors to IJC success but it lays the groundwork so that we can make an assessment of these factors after exploring the politics of the reference in more depth in Chapter Five.

Chapter Organization

A better understanding of the history of the reference and a closer look at the political setting in Canada and the U.S. during the 1977 reference provides us with a

framework to achieve the aims of this chapter. To better understand the reference, we first explore the issues of diversions and lake levels in the section on The Great Lakes Basin and the Problem of Diversions. This section reveals the problems of diversions through a review of the IJC 1985 Report recommendations. This includes Lake Levels, Problems and Trends in which the reader is given some historical background on the basin with physical geography including data tables on flows, depths and volume of the lakes. This provides basic information to support subsequent analysis.

Next we provide an overview of major international and domestic events to put the reference in perspective and to identify what other priorities were on the agenda competing for the attention of the governments during the 1970's and 1980's. We then look at party representation and national-state-provincial elections in sections: Canada: Stability and Continuity with the IJC under Trudeau's Leadership and The United States: Looking for Legitimacy, Continuity and Stability within the IJC under Reagan's Leadership. The discussion then considers trends in Commission appointments by categorizing commonalities extracted from biographies and IJC Annual Reports in the section: Trends in Commission Appointments. Then we examine into IJC's fiscal support from the two governments in the section: Trends in IJC's Fiscal Support: 1971-1982 based on IJC Annual Reports. We conclude with summary remarks on the findings and expectations.

The Great Lakes Basin and the Problem of Diversions

The Commission concluded in its 1985 Report that there was no evidence that extreme lake levels would be rectified by any new major diversions. Controlling lake

levels might have been technically possible but was not economically cost effective. Related social and environmental effects were unknown. Further the Report stated that if global climatic conditions change or current economic or political parameters shift then inter-basin water transfers might become more feasible. To illustrate this point, in 1998, Nova Group of Canada requested a permit from the government of Ontario to withdraw one-hundred-sixty million (160,000,000) gallons of water per year from Lake Superior for export to Asia. This initiated a change in thinking on the value of Great Lakes water.⁴ Nova initially got the permit but it was later rescinded. In the 1985 Report, the IJC anticipated that changes in geological, political, and social conditions might affect future policy making, as in the case of Nova.

In order for the reader to better understand the background of this issue, the problem of diversions can be explained by reviewing policy recommendations made in the 1985 report. The Commission envisioned water quantity issues being redressed similar to water quality issues - a process analogous to that which produced the GLWQA which would include a review of the 1977 findings and recommendations when considering future policy solutions.

As included in the IJC's 1977 recommendations, the governments would establish an independent bilateral data committee to monitor all existing diversions and consumptive uses. This data would be published and made available to the public at least twice a year. This impartial committee was to develop methodologies for more accurate

⁴Karen Kelly, Great Lakes Radio Consortium, 27 March 2000; Jeff Long, *Chicago Tribune*, "Great Lakes Spigot Fine-Tuned," 18 June 2001.

data estimates. This underlines the problem of accurate collection of data, creating a mechanism to monitor it, and how to incorporate meaningful public participation into the process.

Discussed in the 1985 report was the study board's supposition that as technology improves so would the amount of data. This is important because society must determine what data is significant and establish priorities based on information produced by new technologies. In the case of toxins, for example, scientists do not always agree on safe and acceptable levels of exposure to humans; there must be a mechanism in place to improve communications and filter and process new data. Input from society would be necessary to make these decisions.

Through the mechanism of another reference, the IJC would create an intermittent bilateral task force specifically on lake levels. This task force would make recommendations to the IJC and the governments every five years to update, assess, and review projections and potential or changed diversions. A dialogue between the two countries was expected to follow each report. The task force would work with the data committee and any other government agencies necessary to secure viable data on water levels. The membership would be based on the current needs of the basin. These recommendations highlight problems of administration, access, and dialogue.

A cooperative review of current public policies at the federal and state/provincial levels would follow to identify those affecting consumptive uses and water conservation. Any possible future diversion of water into the Great Lakes would be reviewed. The two governments would survey their jurisdictions to identify and measure small diversions

and to develop a mechanism to make this information available to the bilateral data committee.⁵ This process would address the problems of cooperation, non-contradictory policies, and establishing diversion standards.

On the specific question of regulating extreme lake levels, the Commission chose not to consider manipulating flows of existing diversions unless conditions changed. Instead, it argued, instituting better coastal zone management practices would reduce damage from floods and erosion along the Great Lakes shores. Such management changes required agreement among the parties because these changes would necessarily affect all basin interests' patterns of behavior. The challenge was to protect the Great Lakes water supply using non-invasive methods where possible.

Finally the governments were invited to engage in a process of notice and consultation before adding any new, or changing any existing, diversions. Government at all levels including federal, state/provincial, and local were encouraged to initiate public educational campaigns towards increasing the public's understanding of the nature and affects of consumptive uses. In this same vein, the report also pointed to problems of binational protocol and the potential for more efficient use of existing resources.

Lake Levels: Problems and Trends

The need to reach consensus by all concerned parties on the lake levels issue is important to achieving an agreement on a region wide regulatory plan. Two provinces,

⁵The Reference specified the study of updating current regulations of the Great Lakes during high and low levels by changing existing diversions rates and patterns of consumptive uses.

eight states, the two federal governments, basin tribes and other interests needed to come to the table to reach an acceptable plan involving water uses including new diversions, and water exports. Important to this process is continuous, consistent, and compatible information on water levels and use. Under the authority of the 1909 Boundary Treaty and, more specifically, the terms of the 1977 Reference the IJC was charged with investigating and facilitating this process. Table 4.1 denotes some geophysical characteristics for some background on the Great Lakes Basin.

Table 4.1 Great Lakes Land Dimensions

Features	Units	Superior	Michigan	Huron	Erie	Ontario	Totals
Water Area	sq. miles	31,700	22,300	23,000	9,910	7,340	94,250
	sq. km	82,100	57,800	59,600	25,700	18,960	244,160
Land Drainage Area*	sq. miles	49,300	45,600	51,700	30,140	24,720	201,460
	sq. km	127,700	118,000	134,100	7,000	64,030	521,830
Shoreline Length**	sq. miles	2,726	1,538	3,827	871	712	10,210**
	sq. km	4,385	2,633	6,157	1,402	1,146	17,017**

Source: See U.S. EPA website Physical facts at <http://www.epa.gov/greatlakes/>

*Note: Land Drainage Area for Lake Huron includes St. Marys River. Lake Erie includes the St. Clair-Detroit system. Lake Ontario includes the Niagara River.

** Includes islands.

The Great Lakes, or North America's inland sea, has five immense bodies of water that make up ninety-two percent of the world's fresh, surface water. Lake Superior is the world's largest fresh water lake. The lakes cover one third of the drainage basin

some ninety-five-thousand square miles (95,000).⁶ The volume and vast surface area of the Lakes explains the enormous storage capacity. The level of each lake depends on the balance between total water received and discharged to the next lower lake. “The change in storage is the sum of precipitation, inflow from upstream surface and ground water runoff, evaporation, outflow and diversions into or out of the lake.”⁷ As Dr. Tom Crowley confirmed, rain and snow are the primary sources of its natural water supply. Further construction in the outlets of Lakes Superior and Ontario and dredging of connecting channels have changed the hydraulic characteristics of the lakes. They are regulated by control plans that comply with Orders of Approval issued by the IJC. Lakes Michigan, Huron, and Erie are not regulated; therefore, their water levels are determined largely by natural conditions and effects of control on the lakes upstream.

Diversions are transfers of water from one basin to another and consumptive uses are waters drawn from the basin and not returned to the water courses.⁸ Existing diversions are channeled and man-made waterways. Such structures affecting water levels are the Chicago Diversion into the Mississippi River system, water used at Niagara to

⁶Benjamin De Cooke, Chief of Great Lakes Hydraulics and Hydrology, Detroit District, U.S. Army Corps of Engineers speaking at the 1982 Upper Great Lakes Governors Conference, Panel on Diversions (Mackinac Island, Michigan 1982), 78; See Table 4.1 Land Dimensions.

⁷ International Joint Commission, *Great Lakes Diversions and Consumptive Uses: A Report to the Governments of the United States and Canada under the 1977 Reference* (Ottawa, Ontario and Washington, D.C. January 1985), 5; Tom Crowley, interview by author, 23 July 2001, Great Lakes Environmental Research Center: Ann Arbor, Michigan.

⁸The International Joint Commission, *Activities Report 1985* (Ottawa: Econome Consultants Inc. 1985, 11.

operate the Welland and New York State Barge Canals, and the Long Lac and Ogoki diversions into Lake Superior. Only Lake Ontario's levels are significantly affected by diverting water to control extreme water levels. However, Dr. Thomas Crowley noted that even slight fluctuations can have significant impacts on basin ecosystem activities.

Table 4.2 Average Diversions Rates

Diversions	New York Barge	Long Lac/Ogoki	Welland	Chicago
Average lake levels impact 1980	---	56,000 cfs	9,200 cfs	3,200 cfs

Source: International Great Lakes Diversions and Consumptive Uses Study Board, *Report to the International Joint Commission*, September 1981, pp. 4-1 to 4-41 and *IJC Great Lakes Diversions and Consumptive Uses: A Report to the Governments of the U.S. and Canada under the 1977 Reference*, January 1985, 21.

Given that the waters of the Great Lakes fluctuate naturally, the Board found that extant diversions of the water through the New York State Barge Canal had “no material impact on Great Lakes levels, nor would any modifications [regulation] thereof;” the diversion of water into Lake Superior from Long Lac/Ogoki averages fifty-six-thousand cubic feet per second (56,000 cfs); the Welland Canal Diversion has varied over time but averaged nine-thousand-two-hundred (9,200) cfs in 1980; the Lake Michigan Diversion at Chicago has varied over time and since 1970 averaged three-thousand-two-hundred (3,200) cfs.

Hydroelectric energy produced by the Niagara and St. Lawrence rivers is another use that returns water to the lakes and is beneficial to populated areas. Other non-consumptive uses include navigation, commerce, fisheries, timber, and recreation.

Consumptive uses do not return water to the basin. Table 4.3 sums up the projections from 1985 report on consumptive uses such as municipal water supplies and irrigation for agriculture including crops and livestock watering.

Also to be considered are the 1981 Study Board findings. Contradicting the 1985 report, they found that managing high water levels through existing diversions would be possible but would result in a net loss to surrounding economies and would have some unquantifiable environmental impacts. Alleviating low water levels through existing diversions would not be feasible at all.⁹

Further, the Board found that the “consumptive uses of water reduce the net water supply to the lakes, thereby lowering lake levels...”¹⁰ In concert with the 1985 report, the Board stipulated that this reduction in water levels and supply could result in economic benefits to coastal zone interests and losses to navigation and power interests.¹¹ Specifically, the Board found that consumptive uses could probably limit the ability of the current operational regulation plan for Lake Ontario in relation to the criteria as outlined in the Commission’s Orders of Approval.¹²

The Board projected that the 1975 consumptive uses rate of four-thousand-nine-

⁹International Great Lakes Diversions and Consumptive Uses Study Board, *Report to the IJC* (Ottawa, Ontario and Washington, D.C. September 1981), 2.

¹⁰Ibid., 3.

¹¹Coastal zone effects include erosion, flooding and water pumping - damage or costs increase for the coastal zone as lake levels increase so as lake levels drop coastal zones benefit. See Ibid., 10; see Table 5.2.

¹² Currently as of March 2001, funding has been agreed to by both countries to further study the Ontario regulation plans.

hundred (4,900) cfs could increase to between sixteen-thousand (16,000) cfs to thirty-seven-thousand (37,000) cfs by the year 2035. It is interesting to see how consumption was not considered to have a major impact in earlier studies prior to 1975. With the 1985 Report the impact of consumptive uses of water from the Great Lakes was projected to have a dramatic effect in the twenty-first century.

Table 4.3 Consumptive Uses Projections 1975-2000

Consumptive Uses Projections	1975*	1980	2000
CFS	4,900	2,900-5,600	5,700-18,400
CMS	140	82-159	161-238

*This year's figures represents estimated usage not projection.

Source: International Joint Commission, *Great Lakes Diversions and Consumptive Uses: A Report to the Governments of the United States and Canada under the 1977 Reference*, January 1985, pp. 30-37.

In 1980 one-third of Canada's and one-seventh of the United States' populations or approximately forty-million people were living in the basin. By 2020, the Commission projects the population will double. This increase will strain resources especially drinking water. Therefore, policies to maintain and improve water quantity and quality are necessary to protect the ecosystem. As Table 4.4 records, the census data from 1990 actually shows a decrease in population from the 1980's. However, this does not decrease the need to protect the ecosystem.

Agencies are established in both Canada and U.S. to monitor usage. Canada's Hydrographic Service maintains twenty-nine water levels gauges on the Great Lakes and twenty-seven on the St. Lawrence River. Another agency involved with Ontario Power

Generation also tracks water levels using gauges. For the U.S. the National Oceanic and Atmospheric Administration (NOAA) operates thirty one water level gauges on the Lakes and eighteen gauges on connecting channels. Tracking dates back to 1860. The Army Corps of Engineers and New York Power Authority also track levels.

Table 4.4 Population Around Great Lakes for U.S. 1990 and Canada 1991

Features	Units	Superior	Michigan	Huron	Erie	Ontario	Totals
Population	U.S. 1990	425,548	10,057,026	1,502,687	10,017,530	2,704,284	24,707,075
	Canada 1991	181,573	0*	1,191,467		1,664,639	8,484,290
Totals		607,121	10,057,026	2,694,154	11,682,169	8,150,895	33,191,365

Source: See U.S. EPA physical facts on website <http://www.epa.gov/greatlakes>

*Note that Michigan is totally within the U.S. boundary.

Currently water levels are determined using the 1980 International Great Lakes Datum (IGLD). It is updated every twenty-five to thirty years by soundings on navigational charts. The 1977 reference uses 1955 Datum readings. Soundings measure the difference in elevation between sea level at Father Point, Quebec, and any point in the basin.¹³ In addition to this long term tracking, lake levels are published routinely. The Lake Survey District of the U.S. Army Corps of Engineers published the data starting in 1952. Similarly, Canada Environment's and the Department of Fisheries and Oceans' forecasts have been published weekly since 1973.

¹³The earth's crust in the region has had differential movement affecting the elevation readings so identifying the year is important when using this datum. This was designed to provide official datum specifically for the St. Lawrence Seaway and Power Project. Dr. Tom Croley, interview by author, 23 July 2001, GLERC: Ann Arbor, MI.

Significant, consistent and comparable data are at the core of solving regulatory problems. Connected to this, most diversion measurements are given in cubic centimeters per second (cms) or cubic feet per seconds (cfs). For example a release of two-thousand (2,000) cfs is equal to one-billion-three-hundred-million (1,300,000,000) gallons of water per day. One cfs is then equal to about six-hundred-fifty-thousand (650,000) gallons of water per day. With some quadrillion (15 zeros) gallons of water in the Great Lakes today, some releases may seem insignificant but in the future a water bottling company could profit exporting one-million (1,000,000,000) gallons of water per day. This could mean the drying up of a tributary, thus, damaging other interests in the ecosystem.

To give the reader some further idea of the amounts of water being discussed, mean outflows of the six lakes were as follows from Tables 4.5 and 4.6: Lake Superior measured thirty-one-thousand-seven-hundred (31,700) miles in water surface with a maximum depth of one-thousand-three-hundred-thirty feet (100,330) and a mean depth of four-hundred-eighty-seven (487) feet; it had a mean outflow of seventy-five-thousand (75,000) cfs and an extreme range fluctuation of three point eight (3.8) feet. Lake Michigan had a mean outflow of fifty-one-thousand (51,000) cfs.¹⁴ According to Tom Croley, another relevant measure is acre-feet which is used to measure volume of reservoirs. Dr. Tom Croley is an hydrologist with the Great Lakes Environmental

¹⁴Mean outflows are provided by the Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data, 1900-1978; the International Great Lakes Diversions and Consumptive Uses study Board, "Great Lakes Diversions and Consumptive Uses Report to the International Joint Commission, September 1981, 2-7. (Table 2-1).

Research Center in Ann Arbor and a representative on the IJC's Study Plan of Lake Ontario, and a task team leader of Study Plan 2001. ¹⁵

Table 4.5 Mean Out Flows of Lakes

Lakes	Superior	Michigan	Huron	Erie	Ontario	St. Claire	Total mean outflow
Mean Out-flows cfs	75,000	51,000	180,000	203,000	280,000	184,000	931,000

Table 4.6 Great Lakes by Depth and Volume

Feature	Units	Superior	Michigan	Huron	Erie	Ontario	Totals
Average depth	feet	483	279	195	62	283	
	meters	147	85	59	19	86	
Maximum depth	feet	1,332	925	750	210	802	
	meters	406	282	229	64	244	
Volume*	cubic miles	2,900	1,180	850	116	393	5,439
	cubic meters	12,100	4,920	3,540	484	1,640	22,684

*Note: Volume and depth measured at Low Water Datum 1985
See U.S. EPA website Physical Facts at <http://www.epa.gov/greatlakes/>

The Great Lakes Commission in Ann Arbor, Michigan has been working with other agencies such as the GLERC to achieve a consistent data base.¹⁶ With two countries and numerous agencies taking water level readings at difference places and

¹⁵ Dr. Tom Croley, interview by author, 23 July 2001, GLERC: Ann Arbor, MI.

¹⁶GLC, *Project Work Plan - A Water Resources Management Decision Support System for the Great Lakes*, December 2000 Buffalo, NY.

times, a coordinating plan to make the data consistent is necessary for meaningful use. This has been an on going recommendation of the IJC and is close to coming to fruition. The GLC's Water Resources Management Decision Support System outlines plans to study consumptive uses and diversions. It focuses on compiling data from all states and provinces establishing an available information base for decision makers and the public.

Summary

We have thus far reviewed the text of the 1977 Reference on Diversions and Consumptive Uses and summarized the International Joint Commission's 1985 recommendations on these issues, in order to provide an understanding of the problems associated with fluctuating water levels on the Great Lakes. For example, having a mechanism established to monitor these vacillations and their effects, as well as to collect accurate, comparable data, was a primary criteria for the IJC to accomplish a successful outcome on this issue.

The descriptive passage on the geophysical aspects of the Great Lakes focuses on the import of solving the problems associated with the reference. Vast amounts of water and their usages are affected by minute fluctuations so that even a small diversion may have immense repercussions on property and the environment and affect shipping, recreation, and navigation interests. Having given the reader this background on the issues we can now develop the political framework in which the reference took place. To do this we look at aspects of political leadership, state and provincial political standings, trends in appointments and fiscal support. We expect these factors to reinforce notions

suggested from the literature on controversies and debates concerning the IJC's strengths and weaknesses and further delineate internal and external constraints on its effectiveness in this case reference.

Political Stability and Change: Trends in Elections,
Appointments, and Fiscal Support

Overview: the 1970's and 1980's

During the 1970's, the overarching theme in Canadian politics was the battle over provincial and federal rights in the revision of the constitution. 'Bring it home' was the motto of the decade. The debate on the amendment process to the constitution resulted in the patriation of the constitution and Charter of Rights in 1982.¹⁷ Quebec dissented.

The transition of power from the Liberals to the Conservatives colored this time in Canadian politics. This refocus was demonstrated by the shift in administrations from Pierre Trudeau to Brian Mulroney. In the 1960's and 1970's, the Liberal and Conservative parties allied towards achieving an independent economy and a distinctive culture from the U.S. This strategy was reinforced by Nixon's speech to the Parliament in 1972; the National Democratic party also used the notion of nationalist issues on its platform in the House of Commons during the 1972 and 1974 elections.¹⁸ The issue of

¹⁷W.L. White and R.H. Wagenberg, R.C. Nelson, *Introduction to Canadian Politics and Government*, Fourth edition (Toronto: Holt, Rinehart and Winston of Canada, 1985), 40-44; Quebec dissented in the vote.

¹⁸The Liberal party promoted mildly nationalistic policies in 1980; Anthony Westell, "Economic Integration with the U.S.A.," in *International Perspectives*, November/December 1984, 5-7; White et al, *Introduction*, Seventh Edition, 93-94.

Quebec's independence lost momentum after it failed to achieve a majority in the 1980 provincial referendum.

Twelve issues were up for debate that would change the nature of Federalism in Canada. Important to the federal government's agenda were issues concerning patriation of the constitution and mechanisms to amend it, incorporating a Charter of Rights within the constitution, reforming federal institutions such as the Supreme Court and the Senate, and preserving federal control over the economy. Ontario and New Brunswick supported the Federal agenda. Important to Alberta was provincial control over resources. Newfoundland was concerned about provincial control of fisheries and off-shore resources. Quebec wanted provincial control over linguistic and economic policies.¹⁹

To characterize the U.S. during this period, the overarching theme was loss of presidential legitimacy with the Watergate scandal and resignation of President Richard Nixon. The withdrawal of troops from Vietnam ended a period of what critics characterized as imperialistic aggression by the U.S. towards the Vietnamese people. Proponents characterized the conflict in Southeast Asia as necessary in the battle between democracy and communism.²⁰ The transitions from presidents Harold Ford to Jimmy Carter and then to Ronald Reagan changed the political palate significantly. In 1980, there were economic shifts in power from the Mid-west to the Western states.²¹

¹⁹White et al, *Introduction*, seventh edition, 51.

²⁰Westell, "International Perspectives," 6.

²¹Tom Washington, Executive Director, Michigan United Conservation Clubs stated that "...Though we may be losing our clout, the eight states of the Great Lakes Basin still have a third of the House of Representatives in Washington. I am concerned

International events included the Iranian revolution of 1978-79, the rise of Khomeini, and the 1976 Lebanese civil war (which is unsettled with Syrian forces still present today). These events led to the emergence of militant organized, internationalist terrorist groups such as Islamic Jihad and Hezbollah. Similar organizations have become a major international threat to western civilization today. Disturbing situations, such as the attack on the Marine barracks and the U.S. embassy in Beirut, grabbed the attention of the nations of the West during this time. The Soviet-Afghan war also colored this period along with the beginnings of Perestroika and Glasnost.

In the hemisphere of the Americans, there was the rise of the Sandinistas in Nicaragua, the escalation of the El Salvadorian war and increasing violence in Guatemala resulting in civilian slaughter. These events coalesced into a new military type of American intervention in Latin American politics which focused on the one hand to expand democracy and the other on to interdict the drug trade militarily. This was in part a response to increasing problems of drugs use in the U.S. and Canada and the beginnings of the War on Drugs. Recovery from the Oil Embargo of 1973-74 had lasting effects on energy policy throughout the continent and heighten fears of foreign economic dependence.

On the North American continent, the GLWQA particularly effected the relationship of the IJC, the U.S. and Canada with the creation of the Great Lakes

that we don't appear to have the leadership to coordinate that massive body of Congress which comes from our Basin into action to ensure and guarantee that this water stays here where it belong." Joyce Foundation and the GLC, Mackinac Island, MI: Upper Great Lakes Governor Conference 1982, 80.

Regional Office in Windsor and additional tasks. It emboldened the environmental movement in both countries and focused attention domestically on clean water and air, conservation, and wildlife protection.²²

Canada: Stability and Continuity within the IJC under Trudeau's Leadership

A look at national and provincial elections during this period sheds light on political trends during the 1970's and 1980's. In Table 4.7, the Liberal party dominated Canadian national politics in the 1960's and 1970's. Its traditional stronghold of support was Quebec, the Prairie and Atlantic provinces. It was not as popular in the western provinces. However, the Liberal party was losing its grip on power which culminated

Table 4.7 Canadian Parliamentary Elections

Party Seats	8 July 1974	22 May 1979	18 February 1980*	4 August 1984
Liberal Party	141/264 [53.4%]	114/282 [40.4%]	147/282 [52.1%]	40/282 [14%]
Progressive Party	94/264 [36%]	136/282 [48.2%]	103/282 [36.5%]	211/282 [75%]
NDP	16/264 [6.1%]	26/282 [9.2%]	32/282 [11.3%]	30/282 [11%]
Social Credit	11/264 [4.1%]	6/282 [2.1%]		
Other	1/264			1/282

Source: General election result <http://www.parl.gc.ca> See information about historical, party elections.

* 1980 was the year of the Quebec referendum on sovereignty.

with the resignation of Pierre Trudeau on 1979 and again in 1984. John Turner, who succeeded him in party leadership, could not stamp out the legacy of failed economic policies and corruption.

²²Mark Sproule-Jones, *Restoration of the Great Lakes: Promises, Practices, and Performances*, (UBC Press: Vancouver and Toronto), 2002.

In Table 4.8, the Progressive Conservatives under the leadership of Quebecker, Brian Mulroney, were finally able to loosen the grip of power from the Liberal party. The New Democratic party (NDP) under the leadership of Ed Broadbent gained leverage as a third party climaxing with thirty-two seats in the 1980 elections. According to articles from the *Globe and Mail* at that time, Trudeau's successor, Brian Mulroney, was plagued with scandals at the outset of his administration.²³

Table 4.8 Succession of Prime Ministers from 1979-1988

Elections	Dissolution	Prime Minister	Party Affiliation
8 July 1974	1979	Pierre Elliot Trudeau	Liberal
22 May 1979	1980*	Joe Clark	Progressive Conservative
18 February 1980		Pierre Elliot Trudeau	Liberal
**	1984	John Turner	Liberal
4 September 1984	1988	Brian Mulroney	Progressive Conservative

Note: * Vote of Non-confidence on 13 December 1979.

**On 30 June 1984 John Turner was sworn into office of Prime Minister. He was elected leader of the Liberal party at June 1984 Convention after Trudeau announced intention to retire on 29 February 1984.

Source: General Election results [Http://www.parl.gc.ca](http://www.parl.gc.ca) .

The two provincial states with Great Lakes interests are Ontario and Quebec. In Ontario the NDP and Liberal parties both regained some support in provincial election of

²³ Economics Minister Marcel Masse was alleged to have overspent in 1984 election in which he was later absolved and returned to his position. Then Defense Minister Robert Coates resigned in February of 1985 after visiting a West German sex club. More resignations followed in 1986 and 1987. Mulroney Party maintained a mass majority in the House of Commons until he called for elections in 1989.

1985. The result was that the Liberal party in Ontario formed a minority government allying themselves with the NDP to muster support for their policies. To do this the Liberal party had to accept some of the NDP's socialist agenda. Nationally in the 1980's policies moved away from economic independence and were replaced by policies promoting economic continental integration eventually resulting in changes to General Agreements on Trade and Tariffs (GATT) in 1987 and then the signing of the North American Free Trade Agreement (NAFTA) in 1993.²⁴

Table 4.9 Provincial Election Results in Ontario

Ontario Party Seats	1977	1981	1985
Liberal Party	34/125 [27.2%]	34/125 [27.2%]	48/125 {38.4%}
New Democratic	33/125 [26.4%]	21/125 [16.8%]	25/125 [20%]
Progressive Conservative	58/125 [46.4%]	70/125 [56%]	52/125 [41.6%]

Source: Legislative elections <http://www.parl.gc.ca>;
<http://www.electionsontario.on.ca/results/history/composition>.

The 1976 election was significant in Quebec history and had repercussions nationally with the institutionalization of the French language and culture, i.e., bilingualism. The election outcome saw a complete shift in party leadership from Bourassa's Liberal Party to Rene Levesque's Parti Quebecois (PQ). The PQ had a strong majority in 1976 yet the Liberal party won by a landslide in 1985 as shown in Table 4.10. Parti Quebecois was created by Rene Levesque and emerged on the political scene in the

²⁴Westell, 1984, 18, 13.

Quebec 1976 elections supporting policies for an independent Quebec with only an economic association with Canada.²⁵ When Levesque decided to replace the push towards autonomy with more urgent economic issues, it caused a split in the party in 1984 and the Liberal party was able to make a resurgence in the 1985 Quebec elections. The referendum on pursuing a path towards independent statehood was voted on the 20 May 1980 resulting in 59.56% votes to abandon independence and 40.44% to pursue it.²⁶ Bourassa came back to lead his party to victory in the 1985 election over PQ's Pierre Marc Johnson.

Table 4.10 Provincial Election Results in Quebec

Quebec Party Seats	1976	1981	1985
Parti Quebecois	71/110 [64.5%]	80/122 [65.6%]	23/122 [16.9%]
Quebec Liberal Party	26/110 [23.6%]	42/122 [34.4%]	99/122 [81.1%]
Union National	11/110 [1%]		
Ralliement Crediste	1/110		
Party National Populaire	1/110		

Source: Legislative election results <http://www.parl.gc.ca>; <http://www.assnat.qc.ca>; <http://gouv.qc.ca/vision/institutionsPolitique>; <http://www.encyclopedia.thefreedictionary.com>.

We expect that provincial and tribal rights were still a popular issue in Quebec and Ontario contrary to changes in national policies towards integration with the U.S. on

²⁵Westell, 1984, 9.

²⁶ Further addressing reforms for provincial-federal power structures, Meech Lake and Charlottetown Accords subsequently failed to be enacted. On October, 20, 1995 a close contest was held on yet another referendum on Quebec independence reflecting the majority belief that fiscal and economic problems of high unemployment and slow growth could be handled under current institutional arrangements.

trade and security which might explain this contrary trend apparent in provincial and national elections.

In sum, significant for understanding the political context of the IJC's 1977 reference, Tables 4.7 and 4.8 indicate that the Liberal party dominated appointments to the IJC from 1974 through 1982 providing continuity for appointments to the Canadian section of the IJC. As indicated in Table 4.8, the 1984 general elections ushered in a new era of politics favoring privatization and deregulation under Brian Mulroney.

The United States Looking for Legitimacy:
Continuity and Stability within the IJC under Reagan's Leadership

The United States' political system is dominated by two parties, the Republicans and Democrats. The Green and Reform parties are minor ones. They have acted as spoilers taking votes away from the major parties to effect elections. These parties and independent candidates have seen success more widely in state and local elections. Perhaps James Bryce, a British scholar of comparative politics, most interestingly described the two dominant parties by the following statement:

...Neither party has anything definite to say on these [free trade, civil-service reform, foreign policy] issues; neither party has any principles, any distinctive tenets. Both have traditions. Both claim to have tendencies. Both have certain war cries, organizations, interests, enlisted in their support. But those interests are in the main the interests of getting or keeping the patronage of the government. Tenets and policies, points of political doctrine and points of political practice, have all but vanished. They have not been thrown away but have been stripped away by Time and the progress of events, fulfilling some policies, blotting out others. All has been lost, except office or the hope of it.²⁷

²⁷James Bryce, *The American Commonwealth*, Second edition, revised, 2 (1950): 20; quoted in Herbert Agar, "The Parties and the Union," in *Political Parties and Political Behavior*, eds. William Crotty et al (Allyn and Bacon, Inc.: Boston 1966).

This may be somewhat cynical but it captures perplexing observations about the U.S. political system from a comparative political point of view. Key to the difference between party systems in the U.S. and Canada are perhaps explained concisely by party discipline. Canada's parliamentary system demands strict adherence to party line while the U.S. party system is characterized more by local allegiance, political bargaining, factional ties, and power of personality rather than party loyalty. This is a simplistic caricature, but for the purpose of this chapter, it touches on a relevant nuance of U.S. politics.²⁸

An overview of Congress is provided in Table 4.11 and 4.12 below on the aggregate number of seats for the Republican and Democratic parties in the House of Representatives and the Senate for the 94 through 99 Congresses. These tables provide rudimentary evidence of the leadership of the Democrats during the years of the reference. The balance of power changed during the 96 Congress. During this congress the IJC released its final report on Diversions and Consumptive Usages to the governments. This decline in power of the Democratic party was similar to the decline in power of the Liberal party in Canadian national politics.

The Democrats retained the majority in the House until 1985. Then, under Ronald Reagan's second term, the Republicans consolidated power by gaining the majority.

Table 4.11 and 4.12 demonstrate pivotal changes in party dominance for the House in the

²⁸ Based on the assumption that the Democratic party is more sensitive and supportive of environmental issues while the Republican party places higher priority on military strength and economic development. Anecdotally, Trudeau and Carter amended the GLWQA while Reagan's and Mulroney's administration have been characterized as militarily and economically driven.

99 Congressional elections and the Senate in the 97 Congressional election. The 1985 House elections show the dramatic decline in the Democratic's seats and thus influence.

Table 4.11 House Elections 1975-1987

House of Reps 1975-1987	94 Congress 1975-1977	95 1977-1979	96 1979-1981	97 1981-1983	98 1983-1985	99 1985-1987
Democrats	291	292	277	242	269	182
Republicans	144	143	158	192	166	253

Source: See http://clerk.house.gov/hisHigh/Congressional_History. Note that in the 97 Congress there was one Independent representative.

Table 4.12 Senate Elections 1975-1987

Senate 1975-1987	94 Congress 1975-1977	95 1977-1979	96 1979-1981	97 1981-1983	98 1983-1985	99 1985-1987
Democrat	60	61	58	46	46	47
Republican	38	38	41	53	54	53
Independent	1	1	1	1		

Source: Bureau of Census, *Statistical Abstract of the United States 1977-1985, National Data Book and Guide to Sources*, U.S. Department of Commerce, Printing Office: Washington, D.C., 245.

These facts concerning the party strength at the national level in Canada and the United States colored the atmosphere in which the IJC was conducting its investigation. This change in political power from Democratic to Republican in the presidency, and the Senate by 1981, and lessening of Democratic party strength in the House between the 95 and 99 Congresses coincided with resignations and vacancies within the Commission which resulted in delays of the reference report .

A look at the political climate of the Great Lakes states adds an important dimension to the discussion. The Great Lake states are Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin. According to Table 4.13, there were four Republican and four Democratic governors between 1974 and 1977.

Table 4.13 Governors of Great Lakes States 1974-1984

Governors	1974	1976	1978	1980*	1982	1984
Illinois*		James R. Thompson (R)			James R. Thompson (R)	
Indiana*		Otis R. Bowen (R)		Robert Orr (R)		
Michigan	William Milliken (R)					
Minnesota	Wendell Anderson (D)		Albert H. Quie (R)		Rudy Perpich (R)	
New York*	Hugh Carey (D)				Mario M. Cuomo (D)	
Ohio	James Rhodes (R)				Richard F. Celeste (D)	
Pennsylvania	Milton Shapp (D)		Richard Thornburgh (R)		Rames J. Blanchard (D)	
Wisconsin	Patrick J. Lucey (D)		Lee Dreyfus (R)		Anthony Earl (D)	

Source: *Statistical Abstract of the United States 1977-1985, National Data Book and Guide to Sources*, U.S. Department of Commerce, Bureau of Census, Printing Office, Washington, D.C., p.509, (105 edition) 248, (106 edition), 251. * Note that in 1981 Reagan appointed Commissioners from IL, IN, and NY.

The 1978 elections changed the party leadership in Minnesota, Pennsylvania, and Wisconsin to Republican governors so that the balance was 6 Republicans and 2

Democrats. The 1982 elections changed party standing again this time in Ohio, Pennsylvania, and Wisconsin by choosing Democratic governors. The balance in 1984 stood again at 4 Republican and 4 Democratic governors. The 1982 Upper Great Lakes Governors conference revealed that the attending Republican governors were united in their regional economic concerns.

The composition of elected state legislators in terms of party affiliation describes another layer of the political complexity of the case study since the IJC relies on not only federal but state and provincial agencies for qualified personnel. Table 4.14 provides a glimpse of party changes and strength in the legislatures of the Great Lakes during the reference. This can be taken into account with the resulting changes in gubernatorial elections.

There are some discernible trends in the Great Lakes' state legislative elections during this period. States that maintained a Democratic majority in their upper houses were Illinois, Minnesota, and Wisconsin. States that maintained a Democratic majority in their lower houses were Illinois, Michigan, New York, Ohio, Pennsylvania, and Wisconsin.

Republicans maintained a majority in the upper houses of Indiana and New York. They also maintained the majority in the lower house of Indiana. Interestingly, states that changed from a Democratic majority to a Republican majority included Michigan, Ohio, and Pennsylvania in their upper houses and Minnesota in its lower house. Most changes in party majorities were from Democrat to Republican. Shifting partisanship is prevalent in both houses.

Table 4.14 Party Elections in State Legislatures 1974-1984

State Legislatures	1974 D / R	1976 D / R	1978 D / R	1980* D / R	1982 D / R	1984 D / R
Illinois* Upper House Lower House	34/25 101/76	34/25 94/83	32/27 89/88	30/29 86/91	33/26 70/48	31/28 67/51
Indiana* Upper House Lower House	23/27 56/44	28/22 48/52	21/29 46/54	15/35 35/63	18/32 43/57	20/30 39/61
Michigan Upper House Lower House	24/14 66/44	23/13 68/42	24/14 70/40	24/14 64/46	20/18 63/47	18/19 57/53
Minnesota Upper House Lower House	38/28 103/31	48/18 104/30	47/20 67/67	45/22 70/64	42/25 77/57	42/24 65/69
New York* Upper House Lower House	26/34 88/62	25/35 90/60	25/35 86/64	25/35 86/63	26/35 97/52	26/35 94/56
Ohio Upper House Lower House	21/12 59/40	21/12 62/37	18/15 62/37	15/18 54/45	17/16 62/37	15/18 58/40
Pennsylvania Upper House Lower House	29/20 114/89	29/19 118/84	27/23 100/102	23/25 100/103	23/27 103/100	23/27 103/100
Wisconsin Upper House Lower House	19/14 63/36	23/10 66/33	21/10 60/39	19/14 59/39	19/14 59/40	19/14 52/47

Note: 1974 and 1976 data taken from Statistical Abstract 1978, 509. 1978 data taken from Statistical Abstract 1979, 51. 1980 data taken from Statistical Abstract 1982-1983, 487. The 1982 and 1984 data taken from Statistical Abstract 1985 (edition 106), 249, 251.

* Note that Reagan made IJC appointments from these states of IL, IN, and NY in 1981.

Concerning significant elections, 1980 election was important for Illinois' lower house and Pennsylvania's upper house. In 1984 Michigan's upper house and Minnesota's lower house shifted to Republican majorities. Ohio's upper house saw swings in majorities from Democratic to Republican in 1980, then back to Democratic in 1982, then back to Republican in 1984. Other elections denoting changes in party leadership were

1978/80 in Minnesota's lower house (tie then back to favor the Democrats) and 1976 in Indiana's upper (Republican to Democrat) and lower houses (Democrat to Republican). These elections mirrored political swings which were reflected as resignations and vacancies on the IJC.

These tables provided a snapshot of what was happening in the individual states politically during this period. In Chapter Five there is a more substantive discussion concerning the Great Lake Governors and public hearing in which certain individual and organized interests from the states voiced their opinions on important issues during this period.

Trends in Commission Appointments

During the prolonged period between the time the reference was given to the IJC and the time it gave its report to the governments, the International Joint Commission membership changed along with administrations in both countries. The Trudeau administration was responsible for the Canadian appointments to the IJC while the Nixon, Ford, Carter and the Reagan administrations were responsible for the appointments to the U.S. section. According to scholarly perceptions, the appointments should reinforce political impartiality required for successful performance of its mission. A look at the Commissioners and their backgrounds helps flesh out the nature of the IJC.

Election results (see Table 4.7) demonstrate that the Liberal party dominated the Canadian politics during the reference even as they were losing support to the Conservatives. We can see in Table 4.15 that the Trudeau administration controlled the appointments to the IJC between 1969-1984. Appointed were significant figures in

provincial politics to the Commission that seemed to represent merit more than patronage.

Table 4.15 Canadian Commissioners 1969-1985

Canadian Commissioners	Service dates	Party/Prime Minister
Bernard Beaupre*	Nov. 1, 1969 - Dec. 31, 1980	Liberal Party - Trudeau
Keith A. Henry	May 25, 1972 - Oct. 10, 1979	Liberal Party - Trudeau
MAX COHEN *	Oct. 24, 1974 - April 15, 1979	Liberal Party - Trudeau
Jean R. Roy*	March 26, 1979 - Aug. 17, 1981	Liberal Party - Trudeau
STUART M. HODGSON	April 15, 1979 - Jan. 31, 1981	Liberal Party - Trudeau
E. RICHMOND OLSON **	Aug. 13, 1981 - Aug. 12, 1985	Liberal Party - Trudeau
Charles M. Bedard*	Aug. 13, 1981 - Aug. 12, 1984	Liberal Party - Trudeau
J. B. Seaborn*	Dec. 20, 1982 - Jan. 31, 1985	Liberal Party - Trudeau

Note: Chairs are in bold. *Members from Great Lake provinces.** Olson was Acting Chair through Dec. 19, 1982. Source: Correspondence from Michael Kolodner for Frank Bevacqua at the Washington, D.C. office of the IJC dated February 11, 2003 - 4:02PM

Jimmy Carter was elected President in 1975 and Ronald Reagan in 1979. They represent two very different administrations in American politics in both vision, priorities, personalities and methods. Their appointments to the IJC reflects these differences. For instance, Carter appointed the first woman to the Commission. His appointees were significant because they were considered environmentalists. In the past most appointments had backgrounds in engineering and strong political ties in their communities. Reagan's appointments to the Commission would appear to reward loyal political party activists.

With the Reagan administration there seems to be a shift from merit based technical backgrounds to political patronage appointees with Robert McEwen, Keith

Bulen and Donald Totten. U.S. patronage appointees appear to have longer terms especially under the Reagan's administration than the patronage appointments under Trudeau's administration. Another trend in merit appointments is shorter terms in both countries with the exception of Keith Henry and Bernard Beaupre. Patronage appointee's tenure tended to be longer and more numerous among U.S. Commissioners with exception of Jean Hennessey. U.S. appointments are characterized below in Table 4.16.

Table 4.16 U.S. Commissioners 1973-1989

Commissioners	Service Dates	Party/President
Charles R. Ross	1972-1980 (approximation)	Republican - Nixon
Victor L. Smith	July 23, 1973 - May 25, 1978	Republican - Nixon
HENRY P. SMITH III	April 5, 1975 - March 4, 1978*	Republican - Ford
ROBERT J. SUGARMAN	April 26, 1978 - March 4, 1981	Democrat - Carter
K. Curtis	May 16, 1978 - Sept. 28, 1979	Democrat - Carter
Jean L. Hennessey	Oct. 6, 1979 - March 4, 1981	Democrat - Carter
ROBERT C. MCEWEN	Oct. 30, 1981 - Oct. 9, 1989	Republican - Reagan
L. Keith Bulen	Sept. 25, 1981 - Oct. 9, 1989	Republican - Reagan
Donald L. Totten	Sept. 25, 1981 - Oct. 9, 1989	Republican - Reagan

Source: Correspondence from Michael Kolodner for Frank Bevacqua at the Washington, D.C. office of the IJC dated February 11, 2003 - 4:02PM. Information on Charles Ross was found in *IJC 1977 Annual Report* and Robert Spencer, John Kirton, Kim Nossal (ed) *The IJC Seventy Years On*, Best Printing Co. Ltd., Don Mills: Ontario, 1981. Ross was appointed under Nixon. No bibliography was available.

* Unclear when Henry P. Smith left Commission; no biography was available.

Certain trends emerge from comparing the characteristics of the seventeen Commissioners. The majority of the appointees were from the Great Lakes Region and all were from boundary states or provinces with the exceptions of Sugarman from Connecticut. Nine were from Great Lake states and provinces. Most significant for the

1977 reference are Reagan's appointments. The only other Great Lake state appointee was Victor Smith from Illinois under Nixon. Three of Reagan's appointments in 1981 were from New York, Indiana, and Illinois. In 1981 New York had a Democratic governor (Carey); its upper house had a Republican majority and its lower house a Democratic majority. Indiana had a Republican governor (Orr) and Republican led upper and lower houses. Illinois had a Republican governor (Thompson) and a Democratic led upper house and Republican led lower house.

From the data in Table 4.17 on the next page concerning the states and IJC appointments, one might speculate that Reagan may have intended to reward individuals from these states or intentionally appoint representatives of these Great Lake states rather than boundary states in consideration of the binational agenda (the agenda is explored more fully in Chapter Five). In these states that appointments emanated from, Indiana's elections demonstrated solid Republican support while New York showed little Republican support electorally except in the legislature's upper house. Illinois' support was split with a Republican governor and Republican led lower house but a Democrat led upper house. With more details from Chapter Five on the politics of the reference more significant observations may be revealed about appointments.

Inclusive of the 1977 reference years (1977-1985) upon further examination of Canadian Commissioners, three were from Quebec and two were from Ontario and the rest were from boundary states. According to the election results in Table 4.10, the legislative assembly in Quebec was led by the Progressive Conservatives in 1976-85. Quebec's Liberal party would not gain power until 1985 elections.

Table 4.17 Commissioners Characteristics: Patronage or Merit

# Years of Service	Background	Education	State/Province	Merit/Patronage
Curtis (1)	NA	NA	NA	NA
H. Smith (3)	NA	NA	NA	NA
Ross (8+)	Attorney/farmer	LL.D.	Vermont	Merit
V. Smith (5)	Publisher	NA	Illinois	Patronage
Sugarman (3)	Attorney	LL.D.	Connecticut	Merit
Hennessey (2)	Philanthropy	BA	Washington/NH	Patronage
McEwen (8)	Attorney, State Senator, Congress, Army	LL.D.	New York	Merit
Bulen (8)	Government, Party, Army	BA, Doc JP	Indiana	Patronage
Totten (8)	Consulting, Engineer, State Senator, Party	NA	Illinois	Patronage
Henry (7)	Engineering	NA	British Columbia	Merit
Cohen (5)	NA	NA	Quebec, BC	NA
Beaupre (11)	Health Engineer	M. A & S	Quebec	Merit
Hodgson (2)	Lumber, Navy, Union	NA	BC, NWT	Patronage
Roy (2)	Construction, Union	NA	Ontario	Patronage
Olson (4)	Attorney, Government	LL.D.	NWT	Merit
Seaborn (3)	Government, Environment, Foreign Service	BA/MA	Ontario	Merit
Bedard (3)	Attorney, Government	LL. D., Doc. JP	Quebec	Merit

Source: IJC Annual Reports for 1977, 1980, 1982, 1985 and Commissioner biographies from Ottawa and D.C. offices of the IJC - correspondence with Michael Kolodner for Frank Bevacqua and Lenelle Fabien on Feb. 11, 2003 and IJC, *Seventy Years of Accomplishment: Report*, Washington D.C. and Ottawa, 1978-79.

According to election results for Ontario in Table 4.9, the Progressive Conservatives would dominate the legislative assembly until the 1985 elections when the Liberal party formed a coalition government with the NDP. The Premiers reflected these election results. Like Reagan, Trudeau's administration perhaps wanted to reward individuals from these provinces or represent these provinces on the Commission in order to shape its character according to his vision of boundary priorities.

Other trends concern the professional backgrounds of the appointees. In the late seventies backgrounds favored engineering and law with the exception of Mr. V. Smith being a publisher, and Mr. S. Hodgson, being a lumber industry and trade union activist. With the Carter administration we see a shift to a more liberal, environmental background with Mr. Hennessey and Mr. Sugarman. Legal backgrounds are popular with both presidents and prime ministers which is congruent with the IJC being a legal and scientific body.

Determining motivations on patronage and meritorious appointments is subjective. Appointees with government backgrounds would traditionally be thought of as a reward for service. Party and union activists are more traditionally thought of as patronage appointments. Engineering and legal backgrounds would traditionally be thought of as merit based because it provides a technical background on issues of binational law and environmental science. Based on biographies, Bulen's and Totten's backgrounds have elements of both merit and patronage but because of their party

activism, they are designated as patronage appointments.

Trends in the IJC's Fiscal Support: 1974-1985

In this section we expect to identify fiscal trends that will tell us something about government support of the organization in relation to its ability to reach consensus. The fiscal support that the IJC receives from the U.S. and Canadian governments offers some additional contextual information in relation to the reference. The way in which the data was presented in the IJC's annual reports does not provide much detail about expenditures nor does it calculate work utilized by the IJC from other government agencies. Some studies were generated by departments from other government studies already in progress or completed. There were no estimates on the costs of shared administrative resources for the IJC's investigations.

This data was calculated in U.S. dollars and Canadian dollars so they are not comparable in dollar amounts without knowing the exchange rates; however, the U.S. dollar was stronger than the Canadian dollar at this time. The fiscal cycles differed too; nonetheless, trends emerge. The expenditures do increase steadily over the time period at the U.S. Washington Secretariat and Great Lakes Regional Office in Windsor except for 1980.²⁹ Expenditures decreased for the Ottawa Secretariat between 1972-1974 (as compared to 1971-72) and 1977-1982 as the Liberal party's power waned. By 1982 the Ottawa Secretariat's expenditures were still less than those allotted for 1976-77. As

²⁹In 1982 according to IJC Annual Report, the Great Lakes Institute was founded by the University of Windsor and dedicated to maintaining the health of the Great lakes. A comprehensive collection of Great Lakes documents was installed at the IJC's Regional Office in Windsor.

Liberals lost power and right before Joe Clark of the Progressive Conservative Party became leader for a short time, the expenditures decrease slightly for the Great Lake Regional Windsor office between 1979-1980. This hints at a connection between Liberal party support and IJC funding. However, fluctuating increases and decreases may be a product of the economy and government fiscal constraints.

Table 4.18 IJC Fiscal Support Data 1971-1982

U.S. Canada*	U.S. Secretariat D.C.	Canadian Secretariat Ottawa	U.S. GL Regional Office Windsor	Canadian GL Regional Office
1971 1971-72	(U.S.\$) 128,500	(Canadian\$) 536,000	(U.S.\$)	(Canadian\$)
1972 1972-73	166,000	451,000		
1973 1973-74	256,500	504,000	22,000	206,000
1974 1974-75	314,000	873,500	152,000	598,000
1975 1975-76	369,000	1,230,000**	400,000	742,000
1976 1976-77	476,000	1,183,000	674,200	924,000
1977 1977-78	429,000	1,022,000	711,000	1,070,000
1978 1978-79	518,000	738,000	746,000	1,191,000
1979 1979-80	669,000	823,000	772,000	1,137,000
1980 1980-81	1,093,000	1,083,000	732,000	1,247,000
1981 1981-82	1,077,000	1,145,000	940,000	1,447,000**
1982	1,158,000**		940,000**	

*Different fiscal year than U.S.. ** Fiscal amount peaked. **Bold** represents decreases. Note: Estimated amount for U.S. 1981 and anticipated amount for Canada fiscal year 1981-2. Source: IJC, *1980 Annual Report*, Washington D.C. and Ottawa, 40.

Overall, Table 4.18 indicates a trend of increased financial commitment by both countries after the GLWQA was signed in 1972 establishing the Windsor office. Initially

in 1973 under Nixon, the base fiscal support was at U.S.\$22,000 for the Windsor office and in 1982 it had increased to U.S.\$940,000. In 1973-74 Canada's support totaled CAN\$206,000 for the Windsor office; it increased by 1981-82 to CAN\$1,144,700. These trends demonstrate an escalating commitment by the two governments to the IJC and the GLWQA. In 1971 fiscal support for D.C. office was at U.S.\$128,500; by 1982 it had increased to U.S.\$1,158,000. In 1971-1972 fiscal year Canadian support for the Ottawa office totaled CAN\$536,000. By 1981-1982 fiscal support had increased to CAN\$1,145,000.

With the caveat that the U.S. and Canadian economies suffered inflation, stagnation, recession, and the energy crises during the 1970's, a closer inspection of the data demonstrates that steady increases in funding were interrupted for the U.S. Secretariat in 1977 and 1981. Carter took office in 1977 and amendments were added to the GLWQA in 1978. Reagan took office in 1981. Funding from the U.S. decreased for the Windsor office in 1980 when Reagan was elected.

The Canadian economy was suffering from stagflation during the 1970's under the leadership of the Liberal party. We see a drop in support for the Canadian Secretariat office in 1972-1973, 1976-1977, and 1977-1978. In 1972 the GLWQA was signed creating the Windsor office. Further decreases are apparent before and during Clark's leadership of the Progressive Conservatives in 1978-1979. Then funding rebounds but still lower than the 1975-6 peak. Funding also decreased slightly for the Windsor office in 1979-80. These trends in U.S. and Canadian fiscal support of the IJC hints at the possibility that executive transitions and binational agreements may have had an affect on

IJC funding.

Summary of Findings on the Political Context from Lake Levels Diplomacy

The IJC stressed the importance of establishing a mechanism to monitor fluctuations in water levels on the Great Lakes in their 1985 recommendations towards achieving a successful outcome for this issue. Overcoming the technical problems, e.g, consistent data collection associated with the vast geo-physical aspects of the issue underline the complexities of regulating diversions and consumptive uses. In support of this Chapter's aims, we have provide an introduction to the issues of the 1977 Reference to better understand the IJC's performance.

Based on assumptions from the international governance and comparative policy literatures, we have further described the political context that framed the conditions of the reference. We examined into current events, institutional characteristics, political background of the Commissioners, and fiscal support for the IJC offices to lay the groundwork to gain a better understanding of this reference. This is a descriptive chapter but we expect that despite internal and external constraints on the process, the IJC Commissioners were able to reach a consensus but the governments were neither politically unwilling by 1985 to acknowledge the IJC conclusions nor respond to their recommendations.

International and Domestic Findings

Identified were competing international events concurrent to the reference. International events framing the reference period from 1977 - 1985 affected the priorities of U.S. and Canadian leaders. We suggest that more importantly domestic political

dynamics affected the binational success of the IJC on this lake levels reference.

By examining characteristics of domestic political institutions, trends emerged suggesting that changes in party politics at the national level affected IJC performance. Some significant external constraints on the success of the IJC were political events - Joe Clark's minority cabinet of 1979, Reagan's election of 1980, U.S. Senate elections of 1981, U.S. Congressional elections 1984, Brian Mulroney's election of 1984 - that coincided with such internal constraints as the Commissioners' resignations and disruptions in increased fiscal support from the federal governments. Repercussions from such events in domestic politics may have contributed to the Commissioners' ability to reach consensus by creating delays and disrupting continuity on the Commission with vacancies and new appointments. More questions may be raised than answered by these observations; however, we can further explore their contextual implications in the next chapter.

Overall in respect to domestic factors, the reference was framed by changes in policy direction in the U.S. with the election Reagan and political continuity in Canada under Trudeau's government. While the GLWQA empowered the environmental movement, it also transformed the U.S., Canadian, and IJC relationship with a new commitment to clean up the lakes and rejuvenate the region economically. Trends in elections appear to have reinforced this determination by the federal and state- provincial levels of government thus affecting IJC performance. Fiscal data before 1982 affirms this commitment. The establishment of the Windsor office and figures presented on IJC fiscal expenditures demonstrate an overall increase in funding, and thus support, to the IJC by

the governments between 1973-1982 along with the D.C. and Ottawa secretariats.

In sum, trends concerning provincial elections in Ontario and Quebec are in contrast to national party elections trends. While nationally the Liberal Party maintained a majority in Parliament until the 1984 elections (with the exception of Joe Clark's minority cabinet government in 1979), in Ontario the Progressive Conservative party's power peaked in 1981 only to fall to a minority government lead by the Liberals in 1985 elections.

In Quebec, the Parti Quebecois under the leadership of Rene Levesque gained a majority in the 1976 elections and maintained it until the Liberal Party defeated them in the 1985 elections. Quebec's politics at this time was framed by the separatism debate and influenced by changes in party strategy within the Parti Quebecois. Canada's national debate on issues concerning reform of federal arrangements dominated the political arena especially leading up to Quebec's referendum in 1980 and patriation of the Constitution Act and Charter of Rights in 1982. These trends indicate the challenge of provincial political complexities to the Commission and possible limitations on provincial commitment to further regulation of the Great Lakes.

Trends also emerged in the politics of the U.S. states. Gubernatorial elections of 1978 changed the political balance of the Great Lake states to favor the Republican Party but partisan balance was restored in the 1982 elections. Most changes in state legislative elections were from Democrat to Republican majorities. Therefore, we can say that frequent changes in party majorities of Great Lakes state legislatures, coupled with changes in party affiliation of the presidency and governorships, created an atmosphere of

political uncertainty that had a disruptive effect on the continuity of the Commission.

Nationally Brian Mulroney led the Progressive Conservative party after the 1984 elections; however, all IJC appointments we consider were under Trudeau's Liberal party government. Of the eight Canadian Commissioners who served during this time, three were appointed from Quebec and two from Ontario - three others came from boundary provinces. Of the appointments with information available to make a determination on their nature, five were based on merit and two on patronage. The year 1981 was critical to the IJC's membership because of new appointments including Mr. Bedard from Quebec, Mr. Olson from NWT, and Mr. Seaborn from Ontario. These findings concerning appointments suggest continuity within the Canadian section under the Liberal party leadership and partisan shifts within the U.S. section.

Political uncertainties predicated changes in the U.S. section. Of these appointments that have biographical information available, four of seven were from Great Lakes states and all appointed under Nixon's and Reagan's Republican administrations. Of Carter's three appointments, biographical information is available for two of them neither of which were from Great Lakes states. Significantly, between 1981-1985 Reagan made two appointments from the upper Great Lakes states and one from a lower states and none from other boundary states. The only Commissioner from a boundary state outside of the Great Lakes was Jean Hennessey. She was under Carter's administration and was originally from Washington State then she moved to New Hampshire. All would seem to be patronage appointments based on their non-technical backgrounds with the exception of Mr. Totten being both an engineer and party activist. Even with political

shifts in appointments, these observations only reinforce the reputation of the Commission as impartial and independent because of their ability to reach consensus on recommendations.

These findings contribute to both case studies by describing the political complexities of the domestic setting that affected the binational process. These contextual trends suggest that the governments' commitment to the Great Lakes and the GLWQA may have been affected by the institutionalization of Republican policies in the U.S. and the failure of Liberal policies in Canada. Further these findings suggest that the lapse of time from 1977 to 1985 of the reference and the change in U.S. administrations coupled with the new appointments added to the difficulty of the IJC's ability to gain consensus and maintain policy momentum on this regulatory investigation.

Conclusions concerning political context in respect to the 1977 Reference will be further discussed in Chapter Five. Also in the next chapter we explore the execution of the reference by looking at the role of the IJC as investigator, the nature of the issue, identification of stakeholders affected by regulating fluctuating water levels, the Commission's reaction to questions over science, federal and diplomatic considerations, and the governments' responses to the IJC's final report.

CHAPTER FIVE:
REGULATING GREAT LAKE WATER LEVELS

Lake Levels and the IJC: Mandate and Role

The IJC's investigatory and supervisory roles in water quantity management were established in the first half of the twentieth century and it has continued to undertake studies on regulating water flows as the governments have directed. In this respect, the IJC has instituted mechanisms to monitor projects and conditions along the boundary. It oversees going projects in the Great Lakes region. Its International Lake Superior Board of Control monitors levels on Lakes Superior, Huron, and Michigan. In 1977 the IJC recommended establishing the International St. Lawrence River Board of Control.¹ The 1977 Reference on Diversions and Consumptive Uses highlights its role concerning the St. Lawrence Seaway.

In the 1976 Final Report to the governments on regulating the Great Lakes, the IJC recommended further investigations.² The governments responded to this report by referring the issue of diversions and consumptive uses to the IJC for study. One output of

¹ IJC, *Regulation of Lake Superior Plan 1977*, (Ottawa, Ontario and Washington, D.C. 1977).

² International Great Lakes Diversions and Consumptive Uses Study Board, *Report to the International Joint Commission* (Ottawa and Washington, D.C.: September 1981), 2; see map 2-2 (1) - 2-3 (2).

the process was the 1981 Study Board Report. The Board's findings and the IJC's final report in 1985 are of interest to policy makers concerned with managing extreme lake levels and students of binational environmental organizational success.

The feasibility of better managing lake levels has been approached tentatively by both governments. The governments' reluctance to respond to these recommendations questions the extent of their commitment to regulating the Great Lakes. The IJC's role in this matter has largely been advisory except in the case of the St. Lawrence Seaway.

The basis of government reluctance to support further regulation is both political and administrative. As Susan Hansen suggests, given the growth and maturation of environmental, business, and citizen groups around the Great Lakes region, further regulation on water levels may prove to be unpopular because of the possibility of diverting water from the region and mandated changes in behavior.³ With the recent drops in lake levels, policy makers need to find common ground on alleviating extreme lake levels through further regulation while still being sensitive to economic and social effects of such policies. The IJC's role is to answer these science and policy questions and advise the governments.

Complicating the IJC's role is the problem of effective jurisdiction over diversions. Not all large diversions are under the auspices of the Boundary Water Treaty or special agreements between the two governments. In practice, domestic law and procedures have governed some large diversions, most small diversions and all

³Susan Hansen, "On the Making of Unpopular Decisions: A Typology and Some Evidence" *Policy Studies Journal* 13(1) 1984: 23-44.

consumptive uses. Each jurisdiction's laws and regulations on these matters vary. These legal regimes, or systems of rules, place few restrictions on consumption of water in localities around the Great Lakes in comparison to arid regions; however, improved water quality has been on the agenda since the signing of the Great Lakes Water Quality Agreement. Since the issue of water exports has emerged, a moratorium has been proposed in the Annex 2001 which is to be voted on by Great Lake governors and premiers in the spring of 2005.⁴

While these political and administrative factors impose significant impediments for government cooperation at multiple levels, the IJC has the capability to codify all these practices drawing on its expertise and established reputation if given political, technical, and financial support.⁵ It is in this sense uniquely positioned to set the agenda on Great Lakes water management.

Analytical Aims and Chapter Organization

This chapter has two primary aims. Drawn from past scholarly observations suggesting IJC reforms, we are interested in better understanding the role of the IJC as investigator and facilitator on issues specifically concerning water levels regulation and, drawing on Theodore Lowi's expectations on regulatory issues in general, to discern how

⁴Tom Henry, "Bush, Kerry both Spurn Lake Water Diversions: Draft Accord Seeks to Protect Resource," *Toledo Blade* (August 23, 2004), <http://www.toledoblade.com> .

⁵IJC, *Great Lakes Diversions and Consumptive Uses: A Report to the Governments of the United States and Canada under the 1977 Reference*, (Ottawa and Washington, D.C. January 1985), viii.

the nature of the issue has affected IJC performance. We described the political context in which the IJC executed this reference in Chapter Four and in this chapter we complete our investigation by identifying the players and their interests and then describing their interactions throughout the reference process while under the guidance of the IJC. We then use observations from both Chapters Four and Five to draw conclusions about the agency's success on this regulatory issue.

Given the IJC's record in creating monitoring boards in the past, we expect its role as investigator and facilitator to enable it to make recommendations that the governments would consider adopting to solve the regulation query. After review of the scholarly literature on IJC reforms, we do not expect the IJC's role to be rule enforcement. The Treaty limits the IJC's active role in implementation in this issue area to advise and oversight.

Drawing on Lowi's arena of power approach (Chapter One), we have made the assumption that alleviating extreme lake levels is a regulatory problem which shapes the politics surrounding the reference. We expect the domestic action, i.e., policy dynamics, to be in executive agencies as opposed to legislative or judicial arenas of power. Further, drawing on David LeMarquand's observations (Chapter Three), we expect that the will of the governments and the technical complexities of the issue play a role in IJC's success on this issue.

Having presented the 1977 Reference in the introduction of Chapter Four, we initiated this chapter with a discussion of the IJC's role and mandate which focused on the Commission's function as investigator and facilitator for the governments supported

by information from the 1981 Study Board Report, 1985 IJC Final Report, and the 1989 *Living with the Lakes* publication. Having specified Lowian expectations about the politics of the reference, the following section discusses setting the agenda on lake levels. This includes pre-GLWQA developments concerning the IJC and a discussion of its past record on boundary water regulation. We then focus on the political context including summary remarks from Chapter 4 about elections, appointments, and fiscal support of the IJC. This builds the platform to dive into the subject of regulation and complexity, interests and science. This section explores disputes over science which include report findings and the Commission's reaction to conflicting information. It then identifies the impact of fluctuating lake levels on diverse interests in the in order to describe the complexity surrounding the issue.

Subsequently, the section on regulation, complexity, federal systems and binational diplomacy explores how the Commission tried to mitigate pressures from public hearings, resignations, elections, changing administrations, and the signing of the 1985 Charter while it was conducting other boundary studies. It also outlines the priorities of the governors and premiers of the region and their role in the execution of the 1977 reference.

Lastly, the study comes full circle with a discussion of the 1986 Reference and the governments' response and provides an account of what has happened since the 1985 report on diversions and consumptive uses. The final section provides summary conclusions on the difficulty with IJC's role and mandate, what was and was not accomplished, strengths and weaknesses, and ends with comments on IJC effectiveness.

Setting the Agenda on Lake Levels

The lakes are of great importance to the U.S. and Canada as a shared resource. We now know that there is no surplus of fresh water. The Great Lakes waters are utilized for spawning, municipal water supplies, factory usage, farms, wetlands, hydro electric power, shipping, navigation, fishing, or recreation. At the time of the reference, the governments needed more information on the state of the lakes and existing usage.

Costs and benefits are associated with fluctuating levels. Riparian shoreline values are affected by flooding and erosion. Such interests supported developing technology to maintain favorable lake levels. Other interests supported developing technologies to divert water for economic gain. The main impetus for the 1977 reference were these invitations to regulate and exploit the waters of the Great Lakes.

From 1970 to 1988, annual lake levels had been above average. The years 1973-74 were an important impetus for the reference because the region experienced extremely high water levels.⁶ The period following the study, 1985-1987, also experienced extreme levels. Water levels below the annual average were experienced in the 1960's. These had associated adverse costs for transportation and commercial industries.⁷ In 1964 water

⁶Project Management Team, *Living with the Lakes: Challenges and Opportunities, Progress Report to the IJC* (Burlington, Ontario and Chicago, Illinois, July 1989), 57. Other high levels were experienced in 1929-30, 1952, 1973-74, 1985-56, 1997-98; low levels were mid-1920's, mid-1930's, and early 1960's; see <http://www.ijc.org> - *Protection of the Waters of the Great Lakes: Final Report to the Governments of Canada and the United States*, 1999 Reference August 2004, 6.

⁷ Project Management Team, *Living with the Lakes: Challenges and Opportunities, Progress Report to the IJC* (Burlington, Ontario and Chicago, Illinois, July 1989), 59.

levels dropped significantly resulting in problems with loading and unloading vessels, water pumping costs, dry rot of wooden piles, and increased dredging.⁸ It was hoped that extreme water levels could be controlled through new diversion schemes or regulation controls. As new usages emerged, varying interests competed for access to water. As demand increased, so did competition for water. Accurate data and analysis and resulting policies were needed to avoid conflicts among different interests both regionally and internationally.

The rise of the problem of controlling diversions and consumptive uses to the region's policy agenda has been driven by policy developments internal and external to the basin. Debate within the Basin over usage focused on the ability to maintain water levels for existing interests. External developments have focused on transferring waters of the Great Lakes to arid areas for development. This involved using Great Lakes waters to alleviate shortages in other regions. Four such projects that have been proposed and thwarted are the Chicago diversion, High Plains - Ogallala Aquifer, and the Great Recycling and Northern Development Canal project (GRAND).⁹ Each would exploit Great Lake waters by outside interests.

Pre-GLWQA Developments

At the turn of the century, Chicago's Sanitary Districts drew some 10,000 cfs of

⁸ Ibid., 84.

⁹IJC *Great Lakes Diversions and Consumptive Uses: A Report to the Governments of the U.S. and Canada under the 1977 Reference* (Ottawa and Washington January 1985), 43-44.

water from Lake Michigan for the removal of sewage from the Illinois Waterway to the Mississippi River and ultimately to the Gulf of Mexico. The 1909 Boundary Waters Treaty did not interfere with this diversion for sewage and consumptive uses because it was established prior to the Treaty. Jurisdiction over Lake Michigan was not raised in the Treaty negotiations and no reference to the lake was made in the Treaty.¹⁰

In 1926, John R. Freeman of the Chicago Sanitary District conducted a study entitled *Regulation of the Great Lakes and Effect of Diversions*. The report suggested that through regulation, the maximum and minimum water levels could be changed significantly.¹¹ Industrial use of the waters was imperative for continued growth of the U.S. economy. The ten-thousand (10,000) cfs withdrawal continued in Chicago until the Supreme Court ruled on the matter in 1930. The ruling (*State of Wisconsin, et al*, 278 U.S. 367-1929 & 281 U.S. 179-1930) reduced water taken by Chicago to one-thousand-five-hundred (1,500) cfs because of complaints from other Great Lake states.¹² However, Illinois and Mississippi were negatively affected by the reduction and looked to Congress to enact legislation authorizing an increased withdrawal in Chicago.

These two states presented arguments on diverting Lake Michigan water to the

¹⁰Ibid; Richard Wagner, "Canada's Impact on United States- Legislative Processes: The Chicago Diversion Bills," (University of Arizona: Research 1973), Series 14:3. Lake Michigan is entirely within the U.S. border.

¹¹ International Great Lakes Diversions and Consumptive Uses Study Board, *Report to the IJC*, (Ottawa and Washington, D.C., September 1981), Annex D, D-1.

¹² IJC, "*Great Lakes*," 1985, 43-44; Wagner, "Chicago Diversion," 3; E. Richmond Olson, Canadian Chair of IJC raised issue of linkage of diversions from Great Lakes to issue of U.S. jurisdiction of Lake Michigan in discussion Joyce Foundation, Upper Great Lakes Governors Conference, Panel Discussion on Diversions, 80.

House Public Works Committee on July 15-16 in 1953 (83 Congress, 1 Session).¹³ They argued that with the decreased diversion, algae and plant life flourished from effluent sewage rich in nitrogen and lacking in oxygen. This made navigation difficult in the Illinois Waterway and made marine life unsustainable. Economically the increase would aid barge traffic making profits for commerce. The Lockport project in Illinois would also profit with more water for hydro generation. Increased diversions from Lake Michigan and releases into the Illinois Waterway would be both economically and ecologically beneficial to the area.

Attempts by the U.S. Congress to increase the volume of water withdrawn from the Chicago diversion have been thwarted over the years. The year before the governments asked the IJC to investigate diversions, the Water Resources Development Act of 1976 authorized a study and demonstration program affecting the rate of the Chicago Diversion.¹⁴ The diversion increases would improve Illinois River water quality through dilution and reduction in shoreline erosion along Lake Michigan. However, Canada voiced objections to increased releases and further requested to be notified and consulted before Congress enacted related legislation.

Richard Wagner argues that Canada used peaceful interaction to influence domestic decision-making processes and institutions by joining U.S. domestic opposition to increased diversions.¹⁵ This behavior can be compared to interest group actions on

¹³Ibid., Wagner, "Chicago Diversion," 4.

¹⁴Reference to U.S. Public Law 94-587.

¹⁵Wagner, *Chicago Diversion*, 1.

domestic institutions. Canada used Congressional politics, state and industry alliances, pleas to the executive, and hints of retaliation in the negotiations of the Columbia River Treaty to protect its Great Lakes' water interests.¹⁶ This case is significant because it provides the historical context for the issue's rise to the binational agenda. However, more recent proposals were likely even more influential in pushing the issue to the top of the binational docket in 1977.

In 1976, Congress authorized a study to examine the feasibility of increasing water supplies to ensure economic growth of the High Plains with the Water Resource Act. There was concern at the time that the Ogallala Aquifer could not sustain the area's growth and agricultural production so some felt the need for replenishment alternatives.¹⁷ The aquifer spans the region from South Dakota to Texas and sustains municipal water supplies. Interstate water transfers from the Columbia River Basin or lower Mississippi River or even the Missouri River and Arkansas could replenish the aquifer but so could withdrawal of water from the Great Lakes. Ultimately conservation and efficiency were identified as preferred options for alleviating stress on the Ogallala water supply though a replenishment project could resurface at some future point.¹⁸

¹⁶Ibid., Wagner, "Chicago Diversion," 2.

¹⁷Bill Robinson, President, Upper Peninsula Environmental Coalition at Marquette commented that water is a global renewable resource but it may materialize elsewhere through the process of evaporation, transportation and respiration. The Ogallala Aquifer is an example of underground water that is not renewable though rechargeable. Diversions from Great Lakes could change patterns of rainfall and snowfall.

¹⁸Michael J. Donahue, Alicia A. Bixby, and David Siebert, "Great Lakes Diversion and Consumptive Use: The Issue in Perspective," *Case Western Reserve Journal of International Law* 18(19) 1986: 33.

The GRAND Canada Project was another effort to push the issues of diversions and consumptive uses to the binational agenda. This plan was proposed to alleviate water quantity shortages in semi-arid agricultural regions of Canada and the central U.S.. The project dates back to 1964 when T. W. Kierans proposed the Great Recycling and Northern Development Canal project to transfer water from James Bay to the Great Lakes and then pipe it to arid regions for agricultural use.¹⁹ This inter-basin water transfer would be equal to about forty percent of the annual runoff of the Great Lakes Basin.²⁰ The plan would provide a method of controlling water levels in the Great Lakes, thus benefitting transportation, shipping, riparian shoreline properties, and water quality. Conversely, it could have adversely affected fish and game populations. It would have unknown effects on weather patterns. Construction costs and legal questions also plagued the project.

A Canadian study from 1965 to 1974 explored importing more water from northern Ontario to increase hydro electric power generation in the basin. Engineers were unable to reach any conclusive answers on the issue at that time. Consequently in 1974, Ontario Water Resources Commission investigated the possibility of piping water to inland communities like Kitchener-Waterloo and cities around Toronto from Lakes Huron, Erie and Ontario. Conservation efforts in these communities have not proven

¹⁹Benjamin De Cooke, Chief of Great Lakes Hydraulics and Hydrology, U.S.ACE stated that during the 1960's, there was low water in the Great Lakes and in James Bay so the plan was abandoned in Joy Foundation, Conference, 78.

²⁰Ibid., Donahue et al, "Great Lakes Consumptive Uses," 40-41.

sufficient to satisfy water demands.²¹

Another more proximate factor contributing to the agenda was Lake Michigan's lowest water level in recorded history in 1964.²² This had adverse ramifications for the region's economy. In 1986, a year after the IJC's final report, the highest water levels were recorded. Dr. Tom Croley explained that a one inch variation in the lake levels could cost the navigation business one-million dollars in revenue a day.²³ In general the higher the water level, the better for navigation and shipping but the worse for riparian property owners. With reported high water levels, shipping has to slow down because of damage to riparian property.

Such traditional public work projects, which bring jobs and money into individual states through pork barrel politics, are the primary impetus for IJC fact-finding on water levels. These projects are studied and considered by domestic governmental institutions to satisfy constituents. Referring these matters to the IJC diffuses conflicting constituencies across borders. Objective binational studies are needed to de-politicize these issues so that better policy can be instituted. Domestic politics can be determined by such findings.

Role of IJC Prior to the 1977 Reference

²¹IJC, *Protection of the Waters of the Great Lakes: Final Report to the Governments of Canada and the United States*, (Ontario and D.C. February 2000), 62.

²² Dr. Helen Sellinger interview by author, 23 July 2001, GLERC, Ann Arbor, MI regarding on going studies of regulation plans. See International Great Lakes Levels Board (IGLLB), *Regulation of the Great Lakes Water Levels*, December 1973; IJC, *Further Regulation of the Great Lakes*, 1976..

²³Dr. Tom Croley, interview by author, 23 July 2001, GLERC, Ann Arbor, MI.

Studies on how diversions of water impact the surrounding ecosystem of a region aid decision makers in regulating new uses of water and maintaining traditional ones. Throughout the twentieth century, one of the IJC's roles has involved information gathering exercises to answer questions through scientific investigation and then advise the governments on a range of options.

Where the use of a shared water source is concerned, domestic politics can affect decision making process at the binational level. The historic role of the IJC on issues of boundary water diversions provides a way to better understand regional policies and related politics of the 1977 Reference. Official IJC reports on the question of regulating Great Lakes water levels date back to the turn of the century.²⁴ In order for the IJC to advise the governments on issues related to Article IX and to approve projects according to Article IV of the Boundary Waters Treaty of 1909, specific scientific studies have been undertaken in response to binational questions raised by domestic policies.

The past role of the IJC on regulating diversions has been established by cases involving the St. Marys River, Lake Erie, the Upper Niagara River, the Great Lakes-St. Lawrence Basin, and Lake Ontario. A brief description of these cases outlines the boundaries of the IJC on this issue area.

The St. Marys River forms the boundary between Lakes Superior and Huron. A hydro electric power facility was developed above the rapids on the river and expansions continued over the next one-hundred years. In 1911, engineering consultants for the

²⁴All these reports and studies in this section are referenced in International Great Lakes Diversions and Consumptive Uses Study Board, *Report to the International Joint Commission* (Ottawa and Washington, September 1981), Annex D, D-1, D-2.

Michigan-Lake Superior Power Company, Noble and Woodward, were Commissioned to propose a plan of regulation.²⁵ Subsequently, the IJC, pursuant to Article IV of the Boundary Waters Treaty, issued Orders of Approval for privately owned power plants to operate on both sides of the St. Marys River. The approved power diversion lowered water levels of Lake Superior; gated control works were completed in 1921 to counteract the diversions impacts. Presently, operations are controlled by Plan 1977 as assigned by the IJC to regulate fluctuations.²⁶ Power flows today are withdrawn and returned to the river as a diversion redirecting water around the river's natural channel.

The development of regulations for Lake Erie date to 1900 with a report on restoring navigation depths by the Deep Waterways Board.²⁷ Diversions of water from Lake Erie and the upper Niagara River were governed by Article V of the Boundary Waters Treaty of 1909. Under the treaty agreement, hydro power was regionally developed by Ontario Hydro and the New York Power Authority.²⁸ In 1920, the Speaker of the House of Representatives commissioned the Warren Report entitled *Diversion of Water From the Great Lakes and Niagara River*. This report explored dredging the

²⁵ Ibid., D-1. Though their plan was not adopted, their method of calculating Lake Superior 'supply factors' in relation to water levels continues to be used today.

²⁶IJC, *Regulation of Lake Superior Plan 1977*, (Ottawa and Washington, 1977).

²⁷ Great Lakes Diversions and Consumptive Uses Study Board, 1981, D-1.

²⁸Ontario Hydro is now known as Ontario Power Generation and is the second largest supplier of energy in North America. Mark Sproule-Jones, *Restoration of the Great Lakes: Promises, Practices, and Performances* Vancouver: University of British Columbia Press, 2002, 26; Further reading see A. Vining, "Provincial Hydro Utilities," in A. Tupper and G.B. Doern, eds., *Public Corporations and Public Policy in Canada*, (Montreal: Institute for Research on Public Policy 1981), 152-75.

Niagara River and the Great Lakes for improved navigation.²⁹ Article V of the Treaty was replaced by the Niagara River Water Diversion Treaty of 1950 between the U.S. and Canada. This Treaty established the International Niagara Committee which reports to the governments and the IJC on the amounts of water used for power diversions at Niagara Falls, the Welland Canal, and the New York State Barge Canals. The IJC has played a continuous role in the management of these diversions and the 1977 Reference included their review.

Agreement between the U.S. and Canada over the development of the Great Lakes-St. Lawrence basin was attempted in 1932 and again in 1941. Both these proposals aimed to establish a waterway for navigation as well as regulate power generation. The U.S. Senate did not approve either agreement. The issue of developing a mechanism to resolve disagreements concerning the diversion of water to and from the Great Lakes was particularly controversial. The governments looked to the IJC for advice in 1952 by applying for Approval of Orders to develop construction works for power generation on the St. Lawrence River. This involved obstructing the waterway, not diverting water. The result was the St. Lawrence Seaway and Power Project.

Subsequently, the IJC established the International St. Lawrence River Board of Control (ISLRBC) which still reports weekly to the IJC on the outflows from Lake Ontario to the St. Lawrence River. The Board meets biannually to develop regulation plans and upon the request of the IJC conducts studies. Studies concerning Lake Ontario's water levels resulted in amendments to the plan in 1956 requiring a reduction in

²⁹ International Great Lakes Consumptive Uses Study Board, 1981, D-1.

the range of fluctuation in order to provide dependable water flows for adequate hydro power generation, navigation depths and protection for shoreline to satisfy a variety of interests, i.e., municipalities, transportation, businesses, and property owners downstream of the Province of Quebec.

The IJC's role on managing Lake Ontario-St Lawrence Seaway has evolved with the ongoing work of the ISLRBC. Through establishment of the Board, the IJC has assured representation of navigation, recreation, energy, and riparian and that the lake levels are controlled within the given the existing structures. Regulation of Lake Ontario does not ensure full control of the water levels because of precipitation, evaporation, runoff, and inflow from Lake Erie can not be accurately forecast.³⁰

A proposal for Lake Ontario's regulation was submitted in 1963 to the IJC and has been in effect ever since.³¹ The current 1958-D Plan was developed from the IJC's 1965 Report on regulating these waters. The Moses-Saunders power dam near Cornwall and Massena are jointly owned by Ontario Power Generation and New York Power Authority. Some structures in Ontario near Long Sault and Iroquois are supervised by the IJC. Other projects in the St. Lawrence River not supervised by the Commission are three navigational locks in the international section, two at Massena, and one at Iroquois and hydro power and navigation facilities downstream in Quebec. There is capacity for the IJC's role to grow with further investigations on revising Plan 1958-D.

³⁰Dr. Tom Croley, Interview by author, 23 July 2001, GLERC: Ann Arbor, MI.

³¹ GLDCU Study Board, 1981, D-1; International St. Lawrence River Board of Control, *Regulation of Lake Ontario - Plan 1958-D*, (Ottawa and Washington, December 1965).

To supplement the IJC's investigation on managing Great Lakes' water levels, the U.S. Corps of Engineers tried to define problems concerning fresh water lakes around the world in a report entitled *Water Levels of the Great Lakes, Report on Lake Regulation* on December 1965. In general this added to what was known not only for the Great Lakes but for other unique basin systems.³² The Corps of Engineers included physical and economic aspects along with the standard hydraulics and hydrological data for analysis. This information enabled the IJC to compare the Great Lakes to other fresh water systems and improve its performance.

Regulation and Complexity, Interests and Science
in Executing the 1977 Reference

Jurisdictional Considerations and Trends:
Stakeholders in Diversions and Consumptive Uses

Important to the process of making recommendations to the governments concerning these matters was the cooperation of the states, provinces, relevant federal agencies and affected concerns of Indigenous Peoples, businesses, and citizens. Complexity increased with this regulatory issue because of the diversity of interests affected. The uncertainties of science related to managing fluctuating lake levels added further hindrances.

Different jurisdictions participated in the lake levels investigation. At the state level were Michigan's Department of Natural Resources; Illinois' Division of Water Resources; Pennsylvania's Department of Environmental Resources. The Great Lakes

³² Great Lakes Diversions and Consumptive Uses Study Board, 1981, D-1.

Basin Commission also participated. Specific provincial involvement came from Ontario's Ministry of the Environment; Quebec's Department of Natural Resources; Ontario's Ministry of Natural Resources, and Ontario Hydro. All of these had viable input into the IJC's assessment process determining impacts of diversions and consumptive uses on the basin.

At the U.S. federal level, agencies involved were the Corps of Engineers North Central Division, Detroit District, Buffalo District, and the Chicago District. Additional input was given by the U.S. Federal Energy Regulatory Commission, the Environmental Protection Agency, the National Oceanic and Atmospheric Administration. Federal Canadian agencies involved were the Department of the Environment, and the Department of Transport. Further, municipalities had a stake in water usage. These lists of participants hint at the institutional complexity of the issue and the need for inter-agency cooperation to move towards a viable policy.

As previously discussed, an example of conflicting interests was Chicago's quest for increased diversion flows through congressional action which ultimately clashed with Canadian and provincial interests as well as domestic shipping and hydro power interests. Neighboring states either opposed or supported the diversion on sanitary and consumptive usage grounds. Each locality represented a particular need which was uniquely theirs.

Domestic interests that participated in the reference process included shipping, navigation, transportation, electrical power generation, shoreline riparians, recreation, commerce and industry, commercial fishing, agriculture, and Indigenous Peoples, along with local, regional, and national groups representing different aspects of Great Lakes

ecosystem by giving their opinions on costs and benefits of diversions.³³ Recreational interests included a diversity of interests, e.g., boaters, waterfowl hunters, anglers, bird watchers, hikers, and nature enthusiasts. Riparian interests represented both seasonal and permanent residents and business owners along the shoreline. In the reference process, the IJC challenged these groups to play a role in the consensus building process by participating in public workshops.

A look at the basic costs and benefits of each of these interests produces a complex picture in Table 5.1. What may be economically beneficial to one state in shipping and power generation may cost another state in recreational proceeds. Disagreement was evident within individual interest groups. Disagreements tend to be centered on constituent locations on either the upper, middle, or lower lakes in regard to fluctuations.

Complicating these diverging perceptions on regulating lake levels is the ability to predict lake conditions. Scientific evidence to predict flooding patterns can drive economic interests in the question of where to locate a business and how much to invest in the enterprise. Uncertainty existed and perceptions of the government's ability to predict disasters were contingent on scientific methods and availability and reliability of data. Clear communication and information sharing was essential for preventing and or lessening the impact of likely disasters.

Table 5.1 Diverse Interests

³³Project Management Team, Group 3. *Living with the Lakes: Challenges and Opportunities, Annex C*, Burlington, (Ontario and Chicago June 1989), 57-112

Measures-> Interests:	Stress and anxiety towards fluctuating lake levels	resiliency to damages incurred by fluctuating levels	benefits: dredging, zoning, increased information	cost shifting: self-absorb cost or petition for government monies	measures to regulate lakes through diversion flows
Riparians:	yes	no	yes	self-absorb	yes
Environmental interest groups*	no	yes	yes	self-absorb	no
Electrical power	no	yes	no	self-absorb	status quo
Transportation	no	yes	no	self-absorb	no
Commercial & industrial interests	yes yes	no yes	yes yes	self-absorb self-absorb	yes status quo
Recreation: boaters (subgroup)**	no yes	yes no	no no	self-absorb petition	no yes
Commercial Fishing	yes	yes	no	petition	status quo
Agriculture: shoreline farmers (subgroup)	yes yes	yes no	no yes	absorb petition	no yes
Native Nations	no	no	no	petition	no
Governments: federal & large cities local (subgroup)	yes yes	yes no	yes yes	absorb petition	yes yes

* Including International Great Lakes Coalition and Great Lakes United

** Significant subgroups are separated out to show disunity.

Source: Table based on observations drawn from - Project Management Team, Functional Group 3. *Living with the Lakes: Challenges and Opportunities, Annex C*, Burlington (Ontario and Chicago June 1989), 57-112; Levels Reference Study Board, *Annex 5: Citizens Advisory Committee*. Chicago, Illinois and Burlington, Ontario, 21 March 1993; and for more on Advisory Board positions on issues see IJC, 1993 Report, *Annex 5*.

By no means were these interests united in their attitudes towards fluctuating lake

levels and measures to regulate the lakes. Table 5.1 represents general attitudes in each group. Participants were asked their opinions on different remedial proposals. This table focuses on using variations in diversion rates to modify lake levels. A better understanding of attitudes held by these groups provides a basis for a more accurate assessment of this dimension of complexity.³⁴

A general observation is that most interests were aware that fluctuations are a natural phenomenon but that did not prevent their surprise and frustration in response to extreme water level fluctuations and the damage incurred to their interests. In general larger interests tended to be more resilient because they could pay for the associated externalities while smaller businesses, single riparians, individual boaters, and shoreline agricultural interests tended to be less resilient because of a lack of resources to weather the negative impacts. Almost all would benefit from more accurate information on predicting fluctuations but some interests like hydro power have alternatives and reserves to mitigate damages regardless of conditions.

Most interests have to absorb the costs incurred by fluctuating water levels. A few like Native Nations, fishers, and municipalities could petition the federal government to offset costs. Many interests were skeptical as to whether the lakes could be regulated and preferred more natural solutions such as prohibiting the use of areas at risk to flooding by zoning. Indigenous Peoples and environmentalists called for more studies before any more artificial means were installed to make sure the health of the lakes was not

³⁴ For the purpose of constructing a matrix of support the 1989 report data provided a more substantive review of attitudes than the more limited public hearings recounted in the 1985 report; however, analysis of the hearings follow this discussion.

negatively impacted.

Important to the execution of the 1977 reference by the IJC was the 1981 Board's public workshops. They were conducted in Sault Ste. Marie, Ontario; Chicago, Illinois; Buffalo, New York; Toronto, Ontario; and Detroit, Michigan. Noted in the Board's report was that participation was small but informed.³⁵ Along with the one-hundred-and-seven (107) participants of the workshops was input from various organized groups; namely, The Erie County Shoreline Task Force, Michigan Shorelands Preservation Association, League of Women Voters, Wayne County Conservation Association, Macomb County Board of Commissioners, Lake Erie Advisory Committee, Inter-Lake Yachting Association, Grandview Beach Association, and Shore Property Owners Association.

These groups represented local government, property owners and businesses including power and transportation interests, as well as concerned citizen groups such as the League of Women Voters. Environmental groups represented were Center for the Great Lakes, Save Lake Superior Association, Minnesota Conservation Federation, Great Lakes Committee - Sierra Club, Great Lakes Institute at University of Windsor, Rivers Unlimited - Ohio, Michigan United Conservation Clubs, Association in Defense of Man and Nature, National Wildlife Federation, Isaak Walton League, Great Lakes Commission, East Michigan Action Council, Decisions for the Great Lakes - Windsor Chapter, Great Lakes Tomorrow, NY State Environmental Conservation Commission, Environmental Probe Limited, Stop Contaminating our Waterfront group, and Great

³⁵ IJC, *Great Lakes Diversions and Consumptive Uses: A Report to the Governments of the U.S. and Canada under the 1977 Reference*, (Ottawa and Washington January 1985), 67-73.

Lakes United Save the River.

The statements provided by these groups were in agreement on several issues.³⁶ They were concerned about water quality of the Great Lakes as affected by diversions. They opposed diversions out of the region. They were opposed to water exports especially the Powder River Coal Slurry pipeline project proposing to divert water from Minnesota to North Dakota.³⁷ These groups tended to support the findings and recommendations in the final 1985 report but urged the Commission to take more aggressive action to protect the lakes.

Attending these forums were many municipalities, state agency officials, university departments, state assembly representatives, Indigenous Peoples representatives, provincial government representatives, and a statement by the Government of Canada. These statements showed concern for the environment and economic repercussions. They also voiced alarm over the effects of diversions on availability of water for consumption. Many reiterated the fact that the waters of the Great Lakes are a limited resource and the water should remain in the region.

The 1989 report data was easier to cull than the 1981 data. Nonetheless, from these scattered positions, trends emerged indicating that interests were not well organized nor were group opinions formalized at this time. Often more agreement seemed to exist among the varying groups on a regional basis - upper, middle, and lower lake interests -

³⁶Views were presented in the report as public hearing transcripts. This format of an array of diverse groups and individuals was difficult to distill beyond these few trends.

³⁷It is interesting to note that environmental groups used the public forums to voice their concerns to the Commission.

than within the groups themselves.³⁸

Table 5.2 Costs and Benefits of Extreme Water Levels

Diversion and Consumptive Use Interests	Low water levels Economic Benefits	High Water levels Economic Benefits
Coastal Zones	Plus +	Minus -
Navigation	Minus -	Plus +
Power	Minus -	Plus +

Source of observations from International Great Lakes Diversions and Consumptive Uses Study Board, *Report to the IJC*, September 1981, 67-73.

The 1981 Study Board's findings concerning diversions on the Great Lakes have implications for policy makers still today. There are economic costs and environmental impacts to be considered when deciding how to best manage this water resource considering that existing diversions have produced changes in Great Lakes' water levels and outflows.

The Board provided two recommendations to the IJC. Firstly, it said, the concept of controlling extreme lake levels through existing diversions should be abandoned. Specifically, they found that diversions could solve low water level problems but with prohibitive externalities while high water levels would be unaffected. Secondly, they urged the IJC recommend to the governments the need to create a mechanism for institutional consultation for the purpose of monitoring water levels in relation to diversions as well as consumptive uses and, further, for the purpose of developing public

³⁸Reagan's appointments (Table 4.16) in 1981 to IJC were from upper, middle, and lower Great Lakes which may be more representative and a more significant categorization of interests than traditional interest group divisions.

policies on projected increases in both these areas of use.³⁹

Disputes Over Science and Report Findings

In relation to diversions, not all of the 1985 Report is consistent with the 1981 Study Boards findings.⁴⁰ Departing from the Board's perspective, the Commission reported that "the present flow rates of the four diversions studied can be modified without structural change at existing locations to reduce high levels and raise low levels by small amounts."⁴¹ Simply stated, drought and flooding could be modestly affected by existing diversions and locks but at a cost that was prohibitive to established interests in the region. If hydrological or economic circumstances change, however, then raising water levels may become more attractive.⁴²

Because of discrepancies in estimates of consumptive uses with the existing data at that time, the Commission concluded that data collection needed to be improved in

³⁹International Great Lakes Diversions and Consumptive Uses Study Board, *Report to the International Joint Commission* (Ottawa and Washington, September 1981), 3.

⁴⁰The IJC reported that the diversions at Long Lac, Ogoki, Chicago, and the Welland Canal produced changes in levels and outflows. These hydraulic changes are small in comparison to natural water level fluctuations but significant. The New York State Barge Canal had no measurable hydraulic effect on water levels. The diversions affected long term mean outflows from each individual lake. Revisions of regulation plans for Lakes Superior and Ontario were designed to accommodate these effects.

⁴¹IJC, *Great Lakes Diversions and Consumptive Uses: A Report to the Governments of the United States and Canada under the 1977 Reference*, January 1985, viii; Dr. Tom Crane, interview by author, 23 July 2001, GLERC, Ann Arbor, MI .

⁴²IJC, *Great Lakes Diversions and Consumptive Uses: A Report to the Governments of the United States and Canada under the 1977 Reference*, January 1985, viii.

several areas in order to establish useful historical trends and to improve forecasting abilities for both countries.

Estimates were from the Study Board and the U.S. Geological Survey were different. The Board made estimates starting with the year 1975 at four-thousand-nine-hundred-and-fifty cfs (140 cms) and continued estimates through the year 2035. After reviewing differences in data, the Commission concluded that between two-thousand-nine-hundred cfs (82 cms) and five-thousand-six-hundred cfs (159 cms) were being used for estimates in the recorded 1980 data. The Commission further concluded that by the year 2000 consumptive uses would increase to between five-thousand-seven hundred cfs (161cms) and eight-thousand-four-hundred cfs (238 cms).⁴³ The Commission observed:

[a] strong need for continual improvement in information on historical and projected water use trends, in general, and consumptive use trends, in particular, with the Great Lakes basin. Should changes in public policies regarding these trends prove desirable in the future, a continuous data and information base would provide an invaluable foundation.”⁴⁴

Summary: The Commission’s Reaction to Conflicting Information and Diverse Interests

The Boundary Waters Treaty and other documents divide the Great Lakes legally and administratively into categories of boundary waters or tributaries, surface or groundwater, diversions or consumptive uses, quality or quantity. The IJC found it difficult to report accurately on all these elements given their limited resources and the multiplicity of institutions involved in information gathering.

⁴³Ibid., 30-37.

⁴⁴Ibid., viii.

Critics even noted inconsistencies with definitions in the report. The terminology of the Treaty such as “boundary waters” and “waters of the Great Lakes system” were explicitly defined in its text or in the GLWQA of 1978. The Commission clarified that the terms used in this report did not necessary follow the definitions in either Treaty. For example, ‘the Great Lakes waters’ in the Report described the waters of the Great Lakes Basin and were not to be confused with either Treaty’s terms and definitions regarding boundary waters and the Great Lakes.

In relation to diversions, the Commission was careful to advise that “the information available is insufficient to draw any cumulative basin-wide economic or environmental implications.”⁴⁵ The IJC advised that, in particular, the Study Board’s economic analysis should not be used as a basis for future policy decision-making. What seemed ‘unfeasible’ economically in 1981 might become feasible in a different context.

In relation to consumptive uses, the Commission carefully considered the Board’s projections for 1975-2035. It considered projections beyond 2000 too speculative to base planning and policy decisions on the imprecisions in forecasts of economic and demographic fluctuations.⁴⁶ Interestingly, the Commission specifically downsized consumption for the two largest growth sectors, power generation and manufacturing, based on trends in the region.

However, with these caveats in mind, the Commission advised using the process of consultation and cooperation between the two countries on matters relating to the

⁴⁵Ibid., vii.

⁴⁶Ibid., viii.

regulation of the Great Lakes. This process would aid both countries' ability to reach agreement on managing water levels. The Study Board's report, which adds to what Eckstein might describe as shared knowledge, could be used to embellish future cooperative measures on regulating lake levels.⁴⁷

The IJC recognized mutual, legitimate interests of both countries in executing the reference. However, more work needed to be done on the subject of diversions. For example, most data on major extant diversions were reported regularly to both governments using the IJC or other mechanisms; however, data in regards to small diversions had not been consistently reported as the 1909 Boundary Waters Treaty requires. Perhaps this 1985 report was the beginning of changing that inconsistency, since there is increasing competition both regionally, and increasingly internationally, for every drop of fresh water.

An addendum to the report is that on the 18 June the Great Lakes Charter Annex 2001 was signed in Niagra Falls by the eight Great Lakes governors and two Canadian premiers.⁴⁸ In this agreement those participating addressed the issue of exporting water from the region. Exporting water, as defined by the IJC, involves the diversion of water from the Great Lakes for consumptive uses.

⁴⁷Harry Eckstein, "Case Study and Theory in Political Science" in (eds) Fred Greenstein and Nelson Polsby, *The Handbook of Political Science Readings*, (MA: Addison-Wesley, 1975),. 99.

⁴⁸ John Ibbitson and Daniel Leblanc, "Canada, U.S. toughen pact to protect Great Lakes," *The Globe and Mail*, ([Http://www.globeandmail.com](http://www.globeandmail.com)), Tuesday 19 June 2001; GLIN, <http://ww.great-lakes.net/news>, - *The Rochester Democrat and Chronicle*, 19 June 2001.

Though the Annex document is not binding and does not ban water diversions completely, it will make such transactions more difficult. International trade laws prohibit the banning of diversions. The Charter sets a deadline of three years to establish new limits on diversion or sale of water within the Great Lakes basin to other parts of the country or abroad. This step, along with recent studies and dialogues concerning water quantity, is a progression that the Commission encouraged in its 1985 Report.

In summation, the multiplicity of agencies at all government levels demonstrates jurisdictional complexity - each having their own stake in lake regulation. Businesses either supported or opposed proposed regulations based on costs and benefits to their interests. Other citizen interests, including environmental groups, formed opinions based on impacts that proposed regulations would impose on their behavior. The scope of regulations ranged from maintaining the status quo to decreasing damaging effects of extreme water levels through zoning usage areas to mechanically manipulating lake levels to achieve maximum benefits of water use. The distinction of upper, middle, and lower lakes hinted at important group distinctions.

The challenge to the IJC was to consider the opinions of these conflicting interests and jurisdictions in order to encourage and produced cooperation to determine viable options on possible regulations. Hindering this task was the scientific ability to accurately predict lake levels based on the availability of reliable data and to disseminate the information to the public. The IJC's final report demonstrated modest differences of opinion with the study board on the ability and affects of regulating lake levels.

Overall, the public hearings demonstrated that interests wanted the IJC to protect

the quality of the lakes more aggressively. The findings and recommendations of the final 1985 reference report are still relevant today to policy on regulating lake levels.

Regulation and Complexity, Federal Systems and Binational Diplomacy
in Executing the 1977 Reference

A look at annual reports from 1977 through 1985 sheds light on a multiplicity of pressures impacting the Commission from the federal and binational levels of government. The addition of public hearings and workshops, Commissioner resignations, change in national party support, GLWQA, creation of the Great Lakes Commission and signing of the Great Lakes Charter, and ongoing studies on other boundary issues all combined to impact the completion of the Commission's report on water levels in a timely fashion.

The IJC : Mitigating Pressures

According to the IJC's *1977 Annual Report*, there was an important addition in the Commission's investigative procedure to expand public hearings. This added a layer of complexity to the IJC's mission that further slowed the deliberative process. However, this did provide an avenue for collecting public comment as well as functioning to keep the binational public informed throughout the process. Workshops were coordinated to encourage and boost public participation. Special panels were formed which included public participants as a means to include public input into board reports. These efforts were a means of increasing the Commission's transparency and visibility. In December 1977, there were public hearings in Chateaugay, Quebec; Toronto and Windsor, Ontario; Cleveland, Ohio; and Buffalo, New York that concerned diversions and consumptive uses

of the Great Lakes.⁴⁹

Vacancies on the Commission added other hindrances. In a letter dating February 11, the Public Affairs Director explained Mr. Beaupre's and Mr. Hodgson's resignations in December 1980 and January 1981 respectively. Mr. Beaupre had served as Commissioner since 1969 for the Canadian section. Stuart Hodgson announced his resignation to leave the Commission in order to become the Governor of British Columbia.⁵⁰

Three other U.S. Commissioners left in March of 1981. For six months until August of 1981, the Commission consisted of only Jean Roy of Canada; Mr. Olson and Mr. Bedard were then appointed by Canada. Mr. Bulen, Mr. Totten and Mr. McEwen were appointed to the U.S. section in September and August. Mr. McEwen was appointed Chair of the U.S. section in November of 1981.⁵¹

The 1982 Annual Report explains 1981 as a "period of uncertainty" because of the changes in the Commission's membership.⁵² As discussed earlier, this period marks the transition from Carter's to Reagan's administrations in the U.S.. Conversely, Turner's liberal party lost to Brian Mulroney's conservative party in the 1984 general

⁴⁹IJC, *Annual Report*, (Ottawa and Washington 1977), 7. Other boundary issues discussed in the report included other water levels and flows, water quality, air quality; Point Roberts, Washington; and the Skagit River in Seattle.

⁵⁰IJC, *Annual Report*, (Ottawa and Washington 1980), 10-11.

⁵¹IJC, *Annual Report*, (Ottawa and Washington 1982), 5.

⁵² Ibid..

parliamentary elections in Canada.⁵³

As reflected in the 1982 Annual Report, the incorporation of the ecosystem concept introduced by the GLWQA had increased the scope and responsibilities of the IJC. As scientists and policy makers realized that the Great Lakes waters were a limited resource they also envisioned future shortages from heavy consumption and diversions.

Finally, the 1985 Annual Report focused on water quality, water levels, and air quality. Heavy rains had produced record high water levels in the Great Lakes alarming riparians and relevant interests. There was especially heavy basin precipitation on Lakes Huron-Michigan and Lake Erie from late 1984 to early 1985 which created emergency conditions and demanded much of Commission's attention at that time.

Meanwhile the Commission had submitted its report to the governments on lake levels and consumptive uses and disbanded its relevant study boards. It concluded that large scale diversions were extremely unlikely under current political and economic circumstances; however, these conditions may become more feasible as climate changes are documented from greenhouse effect or world famine worsens.⁵⁴

⁵³The provincial elections in Ontario and Quebec reflect the uncertainties of the political debate surrounding federalism and separatism. The Liberals and the NDP were gaining support in Ontario to eventually form a minority government in 1985. In Quebec the Parti Quebecois won by a margin of 65.6% to 34.4%. In the 1985 elections the support for the PQ had waned to 16.9% and the Liberals won the election with 81.1% of the vote (See Table 4.9, 4.10.)

⁵⁴In the 1982 Annual Report, the Great Lakes Diversions and Consumptive Uses Board concluded that extreme water levels could not be controlled by altering diversion rates without causing long term economic loss to the region. Diversions could have a significant impact on lake levels. The board recommended that diversions and consumption should be monitored and public policies should address this problem. It was thought the problem would only get worse over the next fifty years.

The 1985 Annual report emphasizes that current information was not adequate to determine present levels of consumption. Earlier technical studies' projections probably exaggerated this in view of likely changes in the region's economy, especially in manufacturing and power generation as well as population and employment shifts from the Great Lakes Basin to the west. The Commission recommended the establishment of a bilateral data committee that would monitor all existing diversions and consumptive uses.⁵⁵ The Great Lakes Commission would become instrumental in this effort in the future.

The Upper Great Lakes Governors Weigh in on Diversions

Comments that articulate the complexity surrounding diversions were expressed by participants at the Upper Great Lakes Governors Conference in 1982.⁵⁶ Many identified the interrelatedness of Great Lakes issues such as diversions, water exports, the economy, jobs, energy, and the need for new institutions. This expanded the depth of the discussion on diversions and consumptive uses brought to the IJC for resolution and recommendations.

The most relevant discussions to this case study came from the Panel on Diversions which was moderated by Dr. Howard A. Tanner, Director of Michigan's Department of Natural Resources. Discussants included Robert H. Abrams, Professor of

⁵⁵This mechanism has since been realized under the direction of the IJC and the Great Lakes Commission.

⁵⁶Joyce Foundation, sponsored by Great Lakes Commission, State of Michigan, Council of Upper Great Lakes Governors, *GLC 1982 Great Lakes Water Conference*, Mackinac Island, Michigan, 10-11 June 1982.

Law at Wayne State University; Dr. Jonathan Bulkley, Professor of Civil Engineering at the University of Michigan; and Benjamin de Cooke, Chief of Great Lakes Hydraulics and Hydrology in the Detroit District of the U.S. Army Corps of Engineers.

In 1982, clearly, the threat of proposals to divert water from the Great Lakes to arid areas benefitting from regional migration was very real to the governors, premiers, and administrators participating in the Conference. Early in the Conference, Premier Davis expressed his concern over the relationship between the two countries. Leaders of the region had met in 1971 and then again in 1982. Even with these periodic meetings and the effectiveness of the IJC, Davis supported the idea of establishing some rule based structure responsible for health of the Great Lakes Basin.⁵⁷

Moderator, Howard Tanner, retort to Premier Davis' idea that the question of the day was how the federal government, states, and provinces were going to deal with the question of diverting water from the Great Lakes.⁵⁸ In the panel discussion Professor Robert H. Abrams succinctly pointed to water exports as the region's biggest threat. Professor Abrams warned of the potential negative economic effects of legalizing such actions. The Professor pointed to the courts' decisive role in clarifying the legal uncertainty surrounding water exports and diversions. He recommended the development of new institutions to manage these issues citing the Great Lakes Compact and the IJC as inadequate tools for management and having no enforcement powers respectively. Professor Abrams saw the states and provinces as unable to prohibit Congress from

⁵⁷Joyce Foundation, Conference, 29-30.

⁵⁸Joyce Foundation, Conference, 73.

diverting water unless the Great Lake Compact was strengthened to resemble the Delaware River Basin Compact or Yellowstone River Basin Compact. He suggested developing institutions beyond the IJC to reach a joint decision on how to maximize the benefits of Great Lakes waters through either exporting it or not.⁵⁹

In response to these observations, many of the participants including Jonathan Bulkley and Benjamin De Cooke discussed the cost and benefits of raising or lowering the water levels of the Great Lakes. Impacts to energy, transportation, and agriculture would need to be studied along with effects on the environment and wildlife in the region. Matt McLogan raised the issue of whether any surveys on public attitudes towards diversions and water exports had been compiled in relation to energy plant locations which would be necessary to construct to pump the water elsewhere.

Further, IJC Chair Richmond Olson commented on the importance of water rights to diversion issues. The Boundary Waters Treaty of 1909 clearly established ‘the unfettered right to diversions of all steams flowing across the boundary so that a diversion south may be equaled by a diversion to the north.’⁶⁰ In addition to Olson’s statement, Howard Tanner elaborated that in order to protect and retain the region’s waters, leaders must show prior water rights and states and provinces must deal with the question of

⁵⁹Ibid..

⁶⁰ Olson further states that an endorsement to prohibit diversions supported the Canadian argument that Lake Michigan water is a shared resource and not solely under U.S. jurisdiction. Further on this, Howard Tanner testified to the fact that Lake Huron and Michigan are one lake not two. Their separate treatment has been artificially and politically imposed on the region; Dr. Tom Crowley, interview by author, 23 July 2001, GLERC, Ann Arbor, MI.

diversions jointly.⁶¹

After acknowledging that conflict among Great Lakes interests were inevitable, Davis contributed to the discussion on the ownership of Great Lakes waters. Different perspectives on lake water ownership existed varying from viewing it as an international resource to emphasizing the importance of individual water rights. Premier Davis illustrated this with Quebec's strong sentiment of provincial ownership of resources verses federal claims. He concluded by saying that these issues concerning ownership must be sorted out so not to compromise the best interest of the Basin. Governor Robert Orr of Indiana chimed in that he believed the Great Lakes to be a national resource.⁶² Premier Davis referred to the Great Lakes as one of our greatest national assets.⁶³ Governor Lee Dreyfus of Wisconsin objected to Great Lakes as an international and national resource. He saw them as an interstate and provincial resource.⁶⁴

This group represents a cross section of regional leaders concerned about Great Lakes' issues at this time. Participants from the U.S. spoke of a power shift from the Great Lakes states to the sunbelt of the west. Dire shifts in populations, employment,

⁶¹Premier of Ontario, William G. Davis joined to this statement that Quebec and Ontario represented about 60% of the voting population of Canada. From a practical view point, the opinions of these provinces will not be able to be ignored. See *Conference*, 1982, 81.

⁶²Joyce Foundation, 1982, 41; Samuel Speck, "A Significant Step forward for our "National Treasure," *Advisor*, May/June 2004, 17(3):12; in this article Chair of the GLC, Samuel Speck, expressed his opinion of the Great Lakes as a national treasure.

⁶³Joyce Foundation, 1982, 30.

⁶⁴Joyce Foundation, 1982, 38.

industries, and agriculture from the Great Lakes region were expressed by the need for more fresh water in the southwestern states. Because of these fears, there were obvious worries about the possibilities of diverting Great Lakes water to the west to meet needs for growing populations shifts.

The shift in power to the Progressive Conservatives under PM Mulroney followed a move to focus on sustainability and economic development.⁶⁵ From this came a major reordering of Canadian Federal departments. This change in both countries' national politics in the 1980's helped place the question of diversions on each nation's domestic agendas and added complications politically for the IJC's mission concerning regulating the Great Lakes.

The 1982 Joyce Foundation conference ended with unanimous commitment by both states and provinces to protect the assets of the Great Lakes basin while utilizing them wisely. The fact that the four governors attending were all Republican might partially account for the tone of cooperation and agreement on goals at the conference.

In conclusion, at the Upper Great Lakes Conference, the governors and premiers expressed their views on regional issues with the benefit of commentary from expert panelists. The threat of diverting water out of the region was not a new issue but concerns were heightened by the changes in national priorities demonstrated in recent

⁶⁵Urgent to Canada's national agenda was the economy and Quebec's separatist movement. Canada's economy relied heavily on the Great Lakes where 50% of the industries were owned by investors from the Middle East at that time. Regaining ownership of domestic industry and moving away from this foreign dependence was an urgent topic of discussion. Quebec's desire for independence lead to national policies protecting cultural equality among French and English speaking citizens.

elections. Political undercurrents as reflected in state and provincial elections - were expressed by the conference participants.⁶⁶ The legacy of the 1980 elections impacted the IJC politically with resignations and vacancies resulting in three new U.S. Commissioners from the Great Lake states and a delayed report that recommended further studies needed to be conducted to address all the relevant issues including those raised at the 1982 conference. Participants expressed their faith in the effectiveness of the IJC as well as their frustrations for the IJC to act more aggressively to protect the ecosystem. Further, water exports would become a major issue on both countries' domestic agendas for the Great Lakes and affect the agenda of the IJC by subsequent lake regulation references and the IJC's cooperation with regional organizations such as the Great Lakes Commission.

Updating the Mandate on Lake Levels

Great Lakes Commission and the Great Lakes Charter of 1985

The Great Lakes Commission (GLC) has been instrumental to fulfilling the IJC's 1985 recommendations. It is a nonpartisan, eight-state compact agency based in Ann Arbor, Michigan. It was established by statutory mandate to represent the collective views of the eight Great Lakes states which include Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin. The GLC addresses issues of resource management, environmental protection, transportation and sustainable development. It

⁶⁶The political balance of Great Lake governors was six Republicans to two Democrats in 1980 and the 1982 gubernatorial elections restored the balance to four Republicans and four Democrats reflecting undercurrents to the 1980 national elections.

provides accurate and objective information on public policy issues and a forum for developing and coordinating public policy.⁶⁷ The GLC advocates member states' interests.⁶⁸

Additional progress towards meeting IJC recommendations on the Great Lakes is seen in the establishment of Great Lakes Charter in 1985. This agreement supported the IJC's findings but wanted to go further with protection of the Lakes. The proponents of the Charter have been openly critical of the IJC's lack of progress on this issue.

Shortcomings were identified in the 1985 Charter and further were addressed by the 2000 Annex.⁶⁹ In a recent interview with Dr. Thomas Crane of the Great Lakes Commission, he stated that, in his opinion the release of the 1985 IJC Report did not have a lot to do with the signing of the Charter; however, the timing of the Charter at least raises suspicions that the IJC's study drew added attention to these issues on the regional

⁶⁷Great Lakes Commission, *Advisor*, May/June 2004, 17(3): 2. Other attempts at creating water managing agencies are the Basin Commission established in 1965 as a planning agency representing all eight Great lakes states and eleven federal agencies and one interstate Commission. It was disbanded in 1981.

⁶⁸Thomas Crane, interview by author, 23 July, GLERC, Ann Arbor, MI.: The GLC was established officially December 12, 1955 subsequent to ratification by the five compact states of Illinois, Indiana, Michigan, Minnesota, and Wisconsin. Pennsylvania's General Assembly enacted the compact in 1956. New York joined in 1960. Ohio's General Assembly followed in 1963. After several bills were debated starting in 1956, Congress gave its consent finally in 1968. With the addition of Quebec and Ontario as associate members with the 1999 Declaration of Partnership, it has evolved into a binational public agency; for more see <http://www.glc.org>.

⁶⁹For critique of Annex see Great Lakes United, "Comments on Proposal Annex 2001," 28 February 2001 (<http://www.glc.org>); Reg Gilbert and John Jackson of GLU, "Press Release: Governors/Premiers Address Water Exports/Diversion Threats," Buffalo: NY 18 June 2001.

agenda.⁷⁰

Crane's thoughts about the creation of the Charter focused more on the political context of the times; namely, that a majority of state Democratic party leaders in 1985 supported the Charter's agenda but that after the signing, newly elected governors who were not committed to the Charter's aims claimed the majority of leadership in the region. The Charter's goals languished as other issues had replaced the Charter's priorities. It would appear that the new Republican governors who had not been a part of the Charter's struggle were not dedicated to its goals.

The rising issue of water exports on the binational agenda, and the possibility of water being designated as a commodity, precipitated the revision of the Charter. In regards to water as a commodity, the Free Trade Agreement, the North American Free Trade Agreement, and the North American Agreement on Environmental Cooperation were an impetus to the IJC and the GLC to establish rules on diversions in order to maintain regional control of the issue of water exports. In the Annex, the five million gallon a day watermark was considered too high to assure the sustainable use of the resources. Further, it urged, but did not require, consent of all the signatories to allow a new diversion or consumptive use to proceed. There were no standards established for denying or condoning such works. It did not allow for public involvement during the consultation process.

The governors and premiers representing the Great Lakes met in Niagara, NY on

⁷⁰ Thomas Crane, Interview by author, 23 July 2001, GLERC, Ann Arbor, Michigan.

June 18, 2001. This latest revision, like the original Charter and Annex 2000, is a non-binding agreement among the states and provinces. It establishes a framework for water management programs to be created over the next three years. Annex 2001 combines the Great Lakes Basin Sustainable Water Resources Agreement (GLBSWRA) and the Great Lakes Basin Water Resources Compact.⁷¹ GLBSWRA specifies mutual intentions of the eight states and two provinces. The Compact binds the parties to joint decision making on water use.

The Annex has not gone without criticism. Reg Gilbert of Great Lakes United praised the IJC recommendations on further regulation of the Great Lakes as well as the aims of the Annex but warned of a loop hole that would allow diversion of water from the Basin. The Annex neglects addressing protection of groundwater in and around the Basin. He is not alone in his concerns, Sarah Miller of the Canadian Environmental Law Association stated the need for a moratorium on all diversions until a protection plan is in place. Further, Marc Hudon, President of Strategies St.-Laurent, worried about the provincial role in the Annex. Cheryl Mendoza of Lake Michigan Federation echoed the IJC's warning on the cumulative effects of small diversions on water levels.⁷²

Annex 2001 establishes rules for a new standard limiting withdrawal of waters of the Great Lakes and its tributaries. It further commits the signatories to involving the public in these processes relating to water management and review of withdrawals.

⁷¹Dave LeMieux, "Experts: Michigan blocking water protection deal," *Muskegon Chronicle* and *Michigan Live*, 3 September 2004, <http://www.mlive.com>.

⁷²GLU, "Press Release: Groups worry about new rules allowing diversions from Great Lakes," Buffalo, NY: 14 December 2001, (<http://www.glu.org/swtf/>).

Significantly it includes Ontario and Quebec in this intent. With these steps, it further strengthens the regional water management decision support system.⁷³ The GLC established a Working Group to define this support system.

What spurred this new commitment to joint water management can be traced to the proposal of bulk water export from Lake Superior in 1998 by the Nova Group and the change in political context during the 1990's. This urged the states and provinces to rethink the Charter and its ability to protect resources and specifically to reconsider what amount a proposed diversion or withdrawal had to be to trigger a review.

What is significant about this agreement is the attempt to protect Great Lakes' water as an exhaustible resource. If water is defined as a commodity then it will be subject to regulation by NAFTA and GATT's Article XX.⁷⁴ Water must be treated the same internal and external to the basin that is domestically and internationally if it is traded or used. Therefore, the Charter members wished to avoid any future legal complications with protecting resources by drafting the Annex. Waters can not be abused within the basin and protected from outside uses according to international rules of

⁷³The Water Resource Management Decision Support System was produced by the Annex in cooperation with the GLC, Great Lakes Governors Council, and Great Lakes Protection Fund.

⁷⁴ NAFTA incorporates the General Agreement of Trade and Tariffs, Article XX which reads as followed: "subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party measures:..(g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption..."

agreement. The Annex commits interested parties to this goal.

As the IJC envisioned, a network of resources is being developed to protect the Great Lakes region. The creation of the Council of Great Lake Governors and Premiers⁷⁵ along with the Charter, GLC, Water Resource Development Act (WRDA), and the IJC's advice and previous recommendations all laid the foundation for a water resource management program and institutions to be developed. Cooperation and jurisdictional points of laws are addressed in the Annex to the Charter to facilitate a successful resource management regime for the Great Lakes. Lake levels regulations and these related issues have remained on the IJC's agenda.

The 1986 Reference on Lake Levels: Correspondences

Perhaps what is most valuable for understanding the process of the Commission's relationship with the federal governments concerning this reference is the correspondences prior to the release of the final reports. That governments referred the 1986 reference to the IJC one year after its final report in 1985 suggests their unwillingness to act on the IJC's recommendations beyond requesting further studies. The IJC initially responded to the 1986 reference in November of that same year with an Interim Report. It reiterated the findings of the 1977 Levels and Consumptive Uses Report and commented on the high water levels of 1985-86. In addition to urging the governments to act on recommendations because of the rising concern of elevated water

⁷⁵ Formed in 1983 by Governors of Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. In 1989 New York and Pennsylvania joined the council. For more see <http://www.cglg.org>

levels of the Lakes, it cited the findings in the 1977 Reference to implement emergency measures to inhibit or prevent further shoreline development in vulnerable areas likely to be affected.

Subsequently, in a letter dated December of 1986, the Commission urged the governments to act on previous recommendations to avert the building crisis of high water levels in the region. Again, however, the governments did not respond. The Commission stated that the interim report would not be finished within the year and expressed its concern over the lack of response from the governments over the crises as it waited for more conclusive findings.

The theme of creating a binational rule based agency to coordinate actions to stymie any further damage from high water levels was reiterated. The interim report would not be completed until July of 1989. Since there was no response from the federal governments to the IJC's urging, one can only speculate on the letter's reception. The final report to the governments would not be finished until 2000. After the high water levels of the mid-eighties, the lakes have seen drought conditions in the nineties making related issues of water quality even more critical.

In 1986 the federal governments asked the IJC to "examine and report upon methods of alleviating the adverse consequences of fluctuating water levels" in the Basin.⁷⁶ The context of the request was broad in scope including the following:

1. To propose and evaluate measures that governments could take during periods of extreme high or low water levels;

⁷⁶ IJC, Levels Reference Study Board, *Final Report of the Levels Reference Study Board to the IJC* (Chicago, Illinois and Burlington Ontario, 31 March 1993), 1.

2. To review and revise its earlier studies on lake level regulation;
3. To examine evolving land use and management practices throughout the basin;
4. To compare, to the maximum extent practicable, the costs and benefits of alternative land use and shoreline management practices with the costs and benefits of lake regulation schemes;
5. To investigate feasible methods of improving the outflow capacities of connecting channels and the St. Lawrence River;
6. To develop an information program to be carried out by responsible governmental agencies to better inform the public about lake level fluctuations.

In response to this reference, the IJC formed a task force on water levels in 1986.

The Task Forces submitted its report to the IJC in October of 1987 and in turn the IJC submitted the interim report to the governments on November 22, 1988 which contained the task force's summary and IJC recommendations.⁷⁷ The IJC issued a directive on April 10, 1987 for Environment Canada and the Army Corps of Engineers to find answers to the reference questions in conjunction with the task force. These federal agencies received funding to provide the IJC with technical and administrative support.

The Great Lakes Water Task Force, established by the IJC in 1986, examined the potential crisis measures for the 1985-1988 extreme water levels. Further, the Project Management Team was created to assist the IJC in the first phase of the study while the Levels Reference Study Board was created to assist the Commission during the final phase of the study, pursuant under Article IX of the 1909 Boundary Waters Treaty.

The IJC's initial response to the reference from the IJC was a letter dated 14

⁷⁷ Great Lakes Water Levels Task Force, *Report on Potential Measures to Alleviate Problems Created by Current High Lake Levels: Summary* (Burlington, Ontario and Detroit, Michigan, October 1987). This summarized 8 separate task force reports to the IJC. In turn the IJC submitted the *Interim Report on 1985-1986 High Water Levels in the Great Lakes - St. Lawrence River Basin* (Washington, DC and Ottawa, Ontario, October 1988).

November 1986 outlining actions it had taken to address the high water levels and immediate measures available to the governments. It was then that the IJC established the Great Lakes Water Levels Task Force. The Task Force efforts resulted in the *Interim Report on the 1985-86 High Water Levels in the Great Lakes - St. Lawrence River Basin*. The IJC submitted it to the governments in 1988. No formal response was given.

The second phase of the study was initiated under the Project Management Team in Fall of 1987. This binational group was composed of experts from many disciplines. The final report was entitled *Living With the Lakes: Challenges and Opportunities*, submitted 25 August 1989 to the IJC.⁷⁸

One of the IJC's conclusions was that the governments continue to use and to promote the use of the ecosystem approach in managing water levels and flows in the Basin. To support this recommendation, the IJC used inclusive, ecological criteria for observation rather than the traditional approach as illustrated by the 1977 reference. Previous studies using the traditional-reductionist or multi-disciplinary approaches did not cover the full range of information necessary to make decisions.⁷⁹ Reports prior to 1977 did not integrate social, ethical, economic values related to the water levels issue in part due to the lack of an adequate data base.

The IJC 1993 Report to the Governments on Lake Levels:
A Summary and Comparison

⁷⁸Project Management Team, *Living with the Lakes: Challenges and Opportunities, Progress Report to the IJC* (Burlington, Ontario and Chicago, Illinois, July 1989).

⁷⁹IJC, Levels Reference Study Board, *Final Report of the Levels Reference Study Board to the IJC* (Chicago, Illinois and Burlington Ontario, 31 March 1993), 3.

As in the 1977 Reference, economic analysis posed more problems than it solved. In this 1993 report the IJC integrated divergent views into the study to adhere to the ecosystem approach. The Commission admitted that a problem existed in integrating multiple views and gathering primary data in a timely fashion. Therefore, the IJC was not able to accept some recommendations of the Study Board.

There were serious gaps in data needed to estimate past and future damages to shore property and little useful environmental and social impact data was available on alleviating adverse affects of fluctuating water levels. However, the IJC admitted that to fill these gaps costly studies would need to be conducted which might not provide any more significant basis for action than in past reports, thus no additional funding was requested for further studies on this reference.

Somewhat controversial were the guiding principles set forth to manage fluctuating water levels in the Basin. These principles attempted to enhance a coordinated and system-wide management for future water levels and flows. Are these principles compatible with other Great Lake institutions' guiding principles? Article VIII of the Boundary Waters Treaty states that 'the Commission shall be governed by the following rules or principles which are adopted by the High Contracting Parties for this purpose.' The guiding principles in the Treaty embody equal use and equal division of the waters on either side of the boundary. Along with these principles is the notion of non-favoritism for approved uses by the Commission though uses are prioritized. Most importantly the Commission must adhere to the Treaty principle of protecting the interests of either side from injury of the other when deciding questions concerning boundary waters.

In the report the Commission clarifies that the guiding principles apply only to Great Lakes institutions for the management of the waters and do not intend to replace the Treaty's intent. Their recommendations would work within the bounds of the Treaty. These principles are meant to be used in this report and by the governments as they deem appropriate.

The Commission shifted emphasis from the protection of interests on either side of the boundary to protecting the health of the entire Basin. It does note the protection of the full range of interests within the Basin but does not refer, as in the Treaty, to protecting one side from injury incurred by the actions from the other side. This change in jargon follows the shift from a nationalistic approach to an ecosystem approach to solving Basin problems.⁸⁰

Recommendations include reinforcing the ecosystem approach and public involvement in Basin decisions. Surveys demonstrated the diversity in interests throughout the Basin.⁸¹ The team surveyed riparians along with interest groups involved with the environment, electric power, transportation, commercial business/industrial, recreational, commercial fishing, agriculture, native nations, and local governments.

This report demonstrated the variety of views even within interest groups. As previously cited, the cohesion in interests would seem to be based on where the interests were located. For instance, there is marked disunity among similar riparians on Lake

⁸⁰Project Management Team, Group 5, *Living with the Lakes: Challenges and Opportunities. Annex D: The Great lakes Ecosystem Perspective - Implications for Water Levels Management* (Burlington, Ontario and Chicago, Illinois, June 1989).

⁸¹For more see Project Management Team, *Living with the Lakes*, June 1989.

Superior and Lake Ontario.⁸²

The scope of interests effected by Commission recommendations included land use and shoreline management. This provides for a broader base of input from riparians, recreationists, and environmentalists than before. Perhaps, the most noteworthy outcome of this reference was the inclusion of these varied interests in policy making process. In the 1977 case study on levels, the public group input and participation existed but was limited. The efforts to educate and represent the public supports the ecosystem vision of living with the lakes instead of trying to control the levels.

From surveys of interest groups, it is clear that especially riparians want representation on regulating decisions. There was unprecedented participation by the public on the Study Board during the years 1986-1993. Because of this, a Citizen Advisory Committee was created. The IJC and the Advisory Committee appointed two non-governmental members each to the Study Board.. In response, the Study Board created a public outreach program to monitor and educate the public.⁸³

It would seem that by informing groups of possible hazards and the effects present regulations have on the five Great Lakes, steps could be taken to live within the boundaries of nature. Regulating the flows of all five lakes or even the three middle lakes would disturb the natural ebbs and flows of the system causing unknown effects. Business, recreational, and riparian interests need to educate themselves on the reality of

⁸²See interest groups and their stances 1989 Report, Annex C, 57 - 106.

⁸³For Board positions see Levels Reference Study Board, *Annex 5: Citizens Advisory Committee* (Chicago, Illinois and Burlington, Ontario 21 March 1993).

natural fluctuations to avoid the harmful effects. Further, accessibility to the three main boards of control - International St. Lawrence River Board of Control, the International Niagara Board of Control, and the International Lake Superior Board of Control - is important for all interests to reach an understanding. Federal agency support is also important during crises periods.

Visibility, transparency, and accessibility to the regulation process was another area discussed by the Commission in relation to basin institutions. The Commission emphasized establishing networks of communication on a binational level for government, non-government agencies and citizens. Further, the IJC recommended that citizens, and the various interest groups in the Basin, need to be able to channel their concerns in order for the system to work especially in times of crises.

In addition, the Commission recommended the federal governments use this inclusive model for future large scale studies. This would include establishing Citizen Advisory Committee, public representation on boards, and a comprehensive review of Orders of Approval as well as Rules of Procedure. This would not only ensure awareness by regularly updated data but provide affected interests an avenue to voice their concerns and participate in the process.

In short the voluminous report the Commission offered the federal governments focused on reviewing what has worked in the past and what was economically and environmentally feasible to control fluctuations and levels both structurally and behaviorly in the future. It's review of the measures was surprisingly comprehensive and takes an ecosystem approach to managing crises and planning strategies. Several

measures are pragmatic, e.g, to avoid the use of vulnerable areas to avoid a large part of the property damage incurred by flooding, erosion, and storms. As a result of damage to shoreline property, this measure would reduce local government's property tax base.

Since the 1990's, the Great Lakes Commission has been working on a water use data base and decision plan in accordance with IJC recommendations. Additionally, in a reference dated February 1999, the governments requested a reference on the protection of the Great Lakes in investigated by the IJC.⁸⁴ The Commission was forth coming with an interim report dated August 1999. The final report entitled, *Protection of the Waters of the Great Lakes*, was released in February of 2000 which updated and incorporated the interim report further modifying and extending its recommendations. However, the bottom line is that no government action was taken on fluctuating water levels beyond asking for more studies to be undertaken.

Conclusion

Domestic and international events, national-state-provincial elections by party, Commission appointments and characteristics, and fiscal support for the IJC by the two governments were used as indicators of political context. The type of issue, the players, interest aggregation, political interactions, leadership, institutional diplomacy, complications of science, public participation, the inter-workings of the Commission, the governments' response to IJC recommendations were all factors explored in this chapter

⁸⁴International Joint Commission, *Protection of the Waters of the Great Lakes: Final Report to the Governments of Canada and the United States* (Ottawa, Ontario and Washington D.C. 22 February 2000).

designed to capture the nature of the issue within the whole policy process. This last section focuses on the IJC's role and mandate, what it accomplished, its strengths and weaknesses, and its performance on the Garrison reference. These facets of the case study say something about the influence of this regulatory issue on the reference.

The IJC has encountered difficulties performing its role as investigator and facilitator throughout the reference process on diversions and consumptive. We had expected that the Commission's role on this issue would be to facilitate the governments in moving towards binational policy solutions to alleviate extreme water level effects on Basin interests. We can conclude from the material presented concerning lake level regulation that the Commission's role has been restricted by its charter to functioning as a broker or facilitator in this area rather than imposing and enforcing strict rules based on scientific research and binational consensus. In past references, it recommended the creation of the International Lake Superior Board of Control and the International St. Lawrence River Board of Control which the governments subsequently established with IJC advise and oversight; however, since the 1977 reference on diversions and consumptive uses, the governments' responses to the IJC's recommendations to alleviate the affects of fluctuating water levels has been requests for further studies. No consultation on moving toward policy solutions has occurred outside of the proposed Annex to the Charter by Great Lake states and provinces which is voluntary.

In Chapter Two we described the institutional aspects of the IJC and the various federal, state-provincial, municipal entities it works with in order to complete its mission. This case has demonstrated that the federal and binational structures alone make any

effort to achieve binational consensus on this issue a formidable challenge for the Commission. As discussed during the Upper Great Lakes Governors Conference in 1982, the issues of water rights and jurisdictional controls involved with regulating lake levels added to the complexity of mitigating politics and science on this issue.

The review of scholarly literature written about the IJC in Chapter Three highlighted its strengths and weaknesses. David LeMarquand made observations about the importance of government willingness in solving binational boundary water issues. From describing the reactions of the IJC to governments' requests and the governments' responses to the Commission's recommendations, this case shows that the federal governments in both countries have been unable and unwilling to take the lead in driving a solution to controlling fluctuating lake levels. As Don Munton, suggested politics and the commitments of the governments to resolving the issue referred to the IJC can be obstacles to success.

By exploring the process of the reference as suggested in the international governance and comparative policy literatures, the case study described the politics created by the regulatory nature of the issue. The nature of the interests affected by diversions issues, i.e., the stakeholders, added to this complexity and difficulty of realizing consensus on regulatory objectives and practices. The regulatory nature of the issue further compounded the difficulty of the IJC's role to achieve consensus in this case study. Extreme water levels and domestic proposals for water diversions out of the Basin to developing areas in the western United States drove the issue to the binational agenda. While Congress considered such proposals that initiated questions for the Commission,

state and provincial agencies, natural resource agencies, and federal agencies, such as the U.S. ACE, NOAA, and Canada's Department of Environment and Transport, as well as hydro electric interests participated, in gathering information for the study boards.

Given the political context in studying effectiveness. Further, hindrances to the IJC's successful performance on this issue involved the political context that framed the period. The passage of time (1977-1985) and the change in administrations from Democratic to Republican in the U.S., coupled with resignations, vacancies, and new appointments on the Commission, added to the difficulty of gaining consensus and maintaining momentum and policy continuity of the issue. Thus, it was not surprising that the governments of Ronald Reagan and Brian Mulroney did not act on IJC recommendations in its final report to the governments in 1985.

Further, distracting attention from these issues were Canadian debates on federalism involving patriation of the Constitution Act, Quebec separatism, provincial controls of natural resources and off shore fisheries. In addition, we found overall fiscal support for the IJC during this period, but periodic disruptions in increased funding coincided with major elections and the GLWQA amendments of 1978.

As noted by Leonard Dworsky, the IJC's strengths are its reputation of impartiality and independence. These are based on its modus operandi, use of experts, board structure, and public participation. These structures allowed it to accomplish its referred task by processing the issue to produce conclusions and recommendations to the governments on diversions and consumptive uses. However, this case study showed that the structure of the Study Boards themselves, while promoting public participation and

stakeholder's opinions, actually functioned as arenas of policy conflict that were unable to generate consensus on regulatory norms and values and had to settle for making largely procedural suggestions to the IJC. The IJC did produce outputs but not long term outcomes towards policy solutions on alleviating extreme water levels.

In this study, the fact that the science was inadequate and the data was not available proved to be a significant political obstacle to building consensus. Thus, the nature of the issue itself could not be resolved strictly through science. In conclusion, this case study offers a glimpse into the inner-workings of the IJC on a politically unpalatable issue. Producing recommendations and conclusions for advising the governments, it would seem to be an organization that James Wilson would classify as procedural, that is, having measurable outputs but not outcomes. This emphasis on procedure while promoting fairness may not necessarily ensure satisfying policy outcomes. However, we can say from our observations that given the complexity and uncertainty associated with understanding the dynamics and risks associated with changing lake levels (whether from natural causes or man made diversions), the IJC did seek to maintain its own integrity and credibility. It preferred a neutral, soft glove approach in dealing with the many potential political pitfalls, rather than taking a more aggressive stand with stakeholders and government.

CHAPTER 6

FRAMING THE REFERENCE:

BACKGROUND ON THE GARRISON DIVERSION UNIT PROJECT

A Problem of Water Diversion

The Secretary of State for External Affairs for the Government of Canada and the Secretary of State for the Government of the United States simultaneously forwarded the Garrison reference to the IJC on October 22th 1975. The Project had been conceived in the 1940's under the Pick- Sloan Missouri Basin Program and legislation to appropriate funds for the project was enacted by the U.S. Congress in 1965.

The reference asked the IJC 'to examine into and report upon the transboundary implications of the proposed completion and operation' of the Garrison Diversion Unit in North Dakota and to make recommendations on ensuring that Article IV of the Boundary Waters Treaty were honored.¹ Specifically the IJC was asked to report upon the present state of water quality in the Souris and Red Rivers and other downstream waters including total dissolved solids, sulfates, bicarbonates, nutrients, pesticides, dissolved oxygen, and trace elements to name a few.² Also the Commission was asked to comment

¹IJC, *Transboundary Implications of the Garrison Diversion Unit: An IJC Report to the Governments of Canada and the United States* (Washington, DC and Ottawa, Ontario 1977), Docket 101,130-31.

²State Department of Health North Dakota, "Chemical Analysis of Souris River Basin Municipal Water Supplies" in *Letter from the Secretary of the Army transmitting a*

on present and anticipated uses of these waters. To do this the IJC established the International Garrison Diversion Study Board for technical investigation and advice on 23 October 1975. The Board was advised not to conduct public hearings but to make reports available to the public under the Public Relations policy of the IJC.³

Even though this reference was dated 1975, problems with the Garrison Diversion Unit were seen as early as 1947 after the authorization of the 1944 Omnibus Flood Control Act when tests indicated that irrigation plans would degrade surrounding soils. The original plans would irrigate 1,275,100 acres in Montana and North Dakota. In reaction to the soil samples, the plan was first modified to irrigate 1,007,000 acres of alluvial soils. This area was designated the Garrison Diversion Unit in 1957. Diplomatic notes started in April of 1970 questioning the project. Canada had been monitoring water quality and construction progress since 1957.⁴ The IJC presented its report to the governments of Canada and the United States in 1977.

Letter from the Chief of Engineers, Department of the Army, dated November 10, 1969, submitting a report, together with accompanying papers and illustrations on Souris River North Dakota requested by resolutions of the committees on Public Works, U.S. Senate and House of Representatives, adopted March 28, 1949 and July 29, 1955 - U.S. Government Printing Office, Washington, 1970, 176, 178-180.

³Nossal, Kim Richard, "The Unmaking of the Garrison: U.S. Politics and the Management of Canadian- American Boundary Waters," *Behind the Headlines*, (1978), 37(1):1; IJC, *Transboundary Implications of the Garrison Diversion Unit*, 1977, 9; IJC, *Garrison*, 1977, 137-38.

⁴Nancy J. Doemel, *The Garrison Diversion Unit: Science, Technology, Politics, and Values*, (Indiana University: Advanced Studies in Science, Technology and Public Policy 1979), 19, 23 (reference to *Garrison Diversion Unit*, H. Doc. 325, 11; *Public Works for Water and Power Development*, 43).

Expected Analytical Findings and Chapter Organization

The aims of this Chapter are to provide a basic background on the issues surrounding the Garrison Diversion Unit so to better understand the performance of the IJC on this distributive issue. Secondly this chapter provides the reader with a description of the political context that framed the reference domestically in both countries. Though Don Munton and other IJC scholars have identified politics as the main obstacle to the Commission completing its mission, these factors have not be systematically explored in a comparative case study framework. Further we ask in this chapter what the problems are associated with the Garrison Unit Project, what the role of the IJC is in past water disputes involving transfer of pollution cross boundary, and the what difficulties the Commissioners experienced in defining the scope of the investigation.

Edith Weiss Brown suggested that in order to understand international organizational effectiveness that the whole policy process needs to be considered through exploring a multitude of factors including the context of the international and domestic setting.⁵ In response to this proposition, we look into international and domestic political characteristics surrounding the 1977 reference on Great Lakes Diversions and Consumptive.

In conjunction to this chapter's aims, we expect to find that political events concurrent to the reference may effect the government's commitment to the IJC's reference mission. In this respect domestic agendas provide a focal point for

⁵Edith Brown Weiss, "International Environmental Law: Contemporary Issues and the Emergence of a New World Order," *The Georgetown Law Journal* 81(3) 1993: 695-697.

understanding the reference process. Further, drawing from Theodore Lowi's powers arena approach, we classify the Garrison project as a distributive case with expectations of decision making as concentrated in Congressional committees with established power relationships to support this classic western water project. Along this same vein, by describing federal and state-provincial leadership, we expect that the domestic political dynamics would have an external effect on the IJC's ability to reach consensus and bring the governments to the table for consultation. We expect observations from state-provincial elections to further provide insight into external constraints on IJC.

In exploring the Commissioner appointments, we ask what administration appointed them, how long was their tenure, where they came from, and what their professional background entailed. We expect these observations to reinforce the IJC's reputation as an impartial and independent agency in relation to performance drawing from propositions by Don Munton.⁶ Further, based on the proposition by David LeMarquand on the importance of governmental willingness to IJC success,⁷ we explore the IJC's fiscal support by the governments and expect to find an indication of the governments' commitment to resolving the issue and administrative willingness to follow through with the IJC's policy recommendations.

In order to examine these factors in relation to IJC accomplishments on this reference, this first section - The Problem of Distributive Water Policies in the Souris and

⁶ Robert Spencer et al, *The International Joint Commission Seventy Years On* (Ontario: T.H. Best Printing, 1981), 60-97.

⁷ David LeMarquand, "Preconditions to Cooperation in Canada-United States Boundary Waters," *Natural Resources Journal*, Spring 1986, 26(2): 221-242.

Red River Valleys: Managing Floods and Droughts - discusses the nature of international boundary water disputes and inter-basin water transfers, geophysical characteristics from the study board's report, and the significance of the reference term - transboundary implications. The second section - Political Context for River Basin Diplomacy: Binational, Federal, State-Provincial Considerations - explores the reference's domestic setting in both the U.S. and Canada. It draws on Chapter Four's discussion of international events and includes election results during the reference for Canadian and U.S. federal leadership, parliamentary and congressional elections by party. Then we further explore the political setting by looking at elections of provincial and state leadership, provincial assemblies and state legislative elections by party. More observations are made concerning IJC Commission appointments and fiscal support by the governments. Finally a summary of findings concludes the chapter.

The Problem of Distributive Water Policy in the Souris and
Red Rivers Valleys: Managing Floods and Droughts

International Boundary Water Disputes

Central to this reference was Article IV of the Boundary Treaty which states that no action by one party should cause injury to the health and property of the other party across the boundary. This notion suggested the idea of transboundary pollution.

Excluding the Great Lakes Basin, the IJC's role in this issue dates back to 1918 in Docket 4 entitled *Final Report of the IJC on the Pollution of Boundary Waters Reference*.⁸ The

⁸IJC, *Bibliography of Reports* (Washington, Ottawa, Windsor), 1994, 2.

IJC's role in transboundary pollution has been established through previous references and is further substantiated by contemporary references during the 1970's.

Central to the Garrison query is the issue of flood and drought control; this topic was addressed in 1975 by Docket 26 entitled *Coordinated Water Use and Control in the Roseau River Basin*, involving the management of shared waters by Manitoba and Minnesota.⁹ One contemporary reference reported to the governments in 1976 by the International Souris-Red Rivers Engineering Board was entitled *Joint Studies for Flow Apportionment, Poplar River Basin, Montana-Saskatchewan*.¹⁰ A report by the International Red River Pollution Board of Denver (Colorado) and Regina (Saskatchewan) in 1975 and was entitled *Report on Dissolved Oxygen Depletion in the Red River*. Pollution of the Red River affects Manitoba, Minnesota and North Dakota.¹¹

As Commissioner Bernard Beaupre observed in his separate opinion on the Garrison, the IJC had previously investigated water quality issues in the St. John River. Maine wanted to restore the salmon runs and spawning grounds by improving the water quality of the River upstream; however, the whole River was in crises because of poor quality, especially downstream in New Brunswick and the city of St. John's estuary. According to Mr. Beaupre, an international agreement on water quality management benefitted both countries in this instance as would an equitable agreement on the Red and

⁹Ibid., 2.

¹⁰Ibid., 3.

¹¹Ibid., 4.

Souris Rivers (which would not happen until 1989).¹²

These past investigations into transboundary pollution, apportionment, flood and drought control established the IJC's role on how to manage water quality on polluted streams that cross the boundary. The IJC's role in these matters included brokering or facilitating a consultation or 'sit down' by officials after the release of its report.¹³

Inter-Basin Water Transfers: Problems and Trends

The purpose of the Garrison project was to irrigate 250,000 acres (revised from original 1,275,100 acres or 617,500 hectares) for municipal and industrial water supply to 14 communities and to create recreational, fish and wildlife protective zones using Missouri River water.¹⁴ The Governments of Canada and Manitoba were concerned that the project would result in more frequent flooding of the Souris, Assiniboine and Red Rivers. They feared that water quality would be affected in these Rivers and subsequently in Lakes Winnipeg and Manitoba would be adversely affected by diverted Missouri basin waters carrying concentrations of dissolved solids, nutrients, and other chemicals from upstream in North Dakota.

Anxieties increased concerning the likelihood that foreign biota for the Missouri River basin would contaminate the Hudson Bay River basin into which these waters flow.

¹²IJC, *Implications of Garrison*, 1977, 126.

¹³ John E. Carroll and Roderick M. Logan, *The Garrison Diversion Unit* (Montreal: C.D. Howe Research Institute and D.C: National Planning Association), 1980, 36.

¹⁴Nossal, "Unmaking of the Garrison," 1.

Commercial and recreational fisheries would be open to invasive/foreign species of fish, fish diseases, and fish parasites from the Missouri River. These could also be transferred to animal and human populations through water use and consumption. Separate studies conducted by the governments of Canada and the U.S. concluded that the proposed GDU would cause injury to health and property across the border into Canada in contradiction to Article IV of the 1909 Treaty.¹⁵

Geophysical Characteristics and Dimensions

Some geophysical characteristics must be described to better orient the reader to attributes of the project before defining the scope of the reference and problems with the project. The source for the project was Missouri River water which lies in the Mississippi Drainage basin. Most of the GDU, however, falls within the Nelson River system in the Hudson Bay Drainage basin. The Nelson River system extends from the Rocky Mountains to Lake Superior draining about 414,000 square miles or 1,080,000 square kilometers of Alberta, Saskatchewan, Manitoba, and western Ontario into Hudson Bay. The Lake of the Woods, Red and Souris Rivers, Lake Manitoba, and Lake Winnipeg watersheds make up the Hudson Basin.¹⁶ The project envisioned increasing the agricultural capacity of this area to meet growing needs on food supplies from international pressures.

Table 6.1 Proposed GDU Irrigable Lands in Acres

¹⁵IJC, 1977, 5-6 and Figure 5; see Figure 6.1.

¹⁶Nossal, 1978, 2; IJC, 11-13.

AREA	ACRES	FEEDER CANAL
Middle Souris	103,800	Velva
Karlsruhe	12,200	Velva
Lincoln Valley	6,500	McClusky/LoneTree
New Rockford	20,900	New Rockford/Warwick
Warwick-McVille*	47,200	New Rockford/Warwick
LaMoure	13,400	New Rockford/James River
Oakes	46,000	New Rockford/James River
TOTAL	250,000	

* The extension of the New Rockford Canal, the Warwick Canal, would feed water to the Warwick-McVille area which would restore Devil's Lake.

Source: IJC, *Transboundary Implications of the Garrison Diversion Unit: An IJC Report to the Governments of Canada and the United States*, Washington, DC and Ottawa, Ontario, 1977, Docket 101, 13-15.

The project's principal components were the Snake Creek Pumping Plant, the McClusky Canal, and the Lonetree Reservoir. Lake Sakakawea, created by Garrison Dam, is now part of the headwaters of the Missouri River. The Snake Creek Pumping Plant would draw Missouri water from Lake Sakakawea to an impoundment called Lake Audubon then as proposed gravity would feed water through the McClusky Canal across the continental divide (which separates the two drainage basins) into Lonetree Reservoir. By damming the Sheyenne and Wintering Rivers in the Hudson Bay basin, the Lonetree Reservoir would be created. The reservoir's location was selected so that water for irrigation and recreational use could flow into the Souris, Red, Devil's Lake and James River basins.

Because of the national and provincial governments' concerns about inter-basin waters transfer, only the Snake Creek Pumping plant has been completed. The McClusky Canal is 90% complete, Wintering Dam is 70% complete; the Lonetree Dam and James

River dikes have not been constructed. An addition to these structures would be the development of nine watersheds areas to be operated by federal or state agencies as game management areas open to public hunting, fishing, and recreation as well as to provide wetlands for migratory waterfowl. In order to complete this segment of the project 146,530 acres would have to be acquired including 53,000 acres of marshland.

Table 6.2 Affected Populations

PRINCIPLE CITIES	CANADIAN POPULATIONS	UNITED STATES POPULATIONS
Winnipeg	540,000	
Portage la Prairie	13,000	
Selkirk	9,000	
Fargo-Moorhead		120,000
Grand Forks-East Grand Forks		47,000
Minot		32,000
Totals*	800,000	500,000

*Totals include major cities and surrounding town populations.

Source: IJC, *Transboundary Implications of the Garrison Diversion Unit: An IJC Report to the Governments of Canada and the United States*, Washington, DC and Ottawa, Ontario, 1977, Docket 101, 17.

The populations affected by the projects are represented in Table 6.2. Through inference, this table demonstrates that approximately 32,000 people would have benefitted from the project in its immediate vicinity while 967,000 people would have been negatively affected by transferred waters downstream in eastern North Dakota, western Minnesota and Manitoba (when taking into account major cities of Grand Forks, East Grand Forks, Fargo, and Moorhead). The major metropolitan area of Winnipeg constituted the largest constituency adversely affected. This shows disproportionate

distribution of costs and benefits. Even when examining winners and losers in the U.S. alone, at least 167,000 people in metropolitan areas would be injured while only 32,000 people would benefit. Similarly, disproportionate distribution of costs and benefits would occur with land use. The project would irrigate 250,000 acres in North Dakota; however, some 8.7 million acres of farmland would be affected adversely by inter-basin water transfers in Manitoba which include crops of corn, peas, buckwheat, sunflowers, sugar beets, and potatoes crops. Also affected would be 45% of cattle, 70% of hogs, and 80% of poultry marketed in Manitoba. Further in 1974-75, it was estimated that 11,000,000 pounds or 5,000,000 kilograms of fish commercially harvested from the area would be destroyed.¹⁷

Defining Project Scope and Impact:
Grappling with the Concept of Transboundary Implications

To address the project's potentially negative repercussions, the governments asked the Commission to report on the 'transboundary implications' of the Garrison Project. The Commission found this reference particularly difficult and grappled with defining the scope of transboundary implications in relation to the effects of the project. This concept was important to the scope of the investigation concerning inter-basin water transfers. As in other references, the Commission chose to take a broad view of the query. The concept of transboundary implications (not so unlike the Great Lakes ecosystem) was seen by the Commission to include the ecological consequences of not only the project but also the many geographical and functional activities related to it instead of the more narrow

¹⁷IJC, *Implications of Garrison*, 17-18; Nossal, "Unmaking the Garrison", 9.

interpretation of specific transboundary engineering, water quality, and so forth related to the project. Previous references cited by this study took a more traditional and narrow approach to reporting on transboundary pollution. The governments and the IJC seemed to be 'forward looking' by widening the scope of the inquiry with the concept of transboundary implications.¹⁸

The notion of ecosystem, popularized by the 1972 GLWQA, underlies the IJC's recommendations and conclusions on this inter-basin water issue dispute. Ecosystems can not be separated by nationalistic artificial boundaries. The Commission states in the report the following:

The Commission concludes that the phrase "transboundary implications" in the Reference should be viewed as embracing all of the foreseeable implications involved in the Project from water-quality and water-use viewpoints as well as from the social and environmental aspects.¹⁹

From its source, transboundary pollution would be carried by Missouri waters flowing from the James River into the Lonetree Reservoir and then be redirected into the Sheyenne River which is part of the Hudson Bay Basin. The Sheyenne River is not considered a transboundary river because it does not flow 'along' the boundary; it is a tributary of the Red River which flows 'across' the boundary.²⁰ A narrower interpretation of the reference may have excluded considering contamination from this particular

¹⁸IJC, *Implications of Garrison*, 95-97.

¹⁹*Ibid.*, 97.

²⁰There are three category of waters: Boundary waters like the Great Lakes, Upstream waters and Downstream waters like the Red River which has components of both because it crosses the 49 parallel. 'Either country may use its upstream waters as it sees fit so long as it is mutually advantageous'; Carroll and Logan, *Garrison*, 34-5.

source.

Having defined the scope of the reference, transboundary problems can be identified by analyzing the IJC's conclusions and recommendations. On then current water quality issues, Manitoba's streams had marginal flows but they were suitable for municipal consumption and industrial use; further Lake Winnipeg supported a major commercial and sports fishery. Therefore, the project's negative externalities could cause significant injury to the Red and Souris Rivers valleys and beyond; to their benefit it would increase stream flows.²¹

Concerning the proposed fish screen at the McClusky Canal, the IJC concluded that it would not prevent the transfer of foreign biota from the Missouri River to Hudson Basin even with specified modifications. The Lonetree Reservoir would not be a threat to the Basin if all outlets discharged into the Missouri River and no fishing was allowed. The problem of seepage could be remedied by lining the Velva Canal which would also reduce dissolved solids. Concerning the problem of concentrated dissolved solids discharge in return flows, this could be reduced by specified measures but would still leave the problem of concentrated nitrates in irrigated soils. More research needed to be conducted to determine the ultimate fate of nitrogen from return flows to the Souris River before irrigation could go forward. The IJC concluded that the governments should negotiate appropriate water quality agreements for the Souris and Red Rivers.²²

With respect to the problem of disturbing or destroying waterfowl and wildlife

²¹IJC, *Implications of Garrison*, 99, 105-106.

²²*Ibid.*, 109-111, 116, 118.

habitats, compensation could be achieved through the implementation of wetland habitat restoration policies. Even though many problems could be addressed through engineering, the problem of biota transfer was so threatening that the Commission recommended to delay construction of those features related to transfers.²³

In sum, regarding the problems and limitations of remedies, the IJC recommended against constructing any part of the project that would transfer biota from Missouri River. If measures could be taken to prevent this then construction of GDU could continue with the following caveats. Modifications had to be agreed upon to prevent transfers, reduce salinity in soils, restore wildlife habitat, and prevent seepage. Further caveats concerning verification of return flows' had to be resolved between the two parties, more research on nitrates needed to be conducted, and Best Management Practices (BMP) would need to be employed to minimize pollutants. Finally, the U.S. would need to compensate Canada for any capital and operating costs associated with remedial measures and negotiate water quality agreement on the Souris and Red Rivers.²⁴

Commission Bernard Beaupre wrote a separate opinion because of reservations on the vagueness of compensation and water quality downstream. First, he extolled the board's participants by saying,

There is no better example of the total impartiality which high level

²³Ibid., 113-114.

²⁴Ibid., 121-122; an agreement was achieved. See Department of State, *Boundary Waters: Souris River: Agreement Between the U.S.A. and Canada, Signed at Washington October 26, 1989*, TIAS 11731 (Washington D.C.:U.S. Printing Office).

administrators, engineers and scientist can give proof of than the brilliant objective analysis of such a difficult binational problem.²⁵

He went on to object to the recommendation, "...That the two governments negotiate [an] appropriate water quality agreement for the Souris and Red rivers..."[sic]²⁶ by adding that if the upstream country (U.S.) was willing to ensure a standard of water quality to the boundary at an exorbitant cost then the downstream country (Canada) should be responsible for maintaining that water quality. He used the St. John River reference to illustrate an agreement to share the cost of cleaning up a river basin.

Political Context for River Basin Diplomacy:
Binational, Federal, State-Provincial Considerations

Chapter Four's discussion of possible influences on the IJC during the 1970's provided some general observations about political leadership, party affiliations, Commissioner's background, and IJC fiscal support for its offices from the two governments. Exploring these factors in relation to the 1975 Garrison Project reference sheds some light on why the IJC was more successful on this distributive issue than it was with the consumptive uses regulatory reference. Describing the domestic political settings aids in constructing an explanation for why domestic politics influenced binational outcome of this issue, i.e., the importance of change in U.S. presidential administrations and the role of the U.S. Congress and courts in halting construction of the project so that

²⁵Ibid., 125.

²⁶ Ibid., 122; Mr. Beaupre discussion of water quality agreement cited on p. 116-118 as the subject of his objection to recommendation #3; he differed on the rationale for the basis of discussion on water quality agreement on p. 119; IJC recommendations are on pp. 121-123; Mr. Beaupre's objections are on pp. 125-26.

the IJC could be instrumental in bringing about a consultation in 1979.

Chapter Four described the political setting internationally and the quest for presidential legitimacy in the United States and waning Liberal support in Canada throughout the 1970's and 1980's. Pierre Trudeau's Liberal Party led Canada's national government at this time. President Ford, a previous Republican congressperson from Michigan, had succeeded Richard Nixon after he resigned in 1974 from repercussions of the Watergate scandal. The GDU project was referred to the IJC in 1975.

Before the issue was referred to the IJC for investigation, U.S. and Canadian relations had deteriorated under the leadership of Trudeau and Nixon. The Vietnam War and the exodus of U.S. citizens to Canada to evade the military draft was a contentious issue. Nixon's 1972 speech to parliament outlining the strategy of independent neighbors fueled the Liberal party's nationalistic and protectionist policy goals. The Arab Oil Embargo and the ensuing energy crises further strained the relationship and resulted in the development of the Canadian Crown Corporations. The Watergate scandal and resulting resignation of Nixon further complicated the atmosphere. Perhaps even more significant were the opposing visions of the Liberal Party and the Republican Party, still very much framed in a cold war mentality. Anecdotally, these differences were also reflected at a personal level between the two leaders in generational differences - Trudeau as a younger leader embraced progressive cultural attitudes reflective of the turbulent unrest during the 1960's and Nixon represented a generation befuddled by these attitudes. The succession of leadership is presented in Tables 6.3 and 6.4.

Table 6.3 Succession of Prime Minister 1974-1979

ELECTION	DISSOLUTION	PRIME MINISTER	PARTY AFFILIATION
8 July 1974	1979	Pierre Elliot Trudeau	Liberal
22 May 1979	1980*	Joe Clark	Progressive Conservative

Note: * Vote of Non-confidence on 13 December 1979.

Source: General Election result <http://www.parl.gc.ca> .

Table 6.4 Succession of Presidents 1974-1981

YEARS IN OFFICE	PRESIDENT	PARTY AFFILIATION
1974-1977*	Ford	Republican
1977-1981	Carter	Democratic

* Nixon elected in 1968. Resigned 1974. Ford as Vice President succeed Nixon as President in his second term in office in 1974.

After 1975, the Garrison project exemplified the ineffective relations between the U.S. and Canada during the Ford administration.²⁷ The Ford administration had responded to Canadian concerns with indifference but by the end of 1977 only 20% of the project was completed. Jimmy Carter attempted to control government spending and reduce the budget by targeting pork barrel projects funding such as the Garrison but he was thwarted by Congressional maneuvering on the floor to protect pet water projects. A battle ensued between these institutions over appropriations and the budget.

Carter made attempts to improve the tattered relationship with Canada with new appointments and a policy of outreach. Nonetheless, Carter would lose his bid for reelection to Reagan in 1980. As seen in table 6.5, the Liberal government was dissolved in May of 1979, Joe Clark led the Progressive Conservative government until a vote of non-confidence was held on 13 December 1979 which brought Trudeau and his liberal

²⁷Nossal, 1978, 1.

party back into power. John Turner was sworn into office of Prime Minister on 30 June 1984 after Trudeau announced his intentions to retire on 29 February 1984. Brian Mulroney as leader of the Progressive Conservatives gained power in the September 1984 elections while Reagan was campaigning for his second term of office.

Table 6.5 Canadian Parliamentary Elections

PARTY SEATS	8 JULY 1974	22 MAY 1979
Liberal Party	53.4%	44.4%
Progressive Party	36%	48.2%
NDP	6.1%	9.2%
Social Credit	4.1%	2.1%
Other	.3%	0%

Source: General election results <http://www.parl.gc.ca> .

As seen in Tables 6.6 and 6.7, President Carter had Democratic party support in both houses, however, neither party welcomed the executive branch intrusion into their state constituency's pork barrel projects. Carter's 'hit list' of water projects was not well received by the U.S. Congress in the first year of his administration.²⁸ The IJC and the U.S. courts were able to de-politicize the Garrison issue thus satisfying Canada's concerns on cross boundary injury to property and health. The U.S. Congress finally recognized the significant threat foreign biota posed for Canada, acknowledging the 1977 IJC report, by not releasing appropriated funds for the project.²⁹

Table. 6.6 U.S. House Elections 1975-79

²⁸Nossal, "Unmaking of the Garrison, 18.

²⁹Ibid., 24-25.

HOUSE OF REPRESENTATIVES	93 CONGRESS 1973-75	94 1975-77	95 1977-79
Democrats	242	291	292
Republicans	192	144	143
Independents	1		

Source: <http://clerk.house.gov>

Table 6.7 U.S. Senate Elections 1973-79

SENATE PARTY MEMBERS	93 CONGRESS 1973-75	94 1975-77	95 1977-79
Democrats	56	60	61
Republicans	42	38	38
Conservative	1	1	-
Independent	1	1	1

Source: <http://www.senate.gov>

Table 6.8 and 6.9 show the leadership of affected states and provinces during the reference. Most notably, South Dakota's governor Richard Kneip publically supported the neighboring state of North Dakota's quest for irrigation water. Despite support from Democratic state leadership, Minnesota and South Dakota legislatures did not support the GDU. Environmental groups in Minnesota, Montana, South Dakota and even North Dakota (especially on the eastern border with Minnesota) expressed concern with the project's effect on water quality as well as asymmetrical impacts. North Dakota's Governor, Arthur Link, and Manitoba's Premier, Edward Schreyer, had a particularly caustic relationship because of the asymmetrical costs and benefits of the project to their constituents.

Table 6.8 Governors and Premiers

STATE/PROVINCES	GOVERNOR/PREMIER	YEARS IN OFFICE	PARTY
North Dakota	Arthur Link	1973-1981	Democrat
South Dakota	Richard F. Kneip	1971-1978	Democrat
Minnesota	Wendell Anderson	1974-1978	Democrat
Montana	Thomas Lee Judge	1973-1981	Democrat
Saskatchewan	Allan Emrys Blakeney	1971-1982	NDP
Manitoba	Edward Schreyer	1969-1977	NDP

Source: U.S. Department of Commerce and Bureau of the Census, *Statistical Abstract of United States 1977-1985*, National Data Book and Guide to Sources, Printing Office Washington D.C.

Table 6.9 Provincial Election Results: Saskatchewan and Manitoba

PARTY	SAS. 1971	SAS. 1975	SAS. 1978	MAN. 1973	MAN. 1977	MAN. 1981
Liberal	15/60 [25%]	15/60 [25%]	-	5/57 [9%]	1/57 [1%]	-
NDP	45/60 [75%]	39/61 [64%]	44/61 [72%]	31/57 [54%]	23/57 [40%]	34/57 [60%]
PC	-	7/61 [11%]	17/61 [28%]	21/57 [36%]	33/57 [59%]	23/57 [40%]
Other	-	-	-	-	-	-

Source: <http://www.swishweb.com/Politics/Canada> - see provincial elections for Saskatchewan and Manitoba.

In the Canadian provinces of Saskatchewan and Manitoba, the NDP had majorities in both legislative assemblies until the latter's 1977 election in which the PC gained control through elections. Saskatchewan's Water Resources Commission had weighed in early on the Garrison Project stating that the Souris dam, the northwestern part of the project, would not benefit its constituents.³⁰ While speaking to Progressive Conservative party members of the legislative assembly (MLA) in Winnipeg in 1974,

³⁰Saskatchewan Water Resources Commission correspondence to Corps of Engineers dated 9 June 1965.

Governor Link lost the Manitoba's legislative assembly's trust by proposing they support his piecemeal approach to the project.³¹

Table 6 10 shows the partisan balance in state elections during the reference. In 1975, during hearings on the bill that would fund the Garrison Project (HR 8122), other states' concerns emerged, e.g., South Dakota's Department of Natural Resources secretary expressed his support of GDU but also his reservations about return flows into the James River that would increase salinity of soils.³² South Dakota's Governor also

Table 6.10 State Legislatures by Party 1974 and 1976

STATES	1974 DEMOCRATS - REPUBLICANS	1976 DEMOCRATS - REPUBLICANS
Minnesota Upper House Lower House	38 D - 28 R 103 D - 31R	48 D - 18 R 104 D - 30 R
Montana Upper House Lower House	30 D - 20 R 67 D - 33 R	25 D - 25 R 57 D - 43 R
North Dakota Upper House Lower House	17 D - 34 R 40 D - 62 R	18 D - 32 R 50 D - 50 R

Source: U.S. Department of Commerce and Bureau of the Census, *Statistical Abstract of United States 1977-1985*, National Data Book and Guide to Sources, Printing Office Washington D.C.

Note: Missing data on South Dakota.

expressed support of the GDU but its state legislature did not as demonstrated by a joint resolution issued in 1976 to protect the states' soil and water quality from negative effects of GDU.³³ According to a 1976 report (94-1335) from the House Committee on

³¹Nossal, "Unmaking of the Garrison," 6-7.

³²Ibid., 11.

³³Ibid., 11-12; see asterisk at bottom of page.

Government Operations, David Zenter as spokesman for the Minnesota's Pollution Control Agency outlined concerns about the project's methods and accuracy of data but did not want to interfere with North Dakota's internal affairs.³⁴

Within the U.S. federal government there was opposition to GDU largely based on the 1975 GAO report commissioned by House Subcommittee on Conservation, Energy, and Natural Resources (CENR). Also critical of the methods and data was the CEQ and the EPA - in 1976 both agencies stated the lack of reliability of data and suggested a moratorium on all construction until these questions were resolved.³⁵ Within the Department of Interior, the Fish and Wildlife Service (FWS) had reconsidered its original assessment of the project in 1965. Then the FWS had calculated compensation for waterfowl losses but with the changes in focus and policy in the 1970's, the updated effects on wetlands would also need to be included for reckoning compensation. The FWS deemed that the 1965 Wildlife Mitigation plan was inadequate by updated environmental standards. The Secretary of FWS, at that time, forwarded his conclusions to the CENR that wildlife would be a loser if the GDU was completed.³⁶ The subcommittee's report had little effect on the overwhelming passage of HR 8122 to continue construction of the Project.

According to Table 6.10, Democrats in the U.S. enjoyed the majority in both lower and upper houses of state legislatures affected by the GDU - except North Dakota.

³⁴ Ibid., 1978, 12.

³⁵ Ibid., 1978, 11-12.

³⁶ Ibid., 1978, 13.

In the 1976 elections, both Montana's upper house and North Dakota's lower house were equally represented by both parties. In 1974 both houses of North Dakota's legislature had Republican majorities and President Ford, also a Republican, supported federal funding of the construction of the Garrison project. In 1976 there were Democratic party gains in both houses but the Republicans maintained a majority in the upper house and the lower house was evenly split. It would be interesting if the Democratic party gains in North Dakota's lower house in 1976 were at all reflective of opposition to Garrison in the state.³⁷ There were growing numbers from the state's environmental groups, landowners, and Indigenous peoples who objected to certain aspects of the project. In any case, the majority of North Dakotans were fighting for water, jobs, and a resulting economic upswing to its economy if the project received federal support.

Changes in executive leadership from Presidents Ford to Carter and steady party leadership under Trudeau affected the Garrison issue and, thus, the IJC's role in the dispute, by the nature of these leaders' relationships. Relations improved under Carter with Trudeau but Carter instituted a power struggle between the Congress and the Presidency by challenging Congressional influence over funding pet water projects for their state constituencies. Party majorities in affected states seem to mirror changes in national leadership in the U.S.; Carter's election in 1977 is a case in point. In contrast, affected provinces held consistent majorities for the NDP in both Saskatchewan and Manitoba with the exception of the PC majority in the Manitoba's 1977 elections, in

³⁷ In 1976 the Democrats gained one seat in the upper house and ten seats in the lower house; see Table 6.10.

opposition to national leadership under Trudeau. Nonetheless, Canadian politicians were opposed to the project while opinions were split in the U.S.

Another contextual factor to be considered is the composition of the Commission itself. The Canadian Commissioners were all appointed under Trudeau's administration but the U.S. Commissioners represented two Republican administrations. Carter was not able to make an appointment until 1978 after the final report was released but before the 1979 consultation between the governments. Harkening back to background information on Commissioners in Chapter Four from Tables 4.16 and 4.17, bibliographical information was available on two of the them - Charles Ross an attorney from Vermont and Victor Smith being a publisher from Illinois. From the Canadian section Keith Henry was an engineer from British Columbia; Bernard Beaupre was a health engineer from Quebec and Max Cohen was from Quebec as well. Of these appointments, three were merit based and one was clearly a patronage appointment, base on the bibliographical information available.

The Commission was able to achieve consensus based on scientific and technical findings from an impartial study board further solidifying the IJC's reputation as an effective-independent binational organization. Members were united in their conclusions and recommendations on the project in relation to the 1909 Boundary Waters Treaty. They recommended certain modifications to minimize damage so that the project might be continued in the future. The Commissioners are represented in Table 6.11.

Table 6.11 IJC Commissioners

Commissioners	Service dates	PM/Presidential party affiliation	Administration
Bernard Beaupre	Nov. 1, 1969 - Dec. 31, 1980	Liberal	Trudeau
Keith A. Henry	May 25, 1972-Oct. 10, 1979	Liberal	Trudeau
Max Cohen	Oct. 24, 1974- April 15, 1979	Liberal	Trudeau
Charles R. Ross	1972-1978	Republican	Nixon
Victor L. Smith	July 23, 1973-May 25, 1978	Republican	Nixon
Henry P. Smith III	April 5, 1975-March 4, 1981	Republican	Ford
Robert J. Sugarman	April 26, 1978-March 4, 1981	Democrat	Carter

Source: Correspondence from Michael Kolodner for Frank Bevacqua at the Washington, D.C. office of the IJC dated February 11, 2003 - 4:02 PM. No biography was available on Ross so dates are approximate. Ross was appointed under Nixon and Sugarman replaced him in 1978. See *IJC 1977 Annual Report* and Robert Spencer, John Kirton, Kim Nossal (ed) *The IJC Seventy Years On*, Best Printing Co. Ltd., Don Mills: Ontario, 1981.

Though signing the joint recommendations and conclusions, Commissioner Beaupre felt compelled to write a separate dissenting opinion. He agreed that the governments need to reaching a substantive water quality agreement on the Souris and Red Rivers but disagreed with the other Commissioners that the U.S. should bare the burden of remedial costs. He supported the equitable distribution of costs for remediation.

Most significantly in comparison to the consumptive uses reference, there were no resignations or new appointments during their deliberations on the issue; therefore there was a continuity on the Commission that contributed to few delays in its execution despite the lingering effects of strained binational relations and personal hostilities between Nixon and Trudeau. By contrast, the consumptive uses reference experienced

several processional interruptions with resignations, new appointments, and technical delays from the lack of compatible data between the two countries' agencies. Even with this they were able to reach consensus on the lake level's issue as well but the consensus reached was that not enough information was available to make a definitive determination on the query. Government support, an indicator of the U.S. and Canada's commitment to the IJC, is represented in Table 6.12.

Table 6.12 IJC Fiscal Support Data 1971-1982

U.S. CANADA*	U.S. SECRETARIAT D.C.	CANADIAN SECRETARIAT OTTAWA	U.S. GL REGIONAL OFFICE WINDSOR	CANADIAN GL REGIONAL OFFICE WINDSOR
1974 1974-75	314,000 (\$U.S.)	873,500 (\$Can)	152,000 (\$U.S.)	598,000 (\$Can)
1975 1975-76	369,000	1,230,000**	400,000	742,000
1976 1976-77	476,000	1,183,000	674,200	924,000
1977 1977-78	429,000	1,022,000	711,000	1,070,000
1978 1978-79	518,000	738,000	746,000	1,191,000
1979 1979-80	669,000	823,000	772,000	1,137,000

*Different fiscal year than U.S.. ** Fiscal amount peaked. Bold print represents decrease from previous year's funding level. Source: IJC, 1980 Annual Report, Washington D.C. and Ottawa, 40.

While the long delay in referring the Garrison issue to the Commission affected the IJC's role in the project, there were few delays in the actual execution of the reference. Other effects can be seen in the fiscal support from the governments during the time of reference to the 1979 consultation in Table 6.12. The figures include salaries for each countries' recruited officials for their offices, professional and support staff, and

total operating costs (shared equally).³⁸

Funding increased steadily to the U.S. and Canadian Great Lakes Regional office in Windsor between 1974-1979 with the exception of a slight decrease in 1979-1980 for the Canadian Windsor office. Decreases in funding can also be seen in 1977 for the U.S. Secretariat and in 1976-1977, 1977-1978, and 1978-1979 for the Canadian Secretariat. Overall, the Canadian Secretariat demonstrated a decrease in fiscal support from 1974-1980 with its peak in 1975-1976 while the Canadian Windsor office support more than doubled. Several external events coincide with these decreases. Carter's 1976 election and Joe Clark's 1979 election reflect transitional funding effects on the IJC. The GLWQA amendments were signed in 1978 which may have affected the funding of the Canadian Secretariat for fiscal year 1978-79. On the other hand, these decreases may exhibit the effects of inflationary changes in the countries' economies as well. Comparatively, the Commission received steady financial increases from the U.S. and unsteady support from the Canadian government during the Garrison reference while overall the Commission received increased support from both countries during the Consumptive Uses reference.

Summary of Findings on Political Context from Diversion Diplomacy

The IJC stressed in its final report to the governments in 1977 that the Garrison Diversion Unit, if completed as designed, would cause injury to the health and property of Canadians, especially Manitobans, across the boundary in contradiction to Article IV of

³⁸IJC, *1980 Annual Report* (Washington D.C. and Ottawa), 40.

the 1909 Treaty. Unless actions were taken to ensure that inter-basin transfers of water and foreign biota would not occur then the Commission recommended a moratorium on the project. Observations from the Study Board's report describe the geophysical aspects of the area under investigation and the problems associated with diverting Great Lakes water to use for irrigation by North Dakota agricultural interests. In accordance with Susan Hansen's observations, in her critique of pluralist and structural models of policy analysis, the arena of power approach emphasizes benefits rather than costs. In exploring geophysical aspects of the project we observed that the proponents of the project did emphasize benefits to North Dakota instead of costs to neighboring states and provinces. In sum the background on the physical aspects of the Garrison and the problems associated with the project, describe a classic western water distribution scheme but the repercussions of the project included harmful transboundary implications for Manitoba and Canada.

This chapter has described the geophysical aspects of the Garrison project by detailing transboundary implications. In accordance with the suggestion of Harold Jacobson and Edith Brown Weiss that regenders contextual factors to understand organizational effectiveness, we further delved into the nature of leadership and domestic elections to frame the execution of the reference.³⁹ In addition we also explored facets of the Commission itself and its fiscal support as an indication of internal constraints on the IJC. Based on observations on this case study, we suggest that despite internal and

³⁹Harold K. Jacobson and Edith Brown Weiss, "Strengthening Compliance with International Environmental Accords: Preliminary Observations" *Global Governance* 1(2) (1995):124.

external constraints, the IJC was able to bring the parties to the table and reach consensus. The following findings are based on observations from this chapter's investigation into contextual indicators.

The Impact of Domestic and International Context

The reference period spanned 1975 to 1977 with the addition of two years to incorporate the meeting between the two governments on the project's fate. Repercussions from the oil embargo and ensuing energy crises were still being felt throughout industrial nations and the U.S. and Canada were no exception. More significantly though were the effects of domestic politics within each country. While Canadian politics at this time represented steady leadership of the Liberal party under Pierre Trudeau, U.S. politics experienced a major shift in leadership from Gerald Ford to Jimmy Carter. Canadian relations with the U.S. had been strained with the Nixon and Ford administrations. Jimmy Carter's administration took strides to improve the situation by inviting Trudeau to the White House and lessening tensions emanating from Parliament over the Garrison Project; however, Congress stubbornly supported the project throughout this period. Our findings thus far suggest that the change in presidential administrations in the U.S. affected the response of the governments to the IJC's recommendations. One would expect that Jimmy Carter and the Democratic lead Congress would be able to work together to de-politicize the Garrison issue but cooperation on this issue would require more than just shared party politics in this case.

From observations concerning state and provincial elections by party, all the

affected states were led by Democratic governors and the Canadian premiers of affected provinces were lead by the New Democratic party. We suggest that under this seeming harmony of Democratic strength in the U.S. federal and state levels of government, ran divisive undercurrents concerning the pork barrel politics of public works projects, whereas, even with different parties in power at the federal and provincial levels of government in Canada, unified opposition to the project crossed party lines.

While the governors supported North Dakota's efforts to complete the Garrison, the caustic relationship between the governor of North Dakota and the Premier of Manitoba accelerated tensions. The legislatures of neighboring states held Democratic majorities in contrast to North Dakota's Republican lead houses, however, we suggest that they opposed the project not because of party loyalties but because of its negative effects on constituent interests.

All of the appointments to the Canadian section of the IJC were under the Trudeau government while the U.S. section appointments were under the Republican administrations of Nixon and Ford. The most important finding concerning the composition of the Commission was that the same group of Commissioners persisted throughout the reference. We suggest that this facilitated the process of the reference being completed within two years, even though the delay in the issue's referral by the governments to the Commission complicated the politics surrounding the reference.

Of these appointments with bibliographical information available, three were based on merit based and one patronage while none were from states or provinces directly affected by the Garrison Project. From these observations we suggest that this

Commission only reinforced the reputation of impartiality and independence given there ability to reach consensus on the project; however, Mr. Beaupre did express his dissension to the recommendations on the burden of the costs of protecting Canadian waters being borne by the U.S.. This reinforces what is known in the scholarly literature about the Commission in that the its strength is related to its ability to operate through consensus reached by officials that do not represent the views of their respective governments but instead are able to weigh the investigative findings to reach conclusions.

Fiscal support provides another contextual indication of what David LeMarquand (1986) referred to as the willingness of the governments to utilize the IJC and its talents to investigate and facilitate agreements by the governments on referred issues based on their recommendations. Events that may have affected these levels of funding from 1974 to 1980, just after the consultation, were the election of Carter to the Presidency, Joe Clark's brief tenure as Prime Minister leading a minority cabinet, and the GLWQA amendments. Throughout these events we observed a doubling of funding to the Windsor office and decrease in spending for the Canadian Secretariat. It is interesting to note the decreases during Garrison while the Congress opposed the project and the overall increases from the U.S. during the levels reference.

In conclusion, we have demonstrated that the political context that framed the Garrison project reference looked quite different from the lake levels reference. There were few delays during the reference and the Commissioner were consistent throughout the process. The U.S. federal and state governments seemed to present a united Democratic party front; however, opposition from political undercurrents about pork

barrel politics and unforeseen costs of the programs to neighboring states were mounting, especially with the release of the Study Board report in 1976. Federal and provincial elections in Canada demonstrated political divisions based on party but both levels of government presented a united opposition to the project. This shows the limitation of just considering partisan orientation affects in the absence of other substantive data.

The next chapter completes the case study on the Garrison Diversion Project by further examining the nature of the issue, the relationships that formed around this distributive issue, and the struggle between the powers of the president and congress by considering how the issue came to the binational agenda, trends in public opinion and affected interests, government responses to the IJC's final report, and government behavior in updating the mandate. Then we can draw conclusions based on further findings framed by the contextual observations of this chapter.

CHAPTER SEVEN:

THE GARRISON DIVERSION PROJECT REVISTED

Garrison and the IJC: Mandate and Role

The IJC's role in this reference was to provide conclusions and recommendations on their investigative findings that would enable the parties to come to the table to negotiate a mutually-satisfactory resolution on the fate of the GDU project. In order to achieve this, it had to assess the potential impacts of the GDU on the Souris, Assiniboine, Red rivers and Lakes Manitoba and Winnipeg as set forth by the governments' requests. It determined the extant conditions of water quantity, water quality, biological resources, and current and future water uses by establishing the International Garrison Diversion Study Board. The IJC and its study board held meetings discussing board directives and then its findings that were presented to the public.¹

After receiving the study board's recommendations in January on 1977, the Ford administration continued to support the project and Congressional appropriations. However, a new administration was ushered into office under Jimmy Carter that same month. While waiting for the Commission's final report in August, Carter battled with the Congress over the 1978 appropriation bill that included Garrison Project funding.

¹IJC, *Transboundary Implications of the Garrison Diversion Unit: An IJC Report to the Governments of Canada and the United States* (Washington, DC and Ottawa, Ontario, 1977), 19, 33.

Meanwhile, the District Court's ruling on the Audubon Society case halted any construction and an out of court settlement was being negotiated between concerned parties. Congress, perhaps in consideration of the IJC's reputation, waited for recommendations before releasing funds on the aspects of the project that would affect Canadian waters. The importance of the IJC's role should not be underestimated as domestic politics played out between the three branches of U.S. government dominated the disposition of the issue.

Since U.S.-Canadian relations had faltered under the leadership of the Trudeau, Nixon and Ford administrations, Ministers of Parliament became instrumental in moving the issue forward. Carter's administration seemed to have appeased the opposition in Canada while it only agitated GDU proponents in the U.S.. The IJC's and the U.S. court's role served to slow construction on the project. The IJC helped de-politicize the issue and ultimately recommended a moratorium on all but the construction of the Lonetree Reservoir. By providing the factual implications of the project, the IJC enabled the parties to reach a reasonable solution. Appropriation bills for the project have surfaced in Congress periodically.

Expected Analytical Findings

For the purpose of this case study, domestic factors include the nature of the issue and context of the reference which can be further differentiated into issue characteristics, institutional behaviors, competing priorities and agendas, political relationships, and interest group politics. Observations from case studies by Ingram and

Fiederlein², and Mumme³ suggest that domestic factors influence binational decision making. By studying the 1975 reference, we ask how the political context and nature of the issue influenced IJC success. Drawing on ideas about organizational effectiveness by Oran Young and Edith Brown Weiss, success is demonstrated by the organization's ability to bring the interested parties together towards conflict resolution.⁴ IJC success on the Garrison issue culminated in a consultation between the two governments. We expect to find that the political context of the reference will be a determinant in IJC's influence in bringing the two parties together. Contextual factors further include rules structuring each government which differentiate the two federal systems, shifts in policies from election outcomes, characteristics of IJC Commissioners, and IJC fiscal support which we expect to effect IJC performance. We will draw on secondary literatures, primary documents, and interviews to explore the influence of these variables.

Following observations from LeMarquand, we expect this reference to be less complicated jurisdictionally and have fewer technical uncertainties than a regulatory case

²Helen Ingram and Suzanne Fiederlein, "Traversing Boundaries: A Public Policy Approach to the Analysis of Foreign Policy," *Western Political Quarterly*, 29 (March 1989): 742; Ingram and David Gillilan, *Divided Waters: Bridging the U.S.-Mexico Border* (Tuscon: University of Arizona Press, 1995).

³Stephen P. Mumme, "Symposium: Water Resources and Public Policy," *Policy Study Review* (1985), 5 (2): 349-450; Mumme and Scott Moore, "Agency Autonomy in Transboundary Resources Management - the U.S. Section of the International Boundary And Water Commission," *Natural Resource Journal*, (1990), 30 (3): 661.

⁴Oran R. Young, *International Governance: Protecting the Environment in a Stateless Society* (Ithaca and London: Cornell University Press, 1994), 141; Edith Brown Weiss, "International Environmental Law: Contemporary Issues and the Emergence of a New World Order," *The Georgetown Law Journal*, (1993), 81(3): 695.

would have. Therefore, we expect the IJC to be able to complete their investigation in a timely fashion. Further suggested by LeMarquand, we expect this issue to have fewer problems than the Great Lakes regulatory query. We expect Garrison's greatest obstacle to be the unwillingness of the governments to refer the issue to the IJC. The reference was given to the IJC in 1975 even though the project was authorized in 1965 and Canada's first diplomatic note of complaint was submitted to the U.S. in 1970.

We expect to see the IJC dealing with this distributive issue more successfully than with the lake levels' regulatory challenge. Does the Garrison Project represent a classic western project driven by U.S. domestic claims on federal resources, in this case, the state of North Dakota's agricultural interests? Drawing on Lowi's suppositions about distributive politics in the U.S., we expect Congressional action to influence the ability of the IJC to facilitate an agreement on the fate of the Garrison Project. The type of policy concerning the Garrison Project defined U.S. domestic politics before the controversy was elevated to the binational level. Coalitions in Congress had formed around public work projects originally generated by the Pick-Sloan Missouri River Basin Plan and in 1965 appropriated funds for the GDU project. The Project was designed to provide specific benefits for flood relief, irrigation and reclamation to individual farmers, landowners, and citizens in North Dakota living in the Nelson River system (Red and Souris river basins) and the Missouri River Basin (James River).

By looking at the legislative history, we will demonstrate that stable coalitions had formed around this pork barrel project through established relationships among officials. Governors of neighboring states supported the project and attitudes of mutual non-

interference existed concerning North Dakota's internal affairs. Key decision makers were in congressional appropriations and public works committees at the outset of the controversy. The Department of Interior (Bureau of Reclamation) and Department of Defense (Army Corp of Engineers) were both central agencies involved with managing and executing the project. These characteristics of the GDU are consistent with Lowi's classification of distributive policies types.

Successful prediction of political behavior based on distributive policy content requires clearly delineating policy types and determining costs and benefits based on expected impacts. As Susan Hansen⁵ suggests in her critique of Theodore Lowi's work⁶, overestimating utility income is a common flaw associated with policy analysis employing this approach. In the Garrison case, policy analysts backing the project expected it to smoothly sail through the U.S. Congress on the strength of the projects' economic benefits and the political support of western states' water and agricultural interests. With studies dating back to the 1940's, the data was abundantly available for an impartial analysis of the GDU by experts during the execution of the reference. However, as Hansen notes, expected impacts are not always consistent with actual ones which is why this seemingly beneficial project created a binational crises initially between Manitoba and North Dakota and then Canada and the U.S..

⁵Susan Hansen, "On the Making of Unpopular Decisions: A Typology and Some Evidence," *Policy Studies Journal* 13(1) 1984: 23-44.

⁶Theodore Lowi, *American Business, Public Policy, Case-Studies, and Political Theory*; 1964; Lowi "Public Policy and Bureaucracy in the United States and France," in Douglas Ashford (ed) *Comparing Public Policies: New Concepts and Methods*, 1968, 179.

Chapter Organization

After our introduction on the Garrison Diversion Project and the IJC's role and mandate, we review the political dynamics of how the issue came to be on the binational agenda in the section, *Setting the Agenda: Drought, Depression and Pick-Sloan*. We delve into the origins of the Garrison Project with the history of North Dakota diversions to provide a description of Canadian diplomacy in response to U.S. domestic politics prior to the reference. This section draws heavily on observations from previous scholarly work.

The next section, *Distributive Water Policies: Science and Public Input*, examines into the efficiency of the Study Board on technical issues and public input on the board's findings including trends in varying state and provincial interests. This section relies on primary documents, including the IJC and Study Board reports, and observations from previous scholarly works. The following section, *Garrison: Federal Systems and Binational Diplomacy in Executing the Reference*, describes the institutional roles and interactions including the role of state and national courts, the exchanges between the Canadian Foreign Office and the U.S. State Department, and the check of presidential influence against congressional support of pork barrel projects played out during the reference. Kim Richard Nossal and Nancy Doemel, among others, offer crucial insight into institutional inter-workings during the reference. It concludes with a discussion of the IJC's role in bringing concerned parties to consultation in 1979.

The section, *Updating the Mandate: Devil's Lake and Garrison Today*, asks what the status of the Garrison Project since the IJC's 1977 final report, what the institutional

response to recent flooding in the 1990's was, and how the reference has affected the issue of transboundary diversions in general. Observations are drawn from correspondences, interviews, and disposition of recent legislation. In relation to the case study's analytical focus, conclusions are drawn from previous findings and analysis from Nancy Doemel, Kim Nossal, Roderick Logan and John Carroll. It discusses what the IJC was able to accomplish, its strengths and weaknesses, and then comments on IJC effectiveness on this distributive issue arena.

Setting the Agenda : Drought, Depression, and Pick-Sloan

Having described the project, identified its associated problems, and discussed the context surrounding it - we can now review the politics generated by the issue. Starting with a summary of the history of diversions in ND and the roots of institutional conflict within the federal government on establishing goals and authority for Missouri river development, we can gain insight into the distributive nature of the issue by highlighting the formation of institutional interests into opponents and proponents of the project within the governments. By exposing these coalitions, we can trace how the Garrison project was propelled to the binational agenda through failed diplomatic efforts and the actions of various governmental agencies. This reinforces Theodore Lowi's (1964, 1978) assumption that policies determine politics.

In the U.S., the experience of floods and droughts in the mid-west led to the desire to fulfill the mandate of the 1902 Reclamation Act - to bring water to these arid lands. This led to the enactment of the Pick-Sloan Missouri River Basin Plan which

included the GDU project. Canada became involved with the attempt to bring irrigation, flood relief, and jobs to ND because of the potential negative effects the project would have on Manitoba's water quality and related interests. Manitoba had been following GDU construction since its Congressional enactment. In the 1970's diplomatic notes or aide-memoire were exchanged between the U.S. State Department and the Canadian Embassy in Washington DC.⁷ Initially the national government officials agreed to a meeting to discuss Canadian standing under the 1909 Treaty.

History of Diversion Issues in North Dakota: Setting the Stage for Conflict

The concept of water diversions in North Dakota dates back to its Constitutional Convention in 1889. Major John Wesley Powell, then director of the U.S.GS, advised North Dakotans to retain state ownership of water for irrigation rights. This resulted in Article 17, Section 110 of the state constitution that reads 'All flowing streams and natural water course shall forever remain the property of the state for mining, irrigation, and manufacturing purposes.'⁸ The notion of bringing irrigation to North Dakota by building a Garrison Diversion was developed by the Federal Reclamation Service.⁹

In the Nineteenth Century, the creation of the Mississippi River Commission along with the Supreme Court's broadening of the Commerce Clause resulted in federal

⁷U.S., Department of State, *U.S. Treaties and Other International Agreements*, Vol. 14, "Boundary Waters," TIAS NO. 548, 11 January 1909.

⁸ Kim Richard Nossal, "The Unmaking of the Garrison,"¹; Nancy J. Doemel *The Garrison Diversion Unit: Science, Technology, Politics, and Values* (Indiana University: Advanced Studies in Science, Technology and Public Policy, 1979), 1.

⁹ Doemel, *The Garrison*, 3.

funding of large water projects throughout the nation. Complimenting this, the Homestead Act of 1862 and the Desert Land Act of 1877 encouraged expansion west; however, these acts did not address the irrigation of arid lands necessary to support migration. In response to this, the Reclamation Act was signed into law in 1902 establishing a fund to 'examine and survey the possible construction and maintenance of irrigation works for storage, diversion and development of waters for reclamation of arid and semiarid lands.'¹⁰

Similar to the Great Lakes experience, in the Twentieth Century there were several attempts to divert water west for irrigation and flood relief. These ventures resulted in the Pick-Sloan Missouri River Basin Plan of 1944. In the 1920's a plan was proposed to divert water from Montana to North Dakota across the continental divide including a tunnel from Garrison leading into the Souris river. In the 1930's construction for a high dam near Garrison and lignite powered pumping plant were considered. Important to such schemes were the mapping of river flooding, water supply, irrigation and drainage projects in 1925 by state engineers. Also preceding the Pick-Sloan plan was the creation of the Missouri River Development Commission (later known as the Missouri River Commission) by North Dakota's state legislature in 1929 which designed a program for navigation, flood control, and conservation of state lakes, rivers, and streams.¹¹

¹⁰Doemel, *The Garrison*, 4-5; see U.S. Government, *Statutes at Large*, Vol. 32, pt.1, Dec. 1901 - March 1903, "Reclamation Fund," 17 June 1902.

¹¹Doemel, *The Garrison*, 5-7; see U.S., Congress, House, Committee on Interior and Insular Affairs, *Garrison Diversion Unit*, H. Doc. 325, 86 Congress, 2 Session, 1960,

In response to repeated droughts during the 1930's, the state's Conservation Commission and Department of Health made proposals for counter strategies and related issues. North Dakota's state legislature asked the federal government to divert Missouri River water to drought stricken areas. By 1937, farm income fell from \$200 million to \$50 million and in desperation citizens petitioned the Corps to do a feasibility study for such a diversion.¹²

In 1938, Congress reacted by appropriating funds to build the Garrison Dam for the purpose of impounding and storing Missouri water for irrigation. Congress then introduced a resolution supporting the Pick-Sloan Plan which North Dakota hoped would solve their water distribution problem. In addition President Roosevelt wanted to create a Missouri Valley Authority (MVA) - modeled after the 1933 Tennessee Valley Authority - to administer the plan.¹³ Meanwhile more drought and flooding hit the mid-west in 1943 and 1944 creating a sense of urgency to start construction.

The Pick-Sloan Plan was intended to create a comprehensive federal policy that included construction and development for navigation, stream basins, flood control, land

10; E.J. Thomas, "The Missouri River Diversion," *North Dakota Outdoors*, 3, January 1941: 14; North Dakota, "Missouri River Conference," *Century Code*, Chapter 248, sections 1-4; Chapter 144 (1-3); Chapter 161 (1).

¹²Doemel, *The Garrison*, 7.

¹³Doemel, 1979, 3-4; see U.S., Congress, House, *Message from the President of the U.S. transmitting a Copy of a Resolution Adopted by All but One of the Missouri river States, Represented in a Recent Meeting of their Governors and the Members of the Missouri River States Committee, Requesting Executive and Legislative Action Toward Procuring a Single Coordinated Plan for the Development of the Missouri River Basin*, H. Doc. 680, 78 Congress, 2 session, 1944.

reclamation, hydro-electric transmission-distribution as well as soil, forest, mineral, water, and wildlife conservation. Because the plan concerned water distribution and conservation for multiple uses, competition between the Department of Interior's Bureau of Reclamation and the Department of Defense's Army Corps of Engineers developed over administering the program. Not unexpectedly, agencies operating in the basin, i.e., the Corps, Bureau, Federal Power Commission and the Department of Agriculture opposed the President's recommendation of creating the MVA because it would infringe on their established roles and jurisdictions. The idea died in Congress from lack of agency support - not one agency participated in the hearings.¹⁴

At Congress' request to review the Missouri flood control, Colonel Lewis A. Pick from the Corps of Engineers composed a plan for agencies to work together on this distributive type policy.¹⁵ Concurrently, Senator Joseph O'Mahoney of Wyoming introduced a bill developed by William Sloan of the Bureau in which the Corps would construct a multi-purpose water development strategy.¹⁶ This set the stage for agency mission conflict; namely, the Corps' mission for navigation and flood control under

¹⁴Doemel, *The Garrison*, 16.

¹⁵ Such a plan would divert water from Garrison Reservoir to Devil's Lake and the James river would restore an old waterway; Dr. Jerry Miller, interview by author, 23 July 2001, GLERC, Ann Arbor, MI.

¹⁶Doemel, *The Garrison*, 14; Harold L. Ickes, Secretary of the Interior, *Report on Bureau of Reclamation's Plan for Basin Development: Missouri River Basin, Conservation, Control, and Use of Water Resources of the Missouri River Basin in Montana, Wyoming, Colorado, North Dakota, South Dakota, Nebraska, Kansas, Iowa, and Missouri*, Presented by Mr. O'Mahoney, (Washington: U.S. Government Printing Office, 1944).

Pick's plan or the Bureau's mission for irrigation, hydro-electric power, and conservation of water under Sloan's Plan. Relevant to this case study is the fact that the Sloan Plan omitted the Garrison Project which would become a major point of contention between the Corps and the Bureau.

On 14 November 1944 a compromise was introduced in Congress that the executive branch supported. According to Nancy Doemel, agencies agreed on the following points:

- The Corps would have responsibility over water capacity for storage in reservoirs.
- The Bureau would have responsibility over reservoir capacity for irrigation.
- Both agencies would recognize importance of developing hydro-electric capabilities.¹⁷

According to both Kim Nossal and Nancy Doemel, the Omnibus Flood bill (58 Statute 887 1944) addressed the issue of the MVA with the provision that 'Congress is petitioned to adopt a policy for the development of streams in the Western part of the U.S. which will allocate their waters first for domestic, farm, irrigation, industrial and mining needs and second for the purposes of navigation.'¹⁸ As a result only the

¹⁷Doemel, *The Garrison*, 18-19; see U.S., Congress, House, *Message from the President, Reconciliation Report on Problems of Missouri Valley Project*, 78 Congress, 2 Session, 1944; U.S., Congress, Senate, *Missouri River: Report of a Committee of two Representatives Each from the Corps of Engineers, U.S. Army, and Bureau of Reclamation, appointed to Review the Future of the Plans Presented by the Corps of Engineers (H. Doc. 475) and the Bureau of Reclamation (S. Doc. 191) for the Comprehensive Development of the Missouri River Basin*, S. Doc. 247, 78 Congress, 2 Session, 1944, 1.

¹⁸Nossal, "The Unmaking of the Garrison," 2; Doemel, *The Garrison*, 19, 62; To frame priority of functions, the 1909 Treaty mandates the IJC to rank water projects first

construction of Garrison Dam was authorized as part of Pick-Sloan. The Garrison Dam was completed in 1955. The state of North Dakota consistently supported legislation between 1933-1977 for the entire Garrison Diversion Project, not just the reservoir, but Congress only funded water storage.¹⁹

The revised 1957 Omnibus Flood Control Act sponsored by Otto Kruger of North Dakota included the re-authorization of the Missouri-Souris Unit by renaming it the Garrison Diversion Unit of the Missouri River Basin Project.²⁰ The Interior Secretary forwarded the plans to President Eisenhower in 1959 and it reached Congress for hearings in 1960. The re-authorization failed and was attempted again in 1963 and 1964. Finally a plan (PL 89-108) for irrigation of 250,000 acres for municipal and industrial water, fish and wildlife conservation and development, recreation, and flood control passed in 1965 at a cost of \$207,000 million.²¹

Construction of the project began in 1968 with the Snake River Pumping Plant hitched to the federal government contract with the state of North Dakota for construction in 1966. Work was interrupted by enactment of the National Environmental Policy Act of

by domestic and sanitation use, then navigation/canals, then power generation and irrigation with the caveat that no use can be permitted which conflicts with a higher ranked use.

¹⁹Doemel, *The Garrison*, 10.

²⁰Doemel, *The Garrison*, 21; see U.S., Congress, Committee on Interior and Insular Affairs, *Hearing on HR 7068 to make certain provisions in connection with the construction of the GDU, Missouri River Basin Project, by the Secretary of the Interior*, 85 Congress, 1 session, 1957.

²¹Doemel, *The Garrison*, 21; see Missouri River Basin Project, Garrison Diversion Unit Authorization, *Statues at Large*, 79, 1965.

1969 (NEPA) under President Nixon which stipulates that:

All agencies of the federal government shall...include in every recommendation or report on proposals for legislation and other major federal actions significantly affecting the quality of human environment, a detailed statement of the responsible office on...environmental effects which cannot be avoided should the proposal be implemented, (iii) Alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.²²

On 23 April 1971, the Council on Environmental Quality (CEQ) published EIS guidelines.²³ In 1974 the EIS for the GDU was filed with the CEQ thus facilitating the legislative, diplomatic, administrative and legal challenges to the project's completion. According to Nancy Doemel, the Bureau anticipating potential diplomatic complications, advised Congress to limit discussion of alternatives on the floor even though U.S. legislative actions were proposed in 1975 to halt the project.

This narrative traces the formation of domestic institutional coalitions on the Garrison project from its inclusion with the Pick-Sloan Missouri River Program to its placement on the IJC agenda. Initially, the Missouri River diversion issue demonstrates the complex relationship between competing agencies, e.g., the Bureau of Reclamation

²²NEPA, 83 Statute 853 1969, quoted in Doemel, 1979, 22.

²³Doemel, *The Garrison*, 22; see U.S., Council on Environmental Quality, "Guidelines", April 1971, *Federal Register*, 36(79), April 23, 1971, 774-7729. "To the Maximum extent practicable the (EIS) procedure should be applied to further major federal actions having a significant effect on the environment even though they arise from projects or programs initiated prior to enactment of the Act on 1 January 1970. Where it is not practicable to reassess the basic course of action, it is still important that further incremental major actions be shaped so as to minimize adverse environmental consequences. It is also important in further action that account be taken of environmental consequences not fully evaluated at the outset of the project or program."

and the Corps of Engineers and institutions, e.g., congress and the presidency in creating the Pick-Sloan program, including the Garrison diversion and the battle to fund the project. Conflicts between other agency missions and tasks are seen in the role of the CEQ and NEPA in delaying Garrison construction and their implications for Canadian involvement in the process. The Bureau of Reclamation's EIS findings provided the Canadian government reason to intervene in U.S. domestic policy. We examine this process next.

Canadian and U.S. Diplomacy and Domestic Politics Prior to Reference

After construction of the project began in 1968, the Department of External Affairs officially inquired into the GDU project with a *note verbale* on the 29 April 1969 to the U.S. State Department from the Canadian Embassy. Subsequently in January 1970 an aide-memoire asking for more information on the Souris Loop was transmitted to the State Department.²⁴ After a delay in talks for more than a year, Manitoba Minister of Mines Sidney Green sent another note which resulted in a meeting in February 1972 concerning the Bureau of Reclamation's study on the GDU.²⁵ The result was the creation of a technical working group that met once.

Based on the Bureau's findings that the project would diminish water quality downstream, the U.S. could not offer Canada substantive guarantees it would not violate the Treaty and further talks were suspended. In an article in the *Globe and Mail* dated November 1, 1973, Environment Canada sent a critique of the Bureau report in the form

²⁴Nossal, "The Unmaking of the Garrison," 3-4.

²⁵*Ibid.*, 6.

of a diplomatic note dated October 23, 1973 to the State Department requesting a moratorium on any part of the project affecting national interests until an understanding of Canadian rights were protected.²⁶ The Canadian government requested a meeting to discuss the findings of an updated 1974 EIS. Premier Schreyer responded by calling for further modifications to the plan. Schreyer rejected Governor Link's suggestion that the project proceed in a piecemeal fashion for fear that the closer it reached completion, the more difficult it would be for the Canadian government to gain concessions.²⁷

The U.S. State Department did not respond to the Canadian Foreign office's request on 17 April 1970 concerning the Souris Loop until the Bureau of Reclamation's report was finished in 1973. The Bureau was not prepared to respond to the request since construction was not scheduled for the Loop until 1979. Conversely, the Secretary for Interior, Roger C.B. Morton, strongly supported continuing construction of the project to the State Department in 1973. Canada interpreted this delay as indifference from Washington. Subsequent to the release of the Bureau's report, the State Department attempted to assure Canada of the project's safety and three months later offered a compromise to 'delay' construction on the Souris Loop and East Oakes area until the Canadian government's concerns were satisfied. Drawing on an inter-agency Memorandum of Agreement from the Subcommittee on Conservation, Energy, and Natrual Resources (CENR) hearings on November 19, 1975 and a Department of

²⁶Ibid., 4-5; IJC, *Transboundary Implications of the Garrison Diversion Unit* (Ottawa and Washington DC, 1977), 7; see Canada, Parliament House of Commons, Sessional paper 291-6/141c, 27 Nov. 1973.

²⁷Ibid., 7.

External Affairs Communique dated November 20, 1975, Nossal concludes that this delay and concession illustrated the State Department's reluctance to challenge the Department of Interior support for the project any further.²⁸ Nonetheless Canadian interests interpreted the State Department's actions as ignoring their concerns.

The compromise eased the situation for a time and prompted Manitoba Premier, Ed Schreyer, and Governor Arthur Link of North Dakota to call a meeting which resulted in the establishment of the binational Garrison Monitoring Committee (to meet every 6 months). In the meantime the Bureau updated its study on the Souris Loop and in August representatives of the Departments of State and Interior, the Bureau, the U.S. EPA, the CEQ, North Dakota's Water Commission and Canada's External Affairs, Environment Canada, the Manitoba Department of Mines, Resources, and Environmental Management met.²⁹ Infighting between the U.S. departments and Canada's refusal to accept either the Bureau's report findings or the State Department's assurances produced a disappointing outcome. The Monitoring Committee meeting in November also saw little progress. The dispute between Governor Link and Premier Schreyer further created an atmosphere of distrust and inflexibility. The only thing agreeable was to elevate the problem to the binational level with a reference to the IJC for resolution.

By 1975 with tensions running high, Canada made it clear to U.S. authorities that it would not accept any degradation of its waters. As chief negotiator with Canada, the U.S. State department reviewed the transboundary effects of the project. The department

²⁸ Nossal, "The Unmaking of the Garrison, 5-7.

²⁹ Ibid., 6-7.

formed a negotiating team of technical agency experts which met with its counterpart from the Canadian Department of External Affairs. External Affairs's U.S.A. Bureau consisted of 25 diplomats, five of which focused on transboundary environmental issues. Since the negotiating teams could not agree on whether the project violated Article IV of the Boundary Waters Treaty, they referred the matter to the IJC for resolution.³⁰

Hereafter, the IJC recommended in its Final Report of August of 1977 that no part of the project affecting Canadian waters should be undertaken until both parties agreed upon the methods used to eliminate the risks of foreign biota transfer from the Missouri River basin to the Hudson River basin. After the report was published the two governments met again to negotiate based on the mutually agreed upon facts provided by the IJC.

This account of diplomatic exchanges before 1975 documents before the rise of the GDU controversy to the IJC agenda which reinforces our expectation that domestic policies and the distributive nature of the issue can effect binational politics. This leads us to the matter of the execution of the reference and the IJC's role in the conflict.

Distributive Water Policies: Science and Public Input
in the Executing of the Reference

We anticipate that the IJC's reputation as an impartial and independent agency was significant to its success in resolving the controversy of this distributive issue. The process it employed in the reference supports this assertion and can be illustrated in its use of study boards and public input. The Study Board's procedures reinforced the IJC's

³⁰Doemel, *The Garrison*, 25, 46, 62-63.

reputation by appointing technical experts impartially focused on finding answers without representing their own national interests. Public hearings on its initial directives, and later on the IJC's findings, reinforced the Commission's image of accessibility and transparency.

Science: Efficiency of the Study Board

The International Garrison Diversion Study Board was created on 23 October 1975. It consisted of professionals from engineering, agriculture, biological sciences, economics, and public administration. Because of the complexity of the issues and time constraints, the board created five technical committees; namely, Water Quality, Water Quantity, Biology, Uses, and Engineering committees. These committees drafted 53 experts in fields drawn from 16 federal, provincial and state agencies, and two universities. On 16 January 1976 the board submitted and received approval for its methods of studies to be conducted over a year.³¹

Even with 'a few differences of opinion among the participants' the board was able to effectively report upon all aspects assigned to it by the IJC in a timely manner.³² Data for analysis was drawn from NAQUADAT - the Canadian national computer data storage and retrieval system - so compatibility and comparability were not an obstacle in the analysis as it was for the Great Lakes case study. However, it was difficult to determine water quality for Lakes Manitoba and Winnipeg owing to shortage and

³¹ Nossal, "The Unmaking of the Garrison, 10; IJC, *Transboundary Implications*, 1977 31.

³² IJC, *Transboundary Implications*, 33.

variation in the location and timing of samples.³³ Data on surface waters of the Souris, Assiniboine, and Red rivers were available from both countries from 1936 to 1974 and any missing data on water flows were generated. Water use inventories included municipal, industrial, agricultural, rural domestic, recreational, fish and wildlife as well as water fowl, aquatic invertebrates, plants, and archaeological sites. Time restrictions limited field studies so information was used from previous federal, provincial, academic, and private studies. Predictions were made for water use between 1985 and 2000 and solids concentrations and sediments in streams and lakes were calculated.

Based on the U.S. Bureau of Reclamation's EIS reports which were disputed in court, modifications to construct the 1975 and 1976 models were made by the board concerning concentrations of total dissolved solids, calcium, magnesium, sodium, sulfates, bicarbonates, chlorides, nitrates, and return flows. Phosphorous concentrations were calculated based on a literature review and not derived from a model.³⁴ The board summarized its findings to the commission including recommendations for future field testing, verification of predictions from models, and more research on nitrogen cycles in the streams, lakes, and rivers.

This describes a process of study that was efficient in its execution of assigned responsibilities. Supporting our expectations, the board was able to gather or generate most of the data requested by the commission to complete its task in a timely fashion with

³³Ibid., 34; To solve this problem estimates were used based on water budgets and calculated loadings.

³⁴Ibid., 34-39.

only a year delay. Disagreements or uncertainties existed concerning nitrate cycles and phosphorous readings; however, the experts were able to build data bases based on studies ranging from the 1940's to recent EIS reports. Once the studies were released to the IJC, limited public hearings were conducted.

Trends in Public Opinion: State and Provincial Variations

The IJC conducted eight public hearings of which the first three in 1975 were meant to gather opinions on the possible effects of the project, on study board directives, and on investigation plans while the last five meetings were meant to distribute and solicit views on the 1976 board report. Verbatim transcripts of more than ninety testimonies were published along with the final report.³⁵ This summary of responses identified trends in citizen concerns.

Table 6.13 captures the concerns and hopes of citizens from Canada and the U.S. expressed during these initial three meetings based on sixty-three presentations in 1975 in Minot and Grand Forks and forty-three submissions from Winnipeg. Proponents that attended the meetings in North Dakota included Governor Arthur Link, two former state governors, four members of the state legislature, eight mayors/city managers, local water board members, chambers of commerce representatives plus statements from North Dakota's Senators Milton Young and Quentin Burdick and Representative Mark Andrews.³⁶ In Manitoba, opponents who testified included MPs, provincial and federal

³⁵Ibid., 79.

³⁶Nossal, "The Unmaking of the Garrison," 9.

officials, and interested citizens. According to an article in the *Globe and Mail* dated 21 November 1975 - only two supporting presentations were given in Winnipeg.³⁷

Table 6.13 Citizen Concerns: Costs and Benefits

LOCATION	OVERALL RESPONSE	COSTS	BENEFITS
Minot, ND	positive		assure water supply, stabilize economy, increase jobs, ease economic hardships
Winnipeg, MA	negative	degrade water quality with dissolved solids, pesticides, fertilizers, sulfates; BMP minimize effects but more studies needed; salinity of irrigation hurt food production; irrigation result in loss of ducks and deer affecting hunting and recreation; increased flooding; money isn't adequate compensation; question short study time frame and Bureau's EIS	
Grand Forks, ND	negative	fear transfer plants and aquatic organisms, foreign parasites, disease; question adequacy of fish screens; fear spread to entire Hudson Bay	
Devil's Lake, ND (participated in Grand Forks meetings)	positive		stabilize water levels to benefit recreation, fish, water fowl, wildlife habitat; control flooding

Source: IJC, *Transboundary Implications of the Garrison Diversion Unit: An IJC Report to the Governments of Canada and the United States*, Washington, DC and Ottawa, Ontario, 1977, 79-84; For list of names of participants see International Garrison Diversion Study Board, *Report to the IJC: Appendix E: Engineering Report*, Billings, Montana and Regina, Saskatchewan, October 1976. IJC summary based

³⁷Nossal, "The Unmaking of the Garrison," 10.

on some 2054 pages of transcripts.

In Table 6.14 and 6.14, evidence suggests that participants from the immediate area around Garrison supported the project expressing expectations of reducing economic hardships resulting from periodic droughts and flooding. Adversely, the community downstream of the project expressed incredulity about assurances that fish screens would mitigate invasion of foreign fish, organisms, parasites, and disease into the Hudson Bay Basin area. Opponents also questioned plans to remediate return flows; citizens feared these flows would contaminate the water supply and thus hurt the local economies dependent on hunting, fishing, recreation, and agricultural production.

Table 6.14 Agreements and Disagreements with Board Findings

AREA	CONCURRENCE	RESERVATIONS
Minot, North Dakota Grand Forks, ND	No	Recommendations adequate for Treaty standard of "usable" water flows across border such as BMP, no need for closed system too
Winnipeg, Manitoba Souris, MA Portagela Prairie, MA	Yes	Recommendations might not be enough to ensure WQ; BMP not eliminate negative effects; data on closed system alternative not adequate so have to abandon fish industry; Fish screen not adequate; Channelization hurt waterfowl & increase Black fly population; question thoroughness of library research for protection of archeology sites
Indigenous Peoples (included in Manitoba and North Dakota hearings)	Yes	Project would violate Treaty for them too and added that it would violate Migratory Bird Convention.

Source: IJC, *Transboundary Implications of the Garrison Diversion Unit: An IJC Report to the Governments of Canada and the United States*, Washington, DC and Ottawa, Ontario, 1977, 86-93.

Summary Table 6.15: Garrison Opponents and Proponents

PROponents	MEMBERS/CONTEXT	OPponents	MEMBERS/CONTEXT
National Reclamation Association	citizen, organizations, and government agencies from reclamation states	National Audubon Society	citizen environmental group
Missouri River States Committee	governors of 10 basin states	National Farmers Union	farmers: established 1933 to advocate MVA plan
Missouri Basin Inter-Agency Committee	NA	National Isaak Walton League	NA
Garrison Conservancy District	Committee overseeing irrigation districts, work with federal government on project	Institute of Ecology	National scientist group
ND Water uses Association	3000 membership that supported appropriations for resource development	Minnesota Pollution Control Agency	State agency: filed amicus brief in Audubon Society law suit
Bismarck Chapter of Isaak Walton League	Split with National Association b/c of local benefits of projects	South Dakota Legislature	state elected officials: fear of local water contamination
U.S. Bureau of Reclamation	Under the Department of Interior in the Ford Administration	Canadian Government	Under pressure from Manitoba foreign office acted
U.S. Army Corps of Engineers	Under the Department of Defense in the Ford Administration	Manitoba provincial government	MLA fear of inter-basin water transfer and hurt industry
U.S. Congress	Until 1978 after considering the IJC report	Manitoba Environmental Council	citizen advisory group
		Prairie Environmental Defense League	500 farmers from Portage la Prairie and Souris/Winnipeg areas
		ND Farmers Union	farmers: wanted irrigation but not comprehensive plan
		Committee to Save ND	Turtle Lake/Souris landowners and farmers
		McLean County Farmers Union	ND farmers opposing relocation
		Wildlife Management Institute in ND	changed support in 1974 to oppose project

Source: Doemel, 1979, 34-58.

After the International Garrison Study Board concluded its investigation, the IJC arranged for five public hearings to distribute the results and solicit responses. The board confirmed provincial expectations of negative externalities on downstream waters and their communities in violation of the 1909 Boundary Waters Treaty. Board recommendations to modify the project would alleviate some of the problems but concerns with unaddressed issues and for the plan's ultimate success remained. The main concern involved return flows into the Red and Souris rivers.

Debates lingered over compensation and whether Best Management Practices (BMP), a closed system approach, and fish screens were adequate to address problems due to the need for more studies and lack of assurances that regulations and standards would be followed. Conversely, the State of North Dakota officially supported the Garrison project declaring it would protect Manitoba from contaminated flood waters and they further argued that in the event that waters were to be contaminated then there was recourse to the United States courts for compensation as provided for by the 1909 Treaty.

As shown in Table 6.15 the proponents complained that benefits to Canada were excluded from the study; namely, increased hydro-generation, improvements to low flow water quality, and the elimination of zero flows. Opponents in Canada, however, did not trust the adequacy of BMP, closed system design, and fish screens technologies and thought that the U.S. should pay for any additional water treatments in Manitoba for water consumption. Even the more sophisticated and costly treatments like reverse osmosis might not assure a potable water supply.

Indigenous peoples supported the board's recommendations that even with modifications more studies were needed before construction of the project could be completed. They expressed their opinion that the project violated the 1909 Treaty causing injury to their health and property and like other opponents did not think that recourse to U.S. courts for compensation would be adequate. They were also concerned about the project violating the Migratory Bird Convention provisions.

In conclusion the combination of the methods and expertise of the study board, the IJC's reputation and inclusion of public opinion further supported a strong IJC role in this controversy. The data on opponent's perceptions also supports the observation that disproportionate costs and benefits existed with the project. Other opponents under the Carter administration included the Department of Interior and Environmental Protection Agency. Proponents of the project under the Ford Administration included the Bureau of Reclamation, the Corps of Engineers, and Congress until 1978. Along with affected interests, executive and legislative institutions played pivotal roles in bringing the issue to the binational agenda. This leads us to explore the impact of federal institutions and binational diplomacy in the execution of the reference.

Garrison: Federal Systems and Binational Diplomacy
in Executing the Reference

In this section that focuses on the reference process, we explore the roles and interactions between institutions and their impact on the disposition of the case and IJC success. We expect congress and its committees to play a prominent role based on Lowi's assumptions about distributive issues and the coalitions that form around them. The role

of the courts and executive is also explored by examining the original state court case and then the federal court case in the Garrison controversy and its potential impact on the controversy and the reference process. Both cases were filed in opposition to the Garrison Dam Unit Project's continued construction. In relation to the role of executive agencies, we focus on the diplomatic interactions between the Foreign Office and the State Department to reveal the effect significant institutional processes have to the investigation of the reference.

Based on contextual observations, we expect the change in administrations in the U.S. and the demise of the Liberal party in Canada to effect the execution of the reference. Our observations of undercurrents in provincial and national political trends in Canada, allow us to draw conclusions on the role of the opposition in national government on this issue. We further explore issues related to separation of powers in the U.S. by examining the actions and counter actions between the President and Congress to determine the fate of the Garrison issue. Lastly we explore the impact of the IJC's report and the role of other institutions in bringing about the 1979 consultation.

Trends: Environmental Interests and the Courts

As evident in Table 6.15, The Committee to Save North Dakota and The Audubon Society were inclined to oppose the Garrison Project. A proponent of the project in the legal battle was the Garrison Diversion Conservancy (GDC). The Audubon Society was the first national environmental group outside of North Dakota to file a law- suit questioning the project's validity. The actions of these interest groups resulted in project

delays and ultimately a moratorium on construction. These cases gave momentum to the IJC's efforts to achieve a consultation. between the two parties on the issue.

The Committee to Save North Dakota represented farmers and landowners primarily near Turtle Lake that opposed the construction of Garrison. The group formed in 1972 after farmers complained of being treated 'poorly' by Bureau officials.³⁸ The GDC managed eleven irrigation districts in the area; each had a three-way contract formalizing relationships between the districts, the GDC, and the federal government for irrigation, distribution of water, and construction.³⁹ Because of this arrangement, there were implications of possible corruption associated with the GDU. These concerns prompted a congressional committee to request a GAO investigation of the project.

In December 1972 The Committee to Save North Dakota filed a suit in the U.S. District court in Bismarck naming the Garrison Diversion Conservancy and the Department of Interior as defendants in order to halt construction of the project on the grounds that the GDU project violated NEPA, the Fish and Wildlife Coordination Act, the Environment Quality Improvement Act of 1970, Water Bank Act, and GDU Act of 1965.⁴⁰ Subsequently, the Bureau filed a preliminary EIS with Judge Sickle in April of 1973 and later filed a revised EIS in January of 1974. The court ruled in May 1974 that the EIS was in compliance and that the government had acted in 'good faith in preparing the statement.' The Committee filed an appeal to the Eighth Circuit Court. In January

³⁸Doemel, *The Garrison*, 44.

³⁹Ibid., 35-37.

⁴⁰Nossal, "The Unmaking of the Garrison," 22; Doemel, *The Garrison*, 45.

1975 the court upheld Judge Sickles' ruling with the caveat that the Committee could file an appeal based on new issues. The Committee was unable to financially continue the fight in court to stop the GDU and in response it changed its focus to educating the public on the issue as stated in a correspondence from Gray Pearson dated August 27, 1979.⁴¹

The impact of this law suit was demonstrated by the skepticism it raised among congressional members. The House Committee on Government Operations was asked to look into the GDU in 1973. Its Subcommittee CENR (originally Conservation and Natural Resources) asked the General Accounting Office to investigate into construction costs. It found discrepancies in cost ratios computations and ill-conceived cost ceilings due to ignoring inflationary impacts. With these findings, William Moorhead, Chair of Subcommittee, urged Secretary of State Kissinger to recommend a moratorium on any aspect of project that would harm Canadian waters.⁴²

Subsequently, the National Audubon Society filed a suit in the U.S. District Court in the nation's capitol on 27 May 1976 concerning the adequacy of the EIS. They named the Department of Interior in the suit only, so the federal government filed a motion to dismissed based on the plaintiff's omission of naming the state of North Dakota and the Garrison Conservancy as parties to the suit. Further North Dakota's District Court had already ruled on the adequacy of the EIS. The government asked for a change of venue to the original court but Judge Charles Rickey of DC denied the request and scheduled it to be heard the following year.

⁴¹Doemel, *The Garrison*, 26, 45.

⁴²Nossal, "The Unmaking of the Garrison," 10-11.

In the meantime, the change in presidential administration had affected executive support on the project. Carter had included the Garrison project in this hit list of water projects to be trimmed from the federal budget. Further Carter's appointment of Cecil Andrus to Secretary of the Interior reversed the Department's stance on the project as well. Hearings were scheduled on April of 1977 in view of the administration's lack of support for the project, the court stayed the proceedings since an out of court settlement was being negotiated.

A stipulation of order was endorsed by the judge on 11 May 1977. The subsequent agreement reached by the Justice Department, Department of Interior, and the National Audubon Society was to voluntarily cease construction on the project, except for the McClusky Canal. Further it was agreed that the Interior Department would write a new comprehensive supplementary EIS. However, the Justice Department and the Audubon Society left the original complaint on file while withdrawing other papers.⁴³ This supported Andrus' request to Congress to modify the project and its funding. According to a letter from the Canadian Embassy to the U.S. State Department dated 31 March 1978 and another correspondence from George Rehjon in January 1979, the Bureau responded to the court ruling by releasing a modified plan for GDU in February of 1978 but it did

⁴³ Nossal, "The Unmaking of the Garrison," 9, 22-23; Doemel, *The Garrison*, 27-28; for further reading see *History of the Garrison Diversion Project and the Courts, 1965-1977*, internal Staff Document, North Dakota Attorney General's Office, 2; U.S., Department of Interior, Bureau of Reclamation, *Special Report on Re-evaluation and Modification of the Garrison Diversion Unit*, Washington DC: Government Printing Office, 1979; U.S. District Court, District of North Dakota, Southwestern Division, State of North Dakota and Garrison Diversion Conservancy District v. *Stipulation of Parties and Stipulation of Dismissal*, 6 November 1978.

not address the most critical issue to Canada and the IJC - how to prevent transfer of foreign biota from the James River to the Hudson Bay Basin.⁴⁴ The impact of these decisions can be seen by the fact that no further construction was completed on the project.

These court cases and official responses demonstrate the effect of changes in the political context as well as the role of the courts and congressional committees on the disposition of the project. Originally, the ND law suit resulted in a restraining order on construction of the test fish screen built near Turtle Lake temporarily interrupting land acquisition, surveys, and design work on features. The National Audubon society original suit resulted in an out of court settlement on voluntary administrative cessation of construction. Subsequent to 1977, the National Audubon Society continued filing law suits concerning construction on lakes Brekken and Holmes in McLean County. Motions were denied in court and proponents of the project followed suit by filing more motions to keep the project alive. Other institutional processes were being played out simultaneously to these legal proceedings.

The Canadian Government Response 1975-77: Foreign Office vs State Department

The Canadian government saw the IJC as the logical venue to protect its interests. It pursued this tact for two reasons. The national government was primarily alarmed by Garrison appropriation requests by the Ford administration and the ease by which they passed Congress. Secondly, the Garrison issue gained momentum in Parliament and the

⁴⁴Carroll and Logan, *The Garrison Diversion Unit*, 49.

media due to the efforts of the Progressive Conservatives delegation from southern Manitoba. Constitutionally the onus for protecting water quality, and affected economic interests, fell on the provincial government of Manitoba. However, the Canadian government realized that national waters were also threatened by the project.

This Ad Hoc Conservative Committee was composed of Dan McKenzie from Winnipeg South Centre, Dean Whiteway from Selkirk, Walter Dinsdale from Brandon-Souris, Jake Epp from Provencher, and Jack Murta from Lisgar.⁴⁵ These MPs used parliamentary motions, questions, and adjournment debates to pressure the government (Trudeau's Liberal Party) to send the issue to the IJC. These actions from Manitoba's officials lend some credence to the contextual findings concerning provincial political undercurrents to national trends. Furthermore, public pressure was directed at James Richardson, the lone Manitoban in the federal cabinet, to prod the government to act more aggressively in protecting Manitoba's water rights under the 1909 Treaty.⁴⁶ The provincial government could not refer the issue to the IJC.

After the U.S. House Subcommittee on Appropriations sent HR 8122 to the floor for debate and in consideration of efforts of the Committee to Save North Dakota, in 1975, MP Dan McKenzie raised questions in parliament about the testimony of the Bureau of Reclamation to Congress. The Department of External Affairs quickly responded to Conservative party criticisms by sending a Joint Communique (#86) to the State Department on 16 August 1976 along with a position paper to be circulated among

⁴⁵Nossal, "The Unmaking of the Garrison," 7-8.

⁴⁶Ibid..

congresspersons before the final vote on Garrison project appropriations.⁴⁷ In spite of these efforts the bill passed, confirming the Ford administration's support for the project. Secretary of External Affairs, Allan MacEachen, argued that the U.S. would honor the 1909 Treaty tenets as promised in 1974. Apparently the only issue to be negotiated was the Souris Loop.

The Canadians watched closely as GDU appropriations in bills HR 8122 in 1975 and HR 14236 in 1976 were passed. In response, External Affairs, on October of 1976 sent another note to the State Department asking for a moratorium on the construction of Lonetree Reservoir in lieu of potential harm to Canadian waters; there was debate on how to respond to the request.⁴⁸ There was no reply by the Ford administration which clearly supported the project.

When President Carter came into office he changed the tone of relations towards Canada by making new appointments in Ottawa. Opposition MP's pushed the government to open discussion with Washington on Garrison to no avail. MP Dean Whiteway from Selkirk sent correspondence to Washington asking the President to raise the issue of Garrison with Trudeau but Carter diffused the issue by two actions. Before the meeting Carter sent a reply (dated 18 February 1977) announcing his intentions to cut funding for bloated water projects and a moratorium was placed on Lonetree Reservoir

⁴⁷ John E. Carroll and Roderick M. Logan *The Garrison Diversion Unit* (Montreal: C.D. Howe Research Institute and D.C.: National Planning Association, 1980), 35.

⁴⁸ Nossal, "The Unmaking," 14; Carroll and Logan, *The Garrison*, 35; see Department of External Affairs, "Garrison Diversion," Communique No. 125, 15 November 1976.

construction. In April when Carter announced that Garrison would be substantially modified and the U.S. would honor the 1909 Treaty, Canadians were.⁴⁹

The U.S. Reaction 1977: President vs Congress

At the request of President Ford, appropriations to fund water projects (HR 8122 for FY 1976) including Garrison passed quickly through the House Appropriations Committee despite the GAO report on cost irregularities.⁵⁰ Specifically the bill funded land acquisition for construction of the McClusky Canal, and Lonetree Reservoir, both part of return flow system in question. The Commissioner of the Bureau of Reclamation, Gilbert Stamm, had assured congresspersons that progress had been made in talks with Canada despite contrary statements from the State Department and the Canadian Embassy's calls to individual congresspersons expressing Canadian grievances.

With the delay of the IJC's study board report, Representatives Fraser and Nolan of Minnesota in 1976 attempted unsuccessfully to cut the budget (see FY 1977 Public Works Bill - HR 14236) for the project and eliminate Lonetree Reservoir. In June, the House Government Operations Committee temporarily suspended construction of Lonetree Reservoir until an agreement on minimizing pollutant flows into Canada could

⁴⁹Carroll and Logan, *The Garrison*, 35-6; see Department of External Affairs, "Note from the United States Department of State on the GDU," Communique No. 15, 1 March 1977 and "Text of Statement by the Spokesman for the Government of Canada at the IJC Hearings on the GDU, Winnipeg, Manitoba, 10 March 1977, Communique No. 17, 10 March, 1977, 3.

⁵⁰Nossal, "The Unmaking," 11; see U.S., House, Report 94-852, *14 Report of Committee on Government Operations*, "Bureau of Reclamation's Indexing Procedures Conceal Information that Water Resource Projects are in Excess of their Authorized Cost Ceilings," 26 February 1976.

be brokered. House Government Operations Subcommittee on Conservation, Energy and Natural Resources recommended suspension of land acquisition for the Souris, Central ND and LaMoure-Oakes projects in lieu of the completion of their study.⁵¹

Secretary Kissinger did not send a response to the External Affairs' 1976 request on discontinuing construction of Lonetree Reservoir. The State Department and Bureau both held the view that Lonetree would not effect Canadian waters. The EPA and CEQ disagreed with this view. The Study board's report was released in January of 1977 enumerating potential adverse transboundary implications of the project. Nonetheless, President Ford, as one of his last acts in office sent a budget to Congress that included \$18.66 million for Garrison including construction of Lonetree Reservoir.⁵²

Five factors influenced the change in U.S. policy concerning Garrison, election of President Carter, his appointment of Cecil Andrus as Secretary of Interior, the new administration's emphasis on the importance of U.S. relations with Canada and Mexico, Carter's determination to reduce the federal budget, and the impending release of the IJC report. Andrus had a reputation as a strong environmentalist and shifted the Interior's role from developing public resources to protecting them. This put GDU in a new light. Tri-national relations were improved bureaucratically through new appointments and symbolically by inviting both countries for talks at the White House and to address

⁵¹Doemel, *The Garrison*, 23; Nossal, "The Unmaking," 14; for more information see "Garrison Diversion Faces New Challenges," *Environmental Law Reporter*, 1976 (6).

⁵²Nossal, "The Unmaking," 16, 18.

Congress. Further, Carter sought to reduce the budget by excising costly water projects.⁵³

In order to curtail spending, Carter asked the Department of Interior to review nineteen water projects (pared down from 300) including Garrison. Carter argued that of the 320 ongoing water projects under consideration by the Congress, nineteen of them should be cut in response to economic circumstances, adherence to environmental standards, and public safety and further he recommended these projects not be funded in fiscal year 1978.⁵⁴ In respect to Canadian interests, he wanted to consider the IJC's recommendations before moving construction forward on Lonetree Dam and Reservoir construction.

The drama between Congress and the President over reducing the budget illustrates domestic political influences on the Garrison controversy and issues connected with separation of powers unique to the U.S.. The executive and legislative powers continued to spar over supporting the Garrison Project. The Senate responded to Carter's hit list of water projects by stating their opposition to withholding fundings from the 1978 appropriations bill and further passed an amendment to the bill preventing Carter from interfering with their constituency pet projects. In April, Carter responded to congressional threats by agreeing to fund Garrison at a reduced level of spending, and accordingly, in May, the House Appropriations Committee voted to fund eighteen of

⁵³Nossal, "The Unmaking," 18-19; for more see Jack Shepard, "A New Environment at Interior," *New York Times Magazine*, 8 May 1978, 36.

⁵⁴Doemel, *The Garrison*, 24; for more see U.S., President, *Weekly Compilation of Presidential Documents* (Washington DC: Government Printing Office, 1979), 28 February 1977, 9: 234.

Carter's black listed water projects along with Garrison at a reduced budget thus exercising their legislative prerogatives and protecting the tradition of pork barrel politics.

Andrus and Carter did not expect this reaction to their meddling with sacred pork barrel projects such as Garrison. The Senate authorized GDU funding before considering Carter's public works bill which cut GDU spending. The battle for FY 1978 appropriations (HR 7553) (including GDU funds) demonstrated that the House did not have the votes to override a veto which in turn allowed the State Department to keep its promise (in February 1977) to Canada and further provided Carter with some leverage on reduced spending. Differences between the Senate and House were reconciled in joint committee and the President signed HR 7553 in August. This action is significant to Garrison because it appropriated the \$18.66 million that Ford had requested but with the caveat that it would release funds for the James river portion only thus upholding the 1909 Treaty. Most importantly, Congress wanted to consider the expected IJC report recommendations before releasing additional funding for the project.⁵⁵

In April of 1977 the Department of Interior made the following recommendations to President Carter to modify the current plan as funded by eliminating the Souris, Karlsruhe, Warwick-McVille and New Rockford irrigation areas and Velva Canal. In addition, Lonetree Reservoir's capacity could be reduced and the McClusky Canal completed along with segments of the Warwick and New Rockford Canals for irrigation of the Oakes-LaMoure area to protect Canadian interests. The Department recommended

⁵⁵Nossal, "The Unmaking," 20-21; Carroll and Logan, *The Garrison*, 36.

maintaining the size of the James River Feeder Canal and Taayer Reservoir.⁵⁶

In the meantime the District Court ruled on the National Audubon Society case in May of 1977 in effect temporarily halting construction of the Garrison project. The suit alleged the EIS was inadequate and that issues related to the Fish and Wildlife Act and Migratory Bird Treaty Act were not addressed. The parties agreed to stay the judicial proceedings until 1 January 1978 so that a new EIS could be sent to the CEQ for a decision on the status of the project. Additionally the Department of Interior was required to send a fish and wildlife mitigation plan to Congress. The court ruled that, until these requirements were met, activities related to the project would be suspended except for the McClusky Canal.⁵⁷

The Senate argued that Secretary Andrus' negotiation of an out-of-court settlement (voluntary administrative stoppage on construction) was an executive action deferring funds for Garrison, funds authorized by Congress, without giving notification. This violated the Congressional Budget and Impoundment Act of 1974. However in reviewing this, the Congressional Research Branch of the Library of Congress stated that the funds appropriated would not be spent on account of the court order, not because of executive action.⁵⁸

In 1978 Senators Milton Young and Quentin N. Burdick of North Dakota

⁵⁶Carroll and Logan, *The Garrison*, 41-2; for more information see Memorandum from Secretary of the Interior Cecil Andrus to President Jimmy Carter, April 1977.

⁵⁷Carroll and Logan, *The Garrison*, 42.

⁵⁸ Nossal, "The Unmaking," 22-23; for more information see Memorandum, Congressional Research Service to Donald Fraser (Senator), Washington, 13 June 1977.

sponsored a resolution to modify funding of the GDU to \$17.7 million (1977 appropriation's level) which passed without opposition. Carter responded by vetoing the Energy and Public Works Appropriations bill for 1979 to prohibit continued construction on features of the GDU not affecting Canadian water quality.⁵⁹

During the execution of the reference, several players - President Carter, the Congress, the Courts and the IJC - worked to achieve conflicting goals related to the project. Congressional willingness to delay the release of further appropriated funding for the project reinforced the reputation of the IJC. However, the release of the report was not the end of IJC involvement in the case.

IJC Success: Consultation

The release of the IJC report and pressure from Manitoba and Canada bolstered opposition to the project. Release of the IJC's recommendations did not preclude work continuing on the GDU project, only that if it went forward, it would have to address adverse effects. Addressing IJC recommendations depended on the actions of Congress and the compliance of executive agencies with court stipulations. Because of these decisions in 1977, the Department of Interior revised the project to only 237,500 hectares, Lonetree Reservoir was shrunk, the Souris Loop was abandoned, the cost was reduced to \$365 million.⁶⁰

The effects of the IJC report were polarizing in the United States. Opponents to

⁵⁹ Doemel, *The Garrison*, 25-26; Nossal, "The Unmaking," 20; Carroll and Logan, *The Garrison*, 47.

⁶⁰Nossal, 1978, 25.

GDU - in North Dakota, Minnesota, South Dakota, Manitoba, and members of parliament, as well as lobbying groups like the National Audubon Society - were satisfied that the report provided binational consensus to legitimize their claims. GDU proponents in North Dakota, the U.S. Congress, and the Bureau of Reclamation did not anticipate that IJC's broad interpretations of transboundary implications in its investigation would elevate the effects of one state's irrigation scheme to binational environmental catastrophe.

A congressional delegation from North Dakota reacted acrimoniously towards the report finding it incredulous and blaming Canada for interfering in their state project. Among them were Governor Link of North Dakota who accused the Commission of overstepping the Treaty provisions and the reference's intent. In response Attorney General, Allen Olson, remarked that the report undercut the IJC's credibility by not adhering to tenets of international law and the 1909 Treaty. The State Department agreed with these criticism fearing a dangerous precedent limiting IJC utility and future referrals of disputes due to the Commission's candid statement that the project, even as modified, would violate the Treaty leaving them no leverage for bargaining in future consultations with Canada.⁶¹

Confirming expectations on the case study, a consultative meeting between the concerned parties took place on 28 March 1979. This meeting represented the success of

⁶¹Carroll and Logan, *The Garrison*, 44-5; see Statement of Governor Arthur A Link in response to the IJC report on the GDU, 23 September 1977; see Statement of Attorney General Allen I. Olson in response to the IJC report on the GDU, 23 September 1977.

the IJC's role as broker in bringing the two parties to the table to resolve the issue based on impartial findings and nurtured by its independence. Canada brought to the table their need for assurances that no part of the project enabling the transfer of foreign biota to the Hudson basin would be constructed as stated in a prior note sent to Washington dated 5 March 1979. A follow up note from the head of the Canadian delegation at the U.S.-Canadian conference on the GDU reiterated the crux of the problem including fears concerning the transfer of at least ten known fish species, four fish diseases and one parasite that would devastate the Manitoba fishing industry. The U.S. assured Canada that it would not violate the 1909 Treaty and would fully consider the IJC report and Canadian concerns. As Carroll and Logan concluded the issue of the Garrison project was reduced to one bilateral issue - the transfer of fish biota, an issue that is not easily resolved.⁶² No further construction on the project has occurred.

In sum this section has explored the role of institutions and public opinion in the Garrison project controversy during the execution of the reference. The willingness of Progressive Conservatives from Manitoba to voice their opposition to the project when dialogue between the two government leaders (Ford and Trudeau) had ceased to be effective demonstrates the importance of the provincial role in interest aggregation. The role of the courts, diplomatic efforts, the influence of U.S. domestic institutions especially Carter's administrative actions and the interactions between the President and the Congress on the Garrison, as well as the release of the IJC report, combined to

⁶²Carroll and Logan, *The Garrison*, 51-2; see Statement by Head of Canadian Delegation at the Canada-U.S. Meeting on the GDU, 28 March 1979.

successfully dispose of the controversy. In other words, the politics that were created from the distributive nature of this issue contributed to the IJC's efforts to successfully bring the parties to the table for consultation.

Updating the Mandate: Devil's Lake and Garrison Today

This section reports on the continuing battle for support of remnants of the GDU project. Flooding and transfer of polluted waters is still an issue in North Dakota. The state has sponsored legislation in Congress to support these needs. The political context has certainly changed, and has not been favorable for wide spread support of a comprehensive multi-purpose water project, but Canadian suspicions and objections have not changed either. The IJC's recommendations and conclusions are still relevant today - especially provisions for federal oversight and the role of the IJC in upholding the 1909 Treaty to protect Canada from injury.

Issues of land acquisition and construction of a Devil's Lake outlet and a Garrison inlet emerged following the consultation. As early as 1981, a bill was introduced in the U.S. Senate concerning an affected area of the GDU project in the Red River basin - Devil's Lake. It focused on purchasing land from the Sioux Tribe to consolidate and make 'economically usable' land surrounding the Lake.⁶³

In 1984 President Reagan formed a commission to discuss the future of the Garrison Diversion Project in North Dakota. The commission's task was to consider

⁶³The reservation had been established by Treaty on 19 February 1867 as the permanent home of the Sioux. U.S., Senate, *Hearing before the Select Committee on Indian Affairs*, 97 Congress, 1 Session, SB 503 (Washington DC, U.S. Government Printing Office, 22 September 1981), 23.

possible alterations to the irrigation scheme. Manitoba Agriculture Minister, Bill Uruski, reiterated to the commission that the GDU was a 'dead plan' and Dennis Davis of Environment Canada explained that the technology to prevent transfer of fish and pollutants from the Missouri River to the Hudson Bay drainage system still did not exist. Officials and farmers from North Dakota stated the need to continue the project. Nathaniel Reed from the Audubon Society reiterated the IJC's 1977 findings and recommendations including the finding that only 1% of state farms would benefit from the project. Professor Roger D. Needham from the University of Ottawa questioned whether the institutional or legislative means existed to decide to discontinue construction quickly. Federal funding of the program remained frozen with only 10% of the Lonetree Reservoir completed.⁶⁴

In the 1990's water run-off from Devil's Lake's tributaries had flooded the closed system (the only other closed systems in the U.S. being Salt Lake and Salton Sea) and run-off would overflow into the Sheyenne river running north into Manitoba and then into the Red River. An emergency hearing to address this present situation and preventing a worse scenario was chaired by U.S. Senator John H. Chafee of Rhode Island. At the time of the hearing (1997), the waters had risen sixteen feet since 1993 and were at 1,438 feet. At 1,457 feet the water levels threaten the Sheyenne.⁶⁵ The issue of polluting the

⁶⁴ Anthony Westell, Supplement *International Canada*, "The Events of August and September 1984 - Bilateral Relations" in *International Perspectives: Economic Integration with the U.S.A.* (November/December 1984), 4.

⁶⁵ Committee on Environment and Public Works, *Flood Control at Devil's Lake, North Dakota*, Hearing before the Committee on Environment and Public Works, United States Senate, 105 Congress, 1 Session, On a Proposed Flood Control Project at Devil's

Sheyenne with contaminated waters from Devil's Lake, and nearby Stump Lake, once again emerged. It did not constitute the level of concern involving inter-basin water transfers and foreign biota but the polluted (dissolved solids) water in the Lake, especially Stump Lake, and the possibility of flooding were significant.⁶⁶ Monies had been requested for construction to address the problem in March of 1997; Congress approved only \$5 million to address planning and construction if certain conditions were met. The past history of raising prices and collusive bidding exposed in the 1995 Army audit of a dredging program remained at issue.⁶⁷

Testimonies supported the likelihood of current and potential damage to justify the cost of the construction on the outlet. For example, the state had literally moved 300 houses to avoid damage from the rising waters and the Spirit Nation's town of Devil's Lake was inundated by water.⁶⁸ The Devil's Lake debate was relevant to the GDU because the issue of constructing an outlet for Devil's Lake flood relief was proposed which was suspiciously similar when compared to a proposed inlet for Missouri basin waters to replenish dwindling North Dakota waters. The issue of an inlet for Garrison was being considered in concurrent legislation to revise the GDU's primary function from one of irrigation to providing municipal drinking water. This legislation failed. Senator

Lake, ND, 23 October 1997, (U.S. Government Printing Office: Washington: 1998), 1-2.

⁶⁶Ibid., 15.

⁶⁷Ibid., 34; Dr. Jerry Miller, hydrologist, interview by author 23 July 2001, GLERC; note he was originally from Devil's Lake and his father would have benefitted from GDU project.

⁶⁸Committee on Environment, *Flood Control at Devil's Lake*, 4, 39.

Conrad underlined the importance of not confusing the construction of an inlet with the proposed outlet - one of flood prevention. This latter objective required modifying the GDU project.⁶⁹

Ambassador Raymond Chretien sent a correspondence to the Senate Appropriations Committee asking how Canadian interests would be protected if the outlet would be a component of the Garrison Project. The outlet was technically separate from the Garrison inlet issue. Further the Senate bill made provisions for the Secretary of State to review the project. The Secretary would then consult with the IJC on the matter of whether the outlet violated the 1909 Treaty.

Subsequently in 2000, the Dakota Water Resource Act (HR 2918/S 623) was being considered in Congress. According to Great Lakes Commission Chair, Irene Brooks, the project would have allowed for inter-basin water transfers from the Missouri to the Hudson Bay Drainage Basin allowing aquatic nuisance species and chemical pollutants across the boundary.⁷⁰ As the IJC concluded in its 1977 report, this would violate the 1909 Boundary Waters Treaty. The Act eliminated provisions for consultations to protect Canadian interests and transferred authority over the project to North Dakota officials thus weakening the U.S. federal oversight on the project. The eight Great Lakes States, the federal government of Canada, the provincial government of Manitoba, the Great Lakes Commission, and the state of Minnesota opposed the bill.

⁶⁹Ibid., 13-14.

⁷⁰Correspondence to Great Lakes Congressional Delegation, Irene Brooks, "Commission Urges Congress to Oppose Dakota Water Resources Act," 19 January 2000.

Repercussions of the bill if enacted into law would be far reaching. It would weaken the 1909 Treaty and the IJC's role concerning boundary water issues by ignoring its 1977 conclusions and recommendations. It would undermine the progress on U.S. and Canadian relations directly by eliminating consultation with Canada on the Garrison Project. It would set a precedence encouraging diversion projects which is of great concern to the Great Lakes states and provinces and weaken the efforts towards a Great Lake water management system.

The Dakota Water Resources Act of 1999 (S. 623) was 'held at desk' and no further action has been taken on it since 16 October 2000. A related bill's, HR 1137, final status in committee/subcommittee was awaiting executive comment from the Department of Interior. This issue of appropriations for a modified Garrison project keeps cropping up in Congress even after the 1977 IJC report, court rulings, and 1979 consultation.

The question of inter-basin water transfers and the threat of aquatic invasive species and foreign biota are still problematic but North Dakotans are determined to get the water they need. At the University of North Dakota, the Energy and Environmental Research Center (EERC) is working to develop methods of artificial groundwater recharging through basin infiltration or well injection to bring water to the region and to control cyclical flooding. The EERC was founded in 1951 under the Bureau of Mines. It was federally funded in 1977. It was de-federalized in 1983 then became part of the University of North Dakota. ⁷¹

⁷¹ [Http://www.eerc.und.nodak.edu.](http://www.eerc.und.nodak.edu)

Conclusion

In this reference, the IJC's power was limited to reacting to government initiatives by making recommendations. The IJC is a reactive organization by design. The governments must refer the issue to the IJC before it can take an active role in the dispute. This was the deliberate intent by the U.S. in negotiating the Treaty to keep the agency from having supra-national powers over its clients. Canada pushed for IJC arbitration powers which were included in the Treaty of 1909 but have never been invoked. As observed by LeMarquand, the IJC is reliant on the governments' will to resolve issues.

Consistent with Edith Brown Weiss's observations concerning the importance of the entire policy process, we can now reach conclusions on the significance of several factors related to IJC's success that are consistent with our expectations. The Garrison Revisited Chapter reveals something about the nature of the issue and the political context in relation to IJC's success. Other conclusions concerning its role and reputation reinforce existing assumptions about the IJC's strengths and weaknesses drawn from the literature review in Chapter Three.

As Oran Young observes, institutional success can be operationalized to mean bringing the parties to the table. Based on this definition we can make observations on IJC effectiveness in this distributive policy arena. The Commission's accomplishments are separate from, but dependent upon, the resolution of the Garrison controversy and the IJC's ability to uphold its mandate.

The project offers a classic case of Lowi's distributive politics as described by its

expected impacts and legislative history; however, the nature of the issue when analyzed by impartial experts (IJC Study Board) demonstrated that there were unanticipated costs associated with utility income affecting individual citizens, farmers and industry; that is, the benefits for North Dakota farmers did not outweigh costs to Canadian interests. The binational acceptance of these negative impacts were confirmed by the IJC's report and in effect galvanized the opposition which in turn affected congressional support.

Drawing on Susan Hansen's observations, we can infer that perceptions of expected benefits is an inherent problem with analyzing distributive issues because they are often inaccurate and thus problematic when considering the entire policy process. According to our analytical framework on comparative public policy dynamics, propositions from the literature are supported by our findings; that is, through its expertise and reputation, the IJC was able to influence stable coalitions in Congress by highlighting costs instead of benefits in its final report of which Congress responded with compromise. Further, from our expectations based on writings from Helen Ingram and Stephen Mumme, we can say that IJC influence did not determine the fate of the project, domestic influences did. However, the Commission's influence on this case was predicated on can be described in this case as its ability to boost domestic opposition, thus unraveling congressional support and finally facilitating a consultation.

Based on suppositions from Douglas Ashford and Susan Hansen about the importance of contextual variables in explaining outcomes, relations between Canada and the U.S. under the Nixon/Ford and Trudeau administrations were strained as a result of several events; namely, Nixon's 1972 speech to Parliament stating his policy promoting

the independence of each country concerning trade, security, and culture. The Liberal party reacted with the urging of the NDP, an emerging third party, to promote Canadian nationalism both economically and culturally, and to pursue what Anthony Westell describes as 'the third option.'⁷² Little did Canadian officials know that Nixon's policies would be short-lived or that the NDP's popularity would wane.

Institutionalists conjecture on the importance of previous policies to policy dynamics, related laws and regulations, and various institutions, further reinforce our emphasis on domestic context influencing the outcome of the Garrison. The comprehensive program of Pick-Sloan Missouri River development, that led to the Garrison Act of 1965, as well as NEPA and the Fish and Wildlife Coordination Act, were legislatively influential along with appropriations bills in creating institutional rivalries and congressional coalitions surrounding the project. There seemed to be a working partnership between the Republican administrations under Nixon and Ford and the Democratic dominated House and Senate with respect to pork barrel politics. That changed with Carter's election and the threat to cut federal spending. Party loyalties alone could not overcome politics as usual under Carter's Democratic administration. Other competing institutions were the North Dakota's Republican dominated state legislature, Democratic governors, and the North Dakota's court. These were joined by their Canadian counterparts in opposition to the GDU, the NDP dominated provincial

⁷²Also straining relations were Canadian critics that opposed the U.S. policy in Southeast Asia as imperialist intrusion against the Vietnamese people in the context of socialist nationalism; Antony Westell, "Economic integration with the U.S.A.," *International Perspectives* (November/December 1984), 6.

assembles, and Manitoba's southern delegation in parliament. Politically, the IJC remained an independent entity under the leadership of Max Cohen and Henry P. Smith III, thus producing a final report that reinforced its reputation as impartial and technically legitimate.

The U.S. courts and binational collaboration among environmental groups both played an important role in advancing opposition to the project. Because of the issue's distributive nature, we expected Congress and its committees to decide the fate of the project, which it ultimately did, but not without influence from these two forces. The willingness of Congress and its committees to consider IJC conclusions and recommendations reinforced the Commission's reputation, its ability to balance interests in Canada, North Dakota, and the surrounding region, and thus its role as broker.

Other structural variables include constraints such as those imposed by federalism and separation of powers. In considering institutional constraints and interactions based on the Canadian constitutional arrangement, Manitoba played the lead role in the dispute due to the Garrison directly threatening Manitoba's waters and related industries. Manitoba's legislative assembly and Members of Parliament pressured the national government to act on its behalf through the Foreign Office after studies revealed that the project would injure Canadian waters, thus invoking the diplomatic processes.

Concerning the notion of separation of powers, Carter used the influence of the presidency to diffuse the issue in Canada through his proposed budget cuts, his new appointments and his invitation to Trudeau to visit Washington. These actions, in part, acknowledged Canadian concerns and Canada's significant position as a valued neighbor.

The Canadian government did not wish to be perceived as interfering with U.S. domestic politics but if the project violated the 1909 Treaty, there were legal grounds for a reference. Congress, however, continued to exercise its influence through appropriations that defied Carter's 1978 public works initiative. The balance of power had been affected by the weakening of the presidency resulting from the Watergate scandal and Nixon's resignation. While the Congress and the presidency competed over influencing spending for GDU project construction, the federal court ruled to temporarily halt construction. The Department of Interior settled out of court with the National Audubon Society so that certain criteria had to be met before continuing construction. The IJC's report was able to play an advisory role for these institutions through its study board findings, recommendations, and conclusions.

Role analysis is another useful analytical tool for assessing the IJC's organizational effectiveness. The reference's mandate was to investigate the transboundary implications of the project and to make recommendations to honor the 1909 Treaty which in effect protected Canadian interests in regard to the project's adverse repercussions. Past references on transboundary water pollution had established the IJC's expertise in determining more narrow questions on water quality and engineering solutions. The broad terminology used in this reference allowed the IJC to expand its role and mandate for future references by including social, economic, and environmental impacts. The governments encouraged this comprehensive approach by broadening the parameters of the investigation with the reference's language which followed the legacy of the Great Lakes Water Quality Agreement of 1972 that used the concept of ecosystem

approach.

Past boundary disputes have been managed through various channels. Referrals to the IJC have been only one route towards reaching an agreement between the two parties, however. Alternatively, the Prime Minister has spoken directly to the President. Ministers and secretaries in Ottawa or Washington have had a dialogue on issues. Further, committees of ministers and secretaries have met, the Canadian ambassadors have expressed their government's views to Washington, or the U.S. ambassadors have relayed their government's view to Ottawa. Often, civil servants from both governments come together to discuss shared problems. There have been joint meeting between Members of Parliament and Congress, though they tend not to be as productive as other methods of binational dispute settlement.⁷³ The use of the IJC's reference mechanism has advantages over these other avenues due to their reputation of success, impartiality, independence and the use of expertise from both nations. With the addition of the GLWQA, transparency, visibility, and public access have been greatly enhanced.

Three major instruments affecting the IJC's successful execution of the reference were its technical boards, its public meetings, and its role as a neutral broker. When considering the whole policy process, we find that the IJC's role was ultimately successful in bringing the parties together for consultation to review the future of the GDU project.

According to James Q. Wilson, agency tasks and outputs are important in

⁷³Antony Westell, "Economic integration with the U.S.A.," *International Perspectives* (November/December 1984), 20.

measuring agency type. In this respect, the IJC accomplished its investigation in a timely fashion (two years) by the Study Board creating several problem-specific subcommittees each composed of experts. This efficient use of expertise allowed them to do concurrent studies with few delays. The Study Boards were able to impartially ferret out facts and answer questions concerning transboundary implications that revealed more damage to the environment than previous U.S. Bureau of Reclamation studies indicated.

Supporting Lowi's emphasis on societal factors, the IJC's report affected those opposing the project by legitimizing their claims.⁷⁴ The Board's two public meetings identified proponents and opponents to the project but were limited to distributing board directives and findings; however, the public was allowed to comment on these aspects of the reference. According to the public relations policy of the IJC, the study board was advised not to hold public hearings during its proceedings but it could disseminate information.⁷⁵ After the final report on the reference was released in 1977, Article VII of The Great Lakes Water Quality Agreement of 1978 greatly expanded the IJC's responsibilities towards visibility, transparency and accessibility.⁷⁶ When the IJC held public meetings for the Garrison, it was not as inclusive or extensive as the hearings held for the Consumptive Uses Reference. Public hearings were limited by the terms of the

⁷⁴See Tables 6.13 Agreements and Disagreements with Board Findings and Table 6.14 Summary of Garrison Opponents and Proponents.

⁷⁵IJC, U.S. and Canada, *Rules of Procedure and Text of the Treaty* (Ottawa, Canada and Washington, DC, April 1980), Part 3:29(1), 11.

⁷⁶International Joint Commission, United States and Canada, Revised Great Lakes Water Quality Agreement of 1978 as Amended by Protocol Signed 18 November 1987, (Ottawa).

reference; therefore, the public was not engaged to the same extent as references after 1978.

Another observation concerning agency outcomes was demonstrated by the IJC's ability to work along with other willing institutions. With the release of the IJC report pending, the Commission was able to gain congressional attention, delaying construction of the project, even though funds had been appropriated. Concurrently, the National Audubon Society law suit in federal court placed a temporary moratorium on construction of the project. The role of the courts proved more significant than anticipated; however, without binational consensus on the damaging effects of the project to Canadian waters, the U.S. Congress might have released funds for the project. However, the IJC was not able to completely disperse Canadian tensions over the project nor fully satisfy North Dakota's need for water. Even so, it did facilitate future dialogue between the two governments. This unusual alignment of circumstances within domestic policy dynamics suggests the ability of the U.S. Congress and courts to diminish the role of the Commission.

The IJC's success in facilitating a consultation in 1979 reinforced its reputation; however, as with the case of lake levels, it encountered technical uncertainties. However, in the Garrison case, the IJC was able to reach meaningful conclusions even though it could not resolve the technical issue of interbasin water transfers across the boundary. Most importantly the IJC was able to accomplish its mandate, to de-politicize the issue, to boost opposition in the U.S. bureaucracy and Congress, to provide a public forum for discussion. Congress could have overridden opposition to the project but given the

politics of advancing North American relations it was unlikely then and still is today.

In contrast to the Commission investigating the Consumptive Uses reference, U.S. appointments to the IJC between 1975-1977 were a product of two Republican administration and there were no resignations or new appointments until Mr. Sugarman, in 1979 under Carter, after the final report was released. Similar to the Consumptive Uses Commission, the Canadian section was appointed under Trudeau's tenure. Unlike the final report of the Consumptive Uses reference, Canadian Commissioner Beaupre filed separate comments though he did join the consensus on conclusions and recommendations.

Contributing to academic assessments of the IJC is the evidence presented on the impact of political context on the IJC's role and effectiveness. The case study further denotes the nature of this issue itself as a factor in determining success. The role of the IJC's 1977 report in orchestrating a consultation between the concerned parties demonstrated its success in this policy arena. Other institutional factors discussed impacted this outcome as well.

In accordance with notions from the governance and institutionalist literatures, we have explored how the IJC's role meshed with policy process concerning Garrison. Underlying the policy outcome are institutional characteristics and interactions. We suggest that four factors impacted Congressional determination to follow through with the project. The first contributing factor can be seen in the U.S. court's role in the disposition of the Audubon Society ruling. Second was the role the IJC's recommendations played in dispute resolution. It's recommendations galvanized

opposition in the U.S. and Canada and influenced Congressional opinion. Even more influential was the change in political context with the Carter administration and his stress on improving relations with Canada (and the Mexico) which elevated the status of Canadian opposition to the project.

We suggest the most influential factor was the distributive nature of the issue characterized by opposition from Manitoba's government (and non-governmental interests), the Canadian government, Ministers of Parliament, provincial premiers, other states (Minnesota and South Dakota), environmental groups; and proponents from North Dakota, key state governors, the Bureau of Reclamation, and congressional support. As pressure grew from opposition inside the U.S., congressperson Moorhead's subcommittee on the House Government Operations Committee and strong bureaucratic opposition from the EPA, CEQ, and Fish and Wildlife Service subjugated supporters of the project in Congress. North Dakota was only one sparsely populated state and thus its political leverage in Congress was easily replaced by votes from members on other states' pet projects, i.e, logrolling.⁷⁷

The project's resolution is somewhat tenuous as it appears that Congress could reauthorize the project if the political climate changed or technical matters were resolved to ensure no exchange of foreign biota. However, the U.S. delegation to the meeting on Garrison in March of 1979 conceded to the Canadian delegation that it would fully consider the IJC report along with Canadian concerns on the project. This was a victory

⁷⁷ Additionally, the Bureau's base of support in Congress in relation to the project was limited to 17 western states that were affected by other aspects of Missouri water development projects see Carroll and Logan, 1980, 56.

for the IJC in its role as broker.

In conclusion, this case study provides an alternative way to examine into IJC success by highlighting elements of governance and comparative public policy literatures to construct an approach that accommodates structural and societal factors within the framework of power arenas while acknowledging problematic features. The next chapter focuses on drawing further conclusions on the IJC's performance through the comparison of the two cases within this analytical framework and discussing the future of the IJC given the standing of other institutions such as the CEC in regards to binational politics.

CHAPTER EIGHT: CONCLUSIONS

Introduction

Having reviewed the IJC's performance in the case of the Lake Levels and Garrison Diversion Project References, this chapter compares the principal findings from the two case studies and draws conclusions concerning the IJC's likely effectiveness in view of its evolving role in boundary water management on the U.S.-Canada border. In the first section, we review the key variables shaping the performance of the Commission. In the next sections, we look at how these variables shaped the reference process of each case by examining the IJC's tasks, outputs, outcomes and then summarize the role and achievements of the IJC using a comparative framework.

We also reflect on the findings of our case studies' observations in relation to the literature on controversy and debates. In the last section we discuss the issues facing the IJC today, its relations with other institutions, and the challenge of sustaining the IJC's mission. We then conclude with general observations on the role and future of the IJC and suggest some directions for future research.

The IJC's Performance in Theoretical Perspective

In Chapter One, we set forth why we were interested in the studying the IJC, the aims of the study, and our approach to studying its effectiveness as a success binational boundary waters organization. The international governance literature on institutional

effectiveness, particularly the work of Harold Jacobson and Edith Brown Weiss (1995), suggested looking at several contextual variables - including the character of the activity (or reference), the character of the accord (or treaty in these cases), policy history, leadership qualities, and the role of other organizations - to capture a sense of the IJC's effectiveness. These factors pointing included economic strategies, cultural characteristics, bureaucratic structures, and informational capacity and accessibility (Weiss 1993). In Chapter Two we explored institutional perspectives of the IJC in relation to the 1909 Boundary Waters Treaty, its role, mandate, and procedures towards executing its functions. Further, we described major federal agencies within the domestic setting that interact with the IJC on boundary issues. In Chapter Three couched within the debates and controversies surrounding the Commission, we summarized the literature review and specified our research questions and hypotheses. In Chapters Four through Seven, we developed the case studies, discussed findings, and drew conclusions on possible explanations to each Commissions' performance.

The emphasis on studying aspects of the entire policy process to get at performance guided the structure of the case studies to include factors framing the issues, the history of diplomacy, the agenda process, the execution of the references, and the disposition of the issue as points of comparison (Ashford 1977, 1978). Because there are so many facets to these variables, we devoted separate chapters to developing the political context and how the issue type affected the IJC's investigations.

The comparative policy literature suggested that domestic policy dynamics affect the crafting of foreign policy and that all policies have a domestic policy dimension

(Zimmerman 1973; Ingram and Fiederlein 1989). Extending this thesis to the IJC, we hypothesized that domestic politics and the issue itself affect bilateral recommendations and national reactions to them (Mumme 1985). To explain the Commission's performance on these two cases, with these assumptions in mind, we defined the references conceptually as regulatory and distributive (Lowi 1964; 1970; 1972; 1978) and asked whether distributive issues are functionally more adapted to producing a satisfying outcome from the IJC's processes and structures than regulatory issues are.

Substantively, the cases were chosen to provide variation in issue type, time frames, and length of IJC reference process based on the criteria for a configurative case study approach. Both cases concerned different aspects of water diversions. The Great Lakes levels reference was initiated by both high water levels and water diversion schemes for the west. The debate on the matter was defined by the feasibility of manipulating levels through diversions and the effect on the Basin ecosystem. The Garrison project rose to the binational agenda as a public works project with transboundary implications. The controversy centered around inter-basin water transfers, a diversion scheme, and the fear of transferring foreign biota and invasive species. Given these aspects of the cases, we found clear delineations on the types of issues involved because of the policy dynamics, power structures and institutions associated with each issue making the Garrison reference more conducive to success than the lake levels reference.

Further, we discovered utility in looking at IJC outputs and outcomes as an extension of the issue arena argument (Wilson 1989). Comparatively we found that the

Commission more easily produces output, i.e, boards, public hearings, reports than outcomes, i.e, consultations towards policy solutions. While the issues of the references did vary in type, and this affected the IJC's prospects for success, the political context in tandem with the Commission's organizational structures is much better at producing outputs than affecting outcomes. This is consistent with observations of the IJC's institutional dependency on the governments as characterized by its expertise and its vulnerability to the political complexities of regulatory issues.

Contextual Influences on the Commission's Performances

In order to grasp the significance of the political context surrounding the Commission and its references we focused on both external and internal constraints. External constraints included the international and domestic settings of the 1970's and 1980's, national-state-provincial elections by political party, gubernatorial elections by political party; internal constraints included appointments to the Commission between 1969 and 1982 for the U.S. and Canadian sections, characteristics of the Commissioners serving during the references, fiscal support of the Commission from both governments between 1971 and 1982, and possible impacts of the 1972 GLWQA and its 1978 amendments. These factors provide a composite look at the political context surrounding the references and their respective Commissions.

Similarities in external constraints on the two cases are seen in the tumultuous international setting during the 1970's and 1980's highlighted by problems in the Mid-East and South America. Stagflation in Canada and inflation in the United States as well

as, skyrocketing oil prices drew considerable attention of the governments away from finding solutions to domestic environmental problems. There were indications that political elections affected the Commission. On the surface, Canadian national politics seemed generally stable under the dominance of Trudeau during both references but ongoing debates on constitutional patriation, revising federal and provincial relations, and Quebec separatism undermined the stability of the Liberal party especially during the Lake Levels reference. The waning of support for the Liberal party and the growing momentum of the Progressive Conservatives culminated in Brian Mulroney's election in 1984. In the U.S. there were political repercussions from the Watergate scandal. The election of Jimmy Carter then Ronald Reagan indicated that the IJC was vulnerable to changes with domestic politics. While there were resignations, vacancies, and new appointments to the Commission during the Lake levels reference, in respect to the Garrison there was growing opposition to the project in both countries. Domestic political transitional effects and other pressing issues on domestic and international agendas emerged as possible other external constraints on the IJC's performance.

The Commission's performance was influenced by changes in domestic leadership as a result of national and subnational elections. There were two elections in Canada at the national level, the 1979 election producing a short-lived minority government and the 1984 election resulting in victory of the Progressive Conservatives that upset the Liberal party's consolidation of power during the lake levels reference. In 1979 concerning the consultation between the two governments on the Garrison issue and the execution of the Lake Levels reference, two Commissioners resigned and in 1984

when control of Parliament shifted from the Liberal Party to the Progressive Conservatives, there was one resignation (followed by two more in 1985). The effect of these elections had repercussions in state and provincial level election results by party.¹

Concerning the Lake Level's reference, there were partisan shifts in power at the subnational level in Canada. In the Ontario legislative assembly, the majority shifted from the Progressive Conservatives to the Liberal party in the 1985 elections. Likewise in Quebec, there was a shift from the ruling Parti Quebecois to the Quebec Liberal party in 1985. There were two resignations from Canadian Commissioners in 1985. During the water levels' reference, political party shifts characterized both upper and lower houses' elections in the Great Lake States' legislatures. Some significant elections indicating shifts between the major parties occurred in 1978, 1980, and 1984. Respectively, there were resignations on the Commission in 1978, 1979, 1981. The Commission was stifled by uncertainty in 1981 until new appointments filled the vacancies (at one point only Commissioner Jean Roy from the Canadian section was still serving).

At that time a dimension of party politics both at the federal and subnational levels was a struggle for priorities between focus on the economy or protecting the environment. Both issues were on state and provincial agendas as demonstrated by the panel discussions during the Conference of Upper Great Lakes State Governors. This leads us to conclude that the political will supporting the GLWQA and the levels reference was waning by the mid-80's as economic issues took center stage replacing Trudeau and Carter's environmental agenda. The loss of will by the federal governments

¹ For specific findings see Tables: 4.3, 4.4, 4.5, 4.6, 6.5, 6.6, and 6.7.

and lack of consistent state and provincial pressure to follow through with the environmental agenda contributed to the lack of response, or a successful outcome, to this reference. In the future, a successful resolution to the issue of controlling extreme water levels on the Great Lakes requires the cooperation of both the federal and subnational levels of government.

By comparison, during the Garrison reference, the Saskatchewan and Manitoba provincial legislative assemblies, and the premiers, were dominated by the National Democratic party, yet Parliament was dominated by the Liberal party. Both these provinces were hostile to proposed construction of the Garrison diversion for fear of interbasin water transfers. In the surrounding Garrison states - North Dakota, South Dakota, Minnesota, and Montana - the governorships were held by Democrats until 1978 when six Republican governors were elected. The political balance was regained in the 1982 elections. In general Democrats held the majority in all but North Dakota's legislature. The overwhelming control of the Democrats in national and subnational elections provides evidence of Democratic political majorities; however, it does not explain the struggle for power between the President and Congress over the budget (especially funding for water projects) nor the gubernatorial support for the project. A more likely explanation is that the divisions over the project were not based on party lines in Canada or the U.S., but instead, the nature of the issue created power alliances based on fears of the project's ecological impacts in Canada and pork barrel politics in the U.S. Promoters of the project underestimated costs and damages to neighboring provincial and states' interests as revealed in the IJC's investigations.

Concerning internal constraints, similarities and differences between the two cases became more apparent when examining the specific character of the Commissions. The Lake Levels 1977-1985 reference's Commission was similar to the Garrison 1975-1977 reference's Commission in that the Canadian sections were both appointed under the Trudeau administration. However, during the Garrison reference and initially during the Great Lakes reference, the U.S. section of the Commission was appointed under two Republican administrations of Nixon and Ford. Carter made an appointment in 1978 after the Garrison's final report was released. During the latter part of the Lake Levels reference, Reagan appointed three Commissioners in 1981 to fill vacancies from resignations.² We can conclude that during the Garrison reference consistent party leadership on appointments under the Liberal party in Canada and the Republican party in the U.S. produced a sort of stability within the Commission, avoiding the difficulties experienced during the Lake levels reference that created delays based on shifts in domestic party politics.

In contrast to the Garrison, evidence was presented that the composition of the Commission's U.S. section during the Great Lakes' reference was effected by shifts in domestic party politics by appointments from different parties with different political agendas. This contributed to interruptions in the execution of the reference with resignations and vacancies in the early 1980's (See Tables 4.9, 4.10, 6.11). Other disruptions noted in IJC's annual reports included new appointments in 1981 during deliberations and technical delays concerning board reports (1977-1981).

²See Tables 4.9 and 4.10.

Concerning the differences in characteristics of Commissioners, during the water levels reference there seemed to be more patronage appointments within the U.S. section than the Canadian section but with the Garrison reference there seemed to be more appointments based on merit in both sections. It is difficult to know how these patronage appointments may have affected the Commission's inner-workings. But our overall conclusion is that the performance of the Commissioners themselves, reaching consensus in their deliberations on each reference, reinforced the IJC's reputation as being impartial and independent. These characteristics were not able to overcome complexities for a satisfactory outcome on the Lake Levels reference. The Garrison lacked these difficulties associated with the Lake Levels regulation due to the distributive nature of the reference's issue.

Fiscal support of the Commission by the two parties was deemed an internal constraint as well and some general conclusions can be reached in regard to this. Overall support increased for the secretariats and Windsor office by both parties between 1972 to 1982. During the case of the Lake levels reference, however, there were brief decreases in fiscal support for the U.S. and Canadian Secretariat which coincided with political transitional interruptions demonstrated by the election of Jimmy Carter, Joe Clark, and Ronald Reagan. Further influencing the domestic and binational agendas were the impacts of the GLWQA amendments in 1978 (which shifted agenda priorities to cleaning up the Great Lakes by funding the Windsor office). This, coupled with inflationary factors for both economies, is partial evidence of the effects of government willingness to support resolution of reference issues. In regards to the time frame of the Garrison

reference, the Canadian national government made the first dramatic increases in fiscal support in 1975 to the Windsor office while the U.S. made steady increases between 1974-1979 demonstrating the governments' willingness to cooperate on the binational agenda which resulted in a successful negotiated settlement for the Garrison issue. The most significant factor to the increases in fiscal support to the Commission was the funding of the Windsor office in connection with the GLWQA.

The introduction of the GLWQA in 1972 and its amendments in 1978 was an internal factor, not only impacting funding, but also expanding the authority of the IJC. The greatest controversy from the 1978 amendments, influencing the binational environmental agenda and resulting policy, was the introduction of the concept of ecosystem, or the interaction of air, land, water, and living organisms including humans. Incorporating this concept broadened and further complicated scientific investigations of the Lake levels reference. A movement towards the development of the concept of ecosystem can be seen in the Garrison's Commission's broad interpretation of the reference's language of 'transboundary implications' resulting in the inclusion of investigations into factors that may not have been explored if the reference had been interpreted more narrowly.

Secondly, the greatest expansion of IJC power can be seen with its role in surveillance and monitoring of progress in fulfilling the GLWQA. The establishment of the Windsor office gave the IJC a central headquarters independent of Washington and Ottawa. Increases in fiscal support to Windsor between 1972 and 1981 can be linked directly to its creation. However, with the 1978 amendments, we also observe

interruptions in fiscal support of the secretariat offices in Washington and Ottawa though in the following years Canada would make important strides towards instituting the ecosystem approach with its goal of sustainability. With the Agreement, more responsibility for the health of the Great Lakes was placed on the IJC so more support for Windsor would logically follow.

The Amendment's additional tasks and expectations raised public and bureaucratic expectations resulting in frustration with respect to progress on completing the clean up of the lakes. With this followed increased calls for reforms to strengthen the IJC and give it the ability to initiate its own investigations or have some enforcement authority towards cleaning up the Great Lakes. The governments did not accommodate such demands (and in fact reduced the Windsor's office function to public relations with the 1987 Protocols) but the governments did ask the IJC to bring issues to their attention while monitoring progress on goals.

Perhaps the most obvious difference in the two Commissions, in relation to internal constraints on performance, can be seen in the level of public participation. The 1978 GLWQA amendments authorized the development of a public information system to encourage transparency, visibility, and accessibility of the Commission's work. These principles can be seen in the changes in procedure for investigations between the two case studies with the Levels reference being more inclusive and informative with the public. The Lake Levels reference was more open than the Garrison's public comment process. One would then expect this to positively affect the outcome of the reference; however, Garrison's more closed process had a more successful outcome. Therefore, in relation to

the Lake Levels reference, we can say that public participation was an important element towards the Commission producing a consensual output or report but it lacked mature interest aggregation (delineated groups with strong opinions on diversions) in contrast to Garrison's clearly defined and vocal interests. Interests attached to the Lake levels reference did not demand the governments act towards a satisfying policy outcome as the interests in the Garrison reference did.

In sum, these general observations concerning political contextual factors and the similarities and differences between the case studies indicate that internal and external influences affected the process of IJC investigations directly and indirectly. Effects in the case of the lake levels reference included delays that slowed down the investigation process, shifts in domestic agendas and priorities, and shifting levels of fiscal support for the IJC. In the Garrison reference, however, the Commission was able to overcome constraints and capitalize on effects that facilitated the government support for resolving the controversy. These effects included the internal processing of public opinion and demonstrated the importance of interest mobilization as an impetus for the governments to respond to IJC recommendations.

The Issues and IJC Performance

The second variable explored in the case studies in Chapters Five and Seven affecting the IJC's performance involved the nature of the issue and its effect on the IJC's ability to reach bilateral consensus and move the governments to negotiate a resolution of the issue. Criteria for determining issue types and characteristics include

expected or intended policy impacts on society, the type of government functions involved with the issue, and the nature of political structures and associated elites. In examining issue impacts on IJC performance, we delve into the issues' legislative histories and their rise to the binational agenda, and look at the execution of the reference, including public hearings, boards, and trends in public opinion with the expectation that the IJC is more disposed towards brokering agreements on distributive issues than facilitating policy agreements on regulatory issues.

Concerning agenda building on the Lake Levels reference, water diversion schemes such as the Chicago diversion, Ogallala Aquifer, and the GRAND Canal project were proposed to divert water to developing areas in the western U.S. with the added benefit of relieving damage to the Basin from fluctuating water levels. Such traditional public work projects, which bring jobs and money into individual states through pork barrel politics, were the primary impetus for IJC fact-finding on water levels. These projects were studied and considered by domestic governmental institutions to satisfy constituents.

By referring these matters to the IJC, the governments were utilizing the IJC's ability to diffuse conflicting constituencies across borders. Yet the IJC was unable to recommend any of these manmade structural solutions based on the flawed, limited data available to its study board experts. Instead they proposed common sense measures for those affected to adapt to natural fluctuating lake levels, as well as suggesting the need to conduct further research and establish a more reliable water levels data base for the Great Lakes. Objective binational studies, i.e, those conducted by the IJC study boards, are

needed to avoid the political pitfalls associated with the issue and work towards effective policy solutions.

Low water levels in the 1960's and high water levels of the 1970's had been another impetus for the reference along with diversion schemes to develop western communities producing pressure on governments to fund public work projects. Our analysis on responses from study board workshops³ found that groups attitudes formed based on perceived advantages or disadvantages from high water or low water levels, resiliency to damages, benefits from dredging, ability to absorb costs, and reactions to proposed measures to control fluctuations. However, attitudes on the impacts of extreme water levels on different interests varied within groups and among individuals representing commercial and industrial interests, recreationists, agriculture, and municipal governments. Impacts from proposed diversions varied more according to upper, middle, and lower lake location for some interests, than by group affiliations based on other criteria. Typical of regulatory issues, shifts in subgroup interests diffuse societal pressures on policy makers producing less stable power coalitions than those seen in the Garrison case.

The Garrison case conforms to our expectations of a distributive issue when drawing from our observations on its domestic legislative history. The issue generated mutual, non-interference type of political relationships typical of pork barrel politics. Many states had projects in connection to western water resource development in the 1950's and 60's when Garrison Project was enacted so other states supported the project in

³ See Table 5.1 Diverse Interests.

Congress in return for North Dakota's support of their projects, i.e., log rolling. Coalitions that formed around the issue in the state of North Dakota, Congress, and the U.S. bureaucracies were established among individuals and groups without shared interests, but shifted towards opposing the project with the release of the IJC final report in 1985. The focus of political activity was seen in congressional committees brokering support for the project and opposition was focused in parliament, provincial legislative assemblies, environmental groups, the presidency, and state legislatures.

How the issues came to be on the binational agenda are part of the institutionalist focus on process. We argue that the nature of regulatory issues and the politics that form around these issues is more complex than those seen in the case of distributive issues. The emphasis on the process, thus, draws attention to ,and reinforces the importance of, issue area as a determinant of the IJC success. In further making our case, we focus on the complexities surrounding the IJC's execution of the references.

The Great Lakes reference asked the IJC to investigate on the effects of existing and proposed diversions in the Great Lakes Basin and the effects of consumptive uses on water levels pursuant to Article IX of the Boundary Waters Treaty⁴ stating that:

...Other questions or matters of differences..involving the rights, obligations or interests...Shall be referred from time to time to the International Joint Commission for examination and report, whenever either...(party) shall request that such questions or matters of difference be so referred.⁵

⁴IJC, *A Report to the Governments of the United States and Canada under the 1977 Reference* (Ottawa, Ontario and Washington, D.C., January 1985), Appendix A, 51.

⁵The International Joint Commission, United States and Canada, *Rules of Procedure and Text of Treaty* (Ottawa: Ontario and Washington, D.C. 1965), 9(1):17.

One could say this article defined the IJC's role on this reference as investigatory and advisory to the governments on matters involving proposed diversions and consumptive uses.

In contrast, the Garrison reference asked the IJC to examine and report on the transboundary implications of the project in North Dakota and then to make recommendations on ensuring compliance with Article IV of the Boundary Waters Treaty⁶ which states that "...boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property of the other."⁷ One could say that Article IV defined the IJC's role on this issue as broker - to facilitate a compromise on the project in relation to each party. Each reference represents different roles of the IJC in its mandated capacity.

In response to the reference, the Commission for Water Levels and Consumptive Uses reference of 1977 formed a Working Committee with subcommittees and utilized the already established International Lake Erie Regulation Study Board with its technical committees. However, the committees were plagued with delays, technical uncertainties and incompatible data, thus, requiring five years to submit their report instead of the one-and-one-half year interval taken the Garrison study board. Consensus was reached amongst the Commissioners on recommendations; however, the IJC's report only resulted

⁶IJC, *Transboundary Implications of the Garrison Diversion Unit: An IJC Report to the Governments of Canada and the United States* (Washington, DC and Ottawa, Ontario 1977), Docket 101, 130-131.

⁷The International Joint Commission, United States and Canada, *Rules of Procedure and Text of Treaty* (Ottawa, Ontario and Washington, D.C. 1965), 4(2):14.

in another reference on water levels in 1986. No consultation to resolve the matter was achieved in part due to the complexities of this regulatory issue that required more resources for investigation in addition to the willingness of the governments to act on recommendations, however, Lake Levels regulation was not a priority on the agendas of either Reagan or Mulroney.

Similarly the IJC responded by created the International Garrison Diversion Study Board with five technical committees. In contrast to the Diversions and Consumptive Uses reference, specific instructions were given to avoid public hearings yet make the reports available to the public. In contrast to the other reference, problem specific study boards were able to concurrently study the issues with few delays, impartially ferret out facts, and answer questions on transboundary implications of the projects. These actions reinforced the Commission's reputation for reaching consensus in a timely fashion.

Important to the process and the IJC's ultimate success on the Garrison project were Manitoba's elected officials who pressured the governments and kept the issue on the public agenda, the National Audubon Society's law suit, and the competition and disagreements between government agencies including the Department of Interior, Bureau of Reclamation, U.S. ACE, EPA, and CEQ and even congressional leaders and the president. Consensus was reached on recommendations by the Commissioners, though Mr. Beaupre filed a separate opinion. There were fewer time delays on the study board than with the Great Lakes case. Most importantly, a consultation between the governments occurred in 1979, two years after the IJC's final report, which essentially terminated the project.

These comparisons on the two case studies provide us with evidence that regulatory issues are more complex than distributive issues. Complexities specific to the regulatory nature of the Diversions and Consumptive Uses reference demonstrate the importance of the issue to determining the IJC's success and the importance of considering the policy process to get the governments to 'yes.'

The IJC's Outputs, Outcomes, and Constituencies

Observations concerning agency outputs, outcomes, and constituencies further extend and refine our issue-area argument. Just as the IJC's tasks and role varied in these references, so too did its outputs, outcomes, and constituencies. Outputs are the actual work the agency does. Outcomes are the effects the agency's work has overtime. Constituency refers to the organized interests taking an interest and contributing support to the agency's mission and functions.⁸

Outputs refer to the physical results of the IJC and its boards' efforts that are identifiable and measurable, in these cases, board reports, public hearings, and final reports to the governments. Both references utilized boards but with varying efficiency. The Working Committee, with its Diversions, Consumptive Uses, and Environmental Evaluations subcommittees, and the International Lake Erie Regulation Study Board (and subcommittees) took four years to produce their reports to the Commission in part due to technical uncertainties and the lack of consistent and comparable data. However, the International Garrison Diversion Study Board, and its Water Quality, Water Quantity,

⁸Wilson, *Bureaucracy*, 16.

Biology, Uses, and Engineering technical committees, took less than two years to complete their reports to the Commission. With respect to outcomes generated from the IJC's reports, diversions and consumptive uses is under investigation with some of the recommendations being realized due to the cooperation of non-governmental organizations dedicated to overcoming many of the obstacles associated with this regulatory issue. As to the disposition of the Garrison project, it has still not been completed though bills have been proposed in Congress to revise the project to allow for drinking water consumption.

We conclude from these outputs and outcomes that the Garrison Commission's processes were more efficient and, thus, contributed to a more successful outcome than the Great Lakes reference. In consideration of the complexities associated with the nature of the Great Lakes regulatory issues, the IJC was less adept at bringing the parties to the table to achieve a policy solution in part due to the lack of clear, strong constituencies associated with the issues. Under pressure from mobilized interests in society, the governments responded to the 1977 Garrison reference recommendations while largely ignoring the 1985 Lake Levels' recommendations. Therefore, we argue that while the issues did vary in type and, thus, affected the IJC's prospects for success, that the Commission's organizational structure is much better at producing outputs than affecting outcomes particularly in a difficult political context.⁹ This is consistent with the

⁹Note that when comparing public participation in the two references, we may conclude that the Great Lakes' hearings were more open and inclusive than the Garrison case which were specifically limited by the governments in the reference. The GLWQA revisions of 1978 were partly responsible for the differences. The GDU process asked for public opinion on the reference process and the study boards' reports while the Great

controversies concerning the Commission's institutional dependency on the governments and our observations on its vulnerability to the political complexities of regulatory issues.

With this perspective, the cases show that internal and external perceptions and structures defined and constrained the strength of the IJC in mitigating controversies associated with the cases. Governments' reluctance to act on the IJC recommendations has hampered process on Great Lakes diversions and consumptive uses yet the IJC was able to overcome constraints in Garrison case. The difference in the willingness of the administrations was shaped by the political context. Incomplete data on social and economic impacts proved inadequate to fully flesh out implications to craft policy in the Great Lakes case while the Garrison's Commission was able to make a compelling argument on the dangers of the project to Canadian and Manitoba's waters. The Great Lakes' case demonstrates how issues over science and policy can inhibit issue resolution.

The Commissioners' ability to reach consensus requires motivated constituencies and accurate information to produce a compelling case for the governments to act. Differences in federal structures, the nature of party politics and binational mechanisms make the effort to achieve consensus a formidable task under the best of circumstances and particularly when dealing with technically complex regulatory issues like lake levels. Boards function as arenas of policy conflict and, in the case of the Great Lakes, were unable to generate consensus on regulatory norms and values, only to make procedural suggestions to the Commission. Changes in political administrations disrupted the Great

Lakes reference included public input throughout the process with newsletters to inform the public of progress and public workshops throughout the basin.

Lakes diversions case. However, the competition in U.S. politics between Carter and the Congress did not forestall the resolution of the Garrison case. Changes in administration can affect the direction and commitment of the IJC's goals. Other priorities from the domestic agendas, such as pressure to curb inflation or stimulate the economy, can complicate, even impede, national responses to recommendations.

Consistent with our argument that the IJC is better at determining outputs than influencing outcomes on some issues, it would seem that the IJC is more of a procedural agency than a productive agency.¹⁰ Determining the nature of the IJC's shifting base of support is more difficult, but we can say that its lack of a clear and reliable domestic political constituency is a handicap in building public and governmental support for a more independent or autonomous role for the Commission.

The IJC in the Twenty-First Century: Political and Institutional Challenges

In 1997 the governments charged the Commission with proposing recommendations on how best to assist them to meet the environmental challenges of the twenty-first century. The Commission recognized the institutional challenges and increasingly complex issues facing Canada and the U.S. in this century. The limited capacity of governments and resources fuels the importance of cooperation among, and efficiencies of, agencies missions if they are to continue completing their missions. The International Joint Commission provides opportunities for different levels of government,

¹⁰Wilson, *Bureaucracy*; drawing on classification of agencies.

experts, stakeholders, and citizens to cooperate to resolve bilateral environmental issues.¹¹

Since the 1979 consultation, remnants of the Garrison Project have been introduced in Congress by North Dakota even though the project is not likely to be completed if binational concerns are not resolved. More relevant to IJC investigations today is the issue of Great Lakes restoration and the IJC's evolving role in watershed management. A Watershed event is scheduled for summer of 2005 to review the GLWQA and the role of the IJC in assisting the governments in accomplishing objectives.¹² The current U.S. section chair of the IJC, Dennis Schornack, along with the U.S. Government Accounting Office both agree that leadership on the Great Lakes issues needs to be clarified by the governments.¹³ Both the EPA's Great Lakes National Program Office and a newly created interagency task force have coordinating roles in monitoring progress on basin-wide restoration. Many wonder which will lead the execution of the ambitious and long over due program for the U.S.

Supported by our conclusions concerning complexities of regulatory issues, overlapping and conflicting tasks of multiple agencies hinder leadership efforts. Canadian Section Chair, Herb Gray, commented early on the release of the IJC's Eleventh Biennial Report that the GAO work supported what the IJC and others have found concerning

¹¹International Joint Commission, *The IJC and the Twenty-First Century*, (Ottawa, Ontario and Washington, D.C.: 1997), 2.

¹²Herbert Gary and Dennis Schornack, "2005 Great Lakes Conference and Biennial Meeting: A Watershed Event, *Focus*, 30 (Spring 2005) 1: 2.

¹³Lester Graham, "Looking Ahead to 2005's Great Lakes Issues" (10 January 2005), www.glrc.org. For GAO Report see www.gao.gov. GAO-04-1024.

problems associated with the restoration of the Great Lakes.¹⁴

Current issues on the IJC's binational agenda include on going works with local communities on Remedial Action Plans and Lake Management Plans for improving the land and water quality along the Basin. Further, given the IJC's limited role in air quality issues in relation to the GLWQA and the Air Quality Agreement of 1991, it assists the governments with its International Air Quality Advisory Board and tactively advocates and promotes public awareness on these issues. Other current boundary issues that the IJC is presently monitoring under Orders of Approval or investigating include the following:

- Prevention of invasive species from the Great Lakes, e.g., constructing an electric barrier between the Mississippi drainage basin and Great Lakes to prevent encroachment of the Asian carp on naive species;¹⁵
- Effects of dredging Lake Claire and fluctuating lake levels on Lakes Michigan and Huron;¹⁶
- A controversial pipeline from Lake Huron to Flint County Michigan;¹⁷

¹⁴IJC, "IJC pleased with recent U.S. GAO report on Great Lakes Restoration" (4 June 2003), www.ijc.org/rel/news.

¹⁵ IJC and Great Lakes Fishery Commission, "News Release" (18 January 2005), www.glin.org.

¹⁶ Jordan Lubetkin, (24 January 2005), www.glin.org .

¹⁷ "Pipeline Report Still 3 Months Away: Genessee County" (Flint Journal, First Edition, Thursday 20 January 2005), www.mlive.com .

- Silver Lake Dam and interrupted power on the upper Michigan Peninsula;¹⁸
- IJC monitoring of dykes on Duck Lake near Kootenay River in British Columbia, and¹⁹
- Monitoring air quality issues along the boundary.²⁰

Some of the specifics on these projects allows us to comment on the likely success of the IJC on these issues. The problem of invasive species is a critical concern not only to the Great Lakes but also the Pacific Coast, the Atlantic Ocean and the Gulf of Mexico. Invasive species include the mitten crab on the pacific coast, the green crab in the Atlantic ocean, brown mussels in the Gulf of Mexico, and shellfish pathogens. Foreign flora include watermilfoil, hydrilla, water hyacinth, and water chestnut. Zebra mussels have infested the Chesapeake Bay watershed, the Mississippi River drainage system, the Arkansas River in Oklahoma, and waters east of the Great Lakes into the Hudson river and Lake Champlain. Damage from the zebra mussel alone was estimated at five-billion U.S. dollars in the year 2000.²¹ In relation to this damage from invasive species, the U.S.

¹⁸ “IJC News Release - Cornwall Ontario: IJC Assists in Hydropower Emergency” (22 May 2003), www.ijc.org .

¹⁹ “Public Notice - IJC Terminates Duck Lake Orders of Approval” (17 December 2003), www.ijc.org/re/news .

²⁰ IJC, “Announcement - IJC Releases Summary of Critical Air Quality Issues Between Canada and the U.S. - Encourages Continued Action” (27 January 2004), www.ijc.org/re/news .

²¹ Joseph J. Kalo, Richard G. Hildreth, Alison Rieser, Donna R. Christie, and Jon L. Jacobson, “Statutory Materials to Accompany Coastal and Ocean Law: Cases and Materials,” *National Invasive Species Act of 1996*, 16 U.S.C 4701, <http://www.library.law.unc.edu/ocean-coastal/nisa.htm>.

Secretary of State in consultation with the Council on Environmental Quality has been given the task to negotiate with the governments of Canada and Mexico on federal action. If we extrapolate from the findings of our two case studies, then this problem should prove difficult for the IJC due to the complexities associated with the regulatory nature of the issue.

Another issue of concern along the boundary involves how to ensure that ship ballast water is free of foreign species, i.e., zebra mussels and the possible closing of the St. Lawrence Seaway in response to the problem. Inspection of ship ballast as a policy solution would involve regulatory issues with great technical and jurisdictional complexity as in the case of Diversions and Consumptive Uses reference. However, the closing of the St. Lawrence Seaway, as a worse case scenario solution, would raise issues of shipping redistribution routes which may prove economically devastating to the Basin economies and, as expected, the IJC would use its expertise to facilitate consensus on less extreme measures to ensure protection of native Basin aquatic species. We expect this issue to prove quite difficult for the Commission to resolve due to the nature of the issue. Related international shipping interests will influence the process as well.

Two other Orders of Approval under investigation are plans to modernize the Alburg-Swanton Bridge in Vermont and the apportionment of water for the St. Marys and Milk Rivers. In order to comply with Article IV of the Boundary Waters Treaty, the IJC established the International Missisquoi Bay Task Force.²² The governments in

²²IJC, "Public Announcement - IJC Releases International Missisquoi Bay Task Force Report and Schedules Public Hearings" (9 November 2004), [Http://www.ijc.org/rel/news](http://www.ijc.org/rel/news).

response to the Governor of Montana have asked the IJC to review the 1921 Order of Approval for the St. Marys and Milk Rivers in relation to administrative procedures and apportionment.²³ Based on the IJC's performance on past Orders of Approval, the history of the Milk River controversy (Wolf, 1992), and the issues distributive nature, we can say that the IJC can better facilitate an agreement by the governments on these issues.

Water exports remains an unresolved issue for the Great Lakes since the IJC released its 1985 final report to the governments on diversions and consumptive uses. Public comments on the Annex 2001 proposals generated by the Great Lakes states and provinces are being processed and, according to Dennis Schornack, not all of them are favorable with the Canadian government and public sentiments expressing that the Annex is inadequate to prevent the exporting of Great Lakes waters out of the region.²⁴ New issues for the IJC's Public Interest Advisory Group include possible modification of water levels of Lake Ontario and St. Lawrence river from the Moses Saunders Power Dam to address problems of erosion, flooding, protection of shoreline structures, beach access, sediment budgets, barrier beaches, and dunes.²⁵ While diversions of water can be distributive in nature, as in the case of the Garrison, as we have seen with the Diversions and Consumptive Reference they can also be of a more complex regulatory nature. From what we observed from the 1977 reference on fluctuating water levels and studies on

²³ IJC, "IJC Completes Appointments to St. Mary and Milk Rivers Administrative Measure Task Force" (2 February 2005), [Http://www.ijc.org/rel/news](http://www.ijc.org/rel/news).

²⁴Lester Graham, "Looking Ahead to 2005's Great Lakes Issues" (10 January 2005), [Http://www.glrc.org](http://www.glrc.org).

²⁵Arleen K. Kreusch, "Announcement" (12 January 2005), [Http://www.glin.org](http://www.glin.org).

diversions out of the Basin, water exports would present a significant challenge for the IJC and would need the cooperation of tri-national, federal, subnational governments to mitigate increasing fragmented and complex jurisdictional, social, and economic context.

After the release of the 1985 report, the IJC was able to forge partnerships with NGO's like the Great Lakes Commission, the Council of Great Lakes Governors and Premiers, the Great Lakes Protection Fund, and the Environmental Protection Fund to resolve impediments to successful policy considerations, especially on scientific and technological problems, to move the policy process forward on managing Great Lakes diversions and consumptive uses. Key to reach agreement on policy resolutions is regulatory collaboration with other institutions and affected interests in the regions. For example, important to success on the Great Lakes water levels issue is understanding that living with the lakes instead of controlling them through man-made constructs will protect and encourage prosperity in the region. To reiterate, regulatory issues are a challenge for the IJC but the GLWQA, along with the willingness of the governments and affected interests, may give the Commission the tools to be more successful in this issue area than it has been in the past.

Recently, the IJC has been touted as a model for improving binational water management on the U.S. - Mexico border.²⁶ Given the IJC's strengths and weaknesses,

²⁶Mary Kelly and Alberto Szekely, *Modernizing the International Boundary and Water Commission*, (Berkeley: University of California, Center for Latin American Studies, 2004), Paper 1, 12-13; Jurgen Schmandt, "Binational Water Issues in the Rio Grande/Rio Bravo Basin," *Water Policy*, 4 (2002): 152-153; Stephen Mumme, "Treaty Compatible Watershed Management Reforms for the U.S. Mexican Border: The Case for Strengthening the International Boundary and Water Commission," Colorado State University, unpublished, 2005, 6.

what potentially can other binational organizations learn from the IJC's record and its evolving role in watershed management? Drawing on what we have learned from the IJC's experience in these two case studies and further readings, a number of institutional obstacles must be addressed if bilateral or multilateral transboundary water management commissions are to be made more effective.

- Limits of mandates and procedural authority: The IJC uses its established means to facilitate agreements between governments and build public constituencies, whereas, the IBWC has the authority to initiate its own investigations but hesitates to do so without approval from governments, officials, or key constituency interests.
- Agency dependency on the governments for expertise, resources and willingness: Even so, the IJC maintains a reputation of independence through provisions that its personnel not represent their host governments interests. The IBWC commissioners operate under the authority of its national governments through Mexico's Department of Foreign Affairs and the U.S. State Department. The IJC's reputation as being independent of the governments facilitates its ability to provide incentives to the government to negotiate agreements on disputes by maneuvering around domestic political complications and de-politicizing issues brought before it.
- Lack of standardized qualifications for commissioners: The IBWC has standardized requirements for its commissioners but scholars have suggested that to loosen restriction would improve the political file of its commissioners.²⁷ The IJC's appointment process promotes knowledgeable commissioners, public trust, and the binational agenda.²⁸

²⁷Center for Strategic and International Studies, *A Report of the U.S. - Mexico Binational Council*, Austin: University of Texas, January 2003, 11.

²⁸IJC, "Welcome New U.S. Commissioners, Irene Brooks and Allen Olson," *Focus*, 27 (4) Winter 2002: 1; IJC, "Dennis Shornack Appointed as Chair of the U.S. Section," *Focus*, 27 (2) Summer 2002: 1; IJC, "The Rt. Hon. Herb Gray Appointed Chair of the Canadian Section," *Focus*, 27 (1) Spring 2002: 1; Bettina Kozlowski, "EPA Administrator to Lead Great Lakes Task Force," *Great Lakes Radio Consortium*, 24 May 2004.

- Crises or piecemeal approach to boundary issues: The IJC has been commended in its use of the ecosystem approach institutionalized in the GLWQA. Not only could the IBWC benefit with this type of approach, the IJC could expand the approach to issues other than water management.
- Lack of inclusiveness and openness to the public: The IJC has made real gains in achieving visibility, transparency, and accountability in connection to Great Lakes issues but could expand it to other boundary issues; whereas, the IBWC has a reputation as a closed system and could gain public trust and insight by instituting these practices into its procedures, i.e., the IJC's Areas of Concern (AOC), Remedial Action Plans (RAPs), Lake Wide Management Plans (LAMPs). Further, by promoting public inclusiveness, these water agencies can develop affected interests in the public as part of their constituencies, thus informing the public on matters and receiving feedback to the agency.
- Lack of coordination and cooperation of the multiple layers of government agencies and other non-governmental agencies necessary to achieve project goals: This is being addressed by the U.S. with the creation of new inter-agency task forces but effective communications can increase responsiveness to agency recommendations.²⁹
- Lack of clarification of a lead agency or agencies on project goals: Most recently this criticism has emerged about the IJC in connection to restoring the Great Lakes and the complexities of multiple layers of government agencies and NGO's participating but no one agencies leading the efforts. The IBWC's current agenda includes issues on transboundary water allocation, quality, interconnectedness of surface waters and groundwater.³⁰

The larger question in regards to other institutions is the viability of the IJC with today's increasingly complex issues with regards to regulatory policies and binational agreements such as the GLWQA and the Air Quality Agreement of 1991. Some of these larger issues have been explored in the case studies in relation to the GLWQA. There

²⁹Lack of responsiveness was one of the GAO's criticisms of the governments in its 1989 report.

³⁰CEC, "North American Boundary and Transboundary Inland Water Management Report #7," *North American Environmental Law and Policy* (Editions Yvon Blais: A Thomson Company 2001), 77.

exist the possibility that another organization could diminish the role of the IJC in the U.S.-Canadian boundary issues. However, the IJC has established itself as a rule based system and it is respected in North American cultures as a consensus-building alternative to resolving controversies through more aggressive means. Though the U.S. has a tendency towards resolving boundary conflict through litigation and normal diplomatic channels, Canada prefers dispute settlement through consensus building and the IJC.

Within the North American context are the Canada-United States Free Trade Agreement of 1989 and its trilateral successor, the North American Free Trade Agreement (NAFTA) of 1993. The North American Agreement of Environmental Cooperation (NAAEC) established the trilateral Commission for Environmental Cooperation (CEC).

The precursor to NAFTA, the U.S.-Canada Free Trade Agreement, established a mechanism similar to the IJC in that it relied on rules of procedure and was limited to an advisory role for the governments on issues referred it. In response to its short-comings, NAFTA was negotiated between Canada, Mexico and the U.S. and given enforcement powers.³¹ The rules of dispute settlement for the CEC, unlike the IJC's rules of

³¹Most notably, NAFTA was signed in 1994 to expand trade between the signatories and protect the common environment. In addition, Canada, Mexico, and the United States signed the North American Agreement on Environmental Cooperation (NAAEC). Its mandate is to protect and enhance the environment in North America through economic and social activities which furthered the creation of the Committee on Environmental Cooperation. "CEC: The Next Decade Starts Today," *Trio* (Summer 2004), [Http://www.cec.org/trio/](http://www.cec.org/trio/).

procedures, are not designed to prevent crises.³² Unlike the IJC, the CEC can impose sanctions through federal courts after agreement terms have been violated.

In the *Ten Year Review and Advisory Committee* report assessing the implementation of NAAEC and NAFTA, the CEC was commended for its commitment to the environment and incorporation of public participation. In regards to organizations mandate, the report advised that CEC's ministers need to better engage environmental ministers of each country and key constituencies in assessing environmental implications of trade.

In the 1990's the CEC had envisioned a role in transboundary water issues which carried implications for the IBWC and the IJC. however, a functional division of labor has developed in practice on bilateral and trilateral issues.³³ The CEC's role is evolving towards facilitating the IJC in its mandate rather than competing with it on issues affecting boundary management. This may have implications for Great Lakes water exports in the future if water is determined to be a commodity.

Conclusion

The IJC played a successful role in encouraging the parties to sit down and resolve their problems over the Garrison project after the Commission's report was release; however, it was not successful in achieving a consultation between the parties on the

³²Annette Baker Fox, "Observing the Rules: Canada-U.S. Trade and Environmental Relations," *Canadian-American Public Policy* 31(November 1997): 25.

³³For more on evolving role of CEC in trilateral issues see CEC, "North American Boundary and Transboundary Inland Water Management Report #7," *North American Environmental Law and Policy* (Editions Yvon Blais: A Thomson Company, 2001).

diversions and consumptive uses issue. This comparative policy analysis through the case study method captures a range of variation and has brought to light evidence of the importance of the issue itself as reinforced by factors concerning the politics that framed the reference. This is the major contribution of this work to the literature on the IJC. Whereas, this research has also promoted the use of an inter-disciplinary approach by utilizing observations from the international governance literature and comparative policy literatures to explain IJC performance in two references.

We have discovered through the analysis of the cases, and further readings on the IJC, obstacles to its success and how it has overcome these obstacles through utilizing its reputation, public trust, and reliance on the facts as incentives for the governments to cooperate. By respecting the sovereignty of the parties that established it and increasing its visibility, transparency, and accountability to public and government institutions, it has been able to nurture public constituencies to pressure the governments to keep issues of import on the binational agenda.

These case studies point to future studies to better understand the IJC, its future, and implications for other bilateral and trilateral institutions. Further study on the effects of political transitions on various commissions overtime may prove fruitful in understanding the Commission's behavior. Certainly more research could be conducted to develop trends in fiscal support over time and how domestic economic factors might intervene in effecting IJC considerations. More research is indicated on the influence of subnational politics on the IJC's performance. All of the indicators used in these case studies could be more fully developed in relation to IJC accomplishments overtime.

While these case studies are highly suggestive concerning the basis of the IJC's success, the study of other references and types of issues would enable us to refine our knowledge of the political and institutional factors shaping the IJC's performance. How has the IJC fared on other regulatory issues along the boundary such as air pollution and power generation? There is much work that could be done here. The Canadian records of the institution dating back to early 1900's have just been moved to a new location in Ottawa that has the means to preserve them. These records offer students of comparative politics, international governance, and applied practitioners of the diplomatic arts a rare opportunity to gain further insight into the IJC's organizational processes.

We have observed through our case studies that the IJC has been use by the governments to de-policize issues and move the parties towards better policy solutions. Further, the Commission must adapt to new demands, problems, and technologies as issues becomes more complex in the twenty-first century. The Commission's past record of success, spirit of impartiality and good will does not insulate it from politics but its institutional procedures and principles help it to maintain its record of completing the tasks given to it by the governments, enabling it to arrive at binational consensus on its conclusions and recommendations.

Observations drawn from these case studies suggest that our understanding of the IJC may indeed benefit from the application of concepts and models drawn from the governance and comparative policy literatures. At a time in which the IJC's remarkable record of advancing binational cooperation in managing environmental problems on the U.S.-Canada border is now being tapped as a model with potential applications to the

needs of other bilateral organizations, such knowledge is a valuable resource in furthering our understanding organizational functioning in the service of peaceful resolution of binational and international disputes.

—end—

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