THE HIGH ROSS DAM/SKAGIT RIVER CONTROVERSY: THE USE OF PUBLIC HEARINGS IN THE MANAGEMENT OF AN INTERNATIONAL RIVER

by

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B. Sci., University of Oregon, 1970

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE

in the school

of

Community and Regional Planning

We accept this thesis as conforming to the

required standard

THE UNIVERSITY OF BRITISH COLUMBIA

May, 1974

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Date June 1, 1974

ABSTRACT

The High Ross controversy was a problem in the management of an international river. An international river presents a special problem because the actions of a nation upstream may cause problems for a nation downstream or vice versa. A river is also a finite resource where uses for one purpose may exclude uses for other purposes. The use of a river for hydroelectric power, for example, may destroy fisheries. In the case of an international river, conflicting demands on water use may present serious problems if the nations riparian to the river fail to coordinate their planning with respect to the river.

In this study, it is normatively assumed that the best system for insuring that the interests of all concerned will be heard is a democracy. In a democracy it is a principle that the decision system should respond to the preferences of its citizens. To do this it must first be able to perceive these preferences. A public hearing is one vehicle for accepting information concerning the preferences of citizens. The goal of this study is to assess certain public hearings which were held in reference to the raising of Ross Dam on the Skagit River in Washington State. The issue of whether to raise the dam has created an international controversy lasting for years and involving the energies of hundreds of persons on both sides of the border. The hearings of interest in this study are certain hearings of 1970 through 1972 held by the International Joint Commission, the Washington Ecological Commission, and the

Seattle City Council.

The approach taken in this thesis began with isolating two normative criteria among many which any democratic system must have: openness and efficiency. Openness is the ability of a system to perceive the preferences of its citizens. This means that there should be no arbitrary restrictions upon what the decision-makers should see. Efficiency means that the process should be simple and not limited to a select group with the most time, money, and expertise to participate.

Having established these criteria, the next step was to isolate the location in the hearings system where one might expect to find evidence of openness and efficiency. To do this, a theoretical paradigm of a communication system was constructed from political communications theory. This paradigm contained the basic components of a simple communication system. Thus, it was found that any communication system will have messages (input), sources for those messages (input sources), and receptors for perceiving those messages (intake elements). In rational systems there will also be a memory process which selects relevant input from among the mass of intake (screening element). These elements were analyzed in order to assess the hearings investigated.

To assemble the data necessary for assessment, a multi-method approach was used. Over four hundred articles in newspapers and periodicals were surveyed. The transcripts of the hearings and resulting reports were closely analyzed. Finally, selected participants who had key roles in the hearings were interviewed. The

information from these sources was used in tandem to examine particular aspects of the hearings process which were suggested by the communication model as relevant.

The conclusions derived from this study were that with certain exceptions the procedures used in the hearings studied facilitated openness. Also, while the cost of using the hearings was very high, the participants with few exceptions felt that the expense was justified because the issue was crucial to their interests. However, the weaknesses that did exist in openness and efficiency merit attention and should be remedied to strengthen the system. The result of this strengthening would be a more responsive and democratic process for managing international rivers.

DEDICATION

In Memoriam

This work is dedicated to Carol--
a girl who died of Sickle Cell Anemia
at twenty-five years of age
because her disease was
an irrelevant topic of inquiry.
These labours are not wasted
if they contribute
to Brotherhood and Peace
on the earth she has left.
A little love too late
is a painful tragedy,
but regrets should not end
our search for relevant answers.

ACKNOWLEDGEMENTS

The debts I owe to the many persons who made this thesis possible are hard to put into words. I am deeply indebted to advisors, friends, sources, and others without whose kindness this thesis would not have been written. I am particularly indebted to my advisors, Professor Gordon Stead of the School of Community and Regional Planning, and Professor Irving K. Fox, Director of the Westwater Research Centre. Their sensitive and critical advice and support in the planning and preparation of this thesis is immensely appreciated. I am also indebted to friends who provided shelter, criticism, support, and love at the right time and in the right measure. Finally, I am indebted to the very busy people who consented to sit with me to candidly share their very personal knowledge, feelings, and fears despite their often tricky legal and political situations. To all of these people I owe a debt of love and I pray that this work meets with their respect.

May 1974

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CHAPTER I

DEFINITION OF THE PROBLEM

The subject of this study is the development of administrative arrangements for the management of international rivers. This study will look at part of the system of communication operating within a decision-making process responsible for a particular international river, the Skagit River in Canada and the United States. The purpose is to assess this communication process according to certain normative criteria. It is hoped that in this way we may gain a clearer understanding of how to structure decision-making arrangements related to international rivers. The importance of international rivers in the modern world is a compelling source of relevance for this study.

THE IMPORTANCE OF INTERNATIONAL RIVERS

The importance of water in our life has been recognized for thousands of years. The ancient civilizations of the world grew up on the shores of great rivers--the Nile, Tigris, Euphrates, Indus, and Huang-ho. Surely conflicts over water rights ensued from the fact that water was scarce and people were more abundant. These conflicts must have led to some administrative arrangements of a primitive sort to alleviate conflicts and to provide for better use of this scarce resource. F. J. Berber, an authority on international water law, goes further, claiming that water may have been the reason for the development of political systems.

> Water rights have been the subject of state concern ever since the earliest appearance of any form of state organization. In light of the most recent

> research it may not even be going too far to say that the organization of the state as known to us over the last six thousand years had its origins in water rights.[1]

This interesting theory emphasizes the fact that water rights have an even more fundamental significance in the modern world.

The importance of managing international rivers is immediately emphasized by the role of water in the current quest for development by the greater part of the world's inhabitants. This quest for development may be threatened by the potential lack of water. Water is critical for development programs. Water is used for hydroelectric power, irrigation, water supply, transportation, and certain industrial concerns. The demand for water will increase with development as new uses place demands on existing supplies. Population growth alone causes increasing demands on water. If the demand for water for these purposes exceeds supply, then water shortages may cause bottlenecks and delays in the implementation of plans. In some cases this may cause severe setbacks to development programmes at a time when setback can mean disaster. Developing countries are already lagging further and further behind developed countries in economic growth. Population increases are nearly keeping pace with economic growth, thus slowing per capita rises in Gross National Products. It is easy to see that with developing countries already strained by population and economic growth pressures, water shortages may become crucial factors inhibiting development. It is evident that at some point the trends become regressive and the quest for development is lost.

The worldwide shortage of fresh water would inevitably cause

conflicts over international streams. These streams will be taxed heavily as each riparian nation tries to get a fair share, or better, of international waters. Given the present decentralized world political system, it could be hypothesized that this would lead to misery and slaughter unless some form of effective peaceful settlement is found. Many international rivers are already located in war torn areas, such as the Indus, Jordan, Ganges, Mekong, and Rio de la Plata rivers. In South America, the Rio de la Plata system has seen horrifying conflict.

Currently these same rivers themselves, and other international rivers, are becoming the very source of intensified conflicts stimulated by the rising demands for water of developing riparians. The demands for water are now changing in character. Formerly the main use of rivers was for navigation. Nations are now developing massive irrigation, flood control, hydroelectric, and water supply programmes which change the rivers' habits or consume some of the water. Meanwhile, the deterioration of the environment, accelerated by industrialization and urbanization, is placing a limit on the amount of water that may be used without harmful feedbacks from the environment. Researchers are now turning to the problem of the management of international rivers to seek some solution to the budding dilemmas these events have caused.

INTERNATIONAL LAW

International law on international rivers is a rather new concept.

Most of the law now applicable comes from treaty obligations of co-riparian nations. Treaties have become the usual method of dividing the waters. This fact derives from the nature of international law. With no universal court and with the nations jealous of territorial sovereignty, the only law is that which nations voluntarily accept. Thus,

> International law governs relations between independent states. The rules of law binding upon states therefore emanate from their own free will as expressed in conventions or usages generally accepted as expressing principles of law and established in order to regulate the relations between these coexisting independent communities or with a view to the achievement of common aims. Restrictions upon the independence of states cannot therefore be presumed.[2]

This situation leads us to the conclusion that law on international rivers is perhaps irrelevant. But this is far from the truth. The current situation is perhaps more flexible and thus may help in the solution of conflicts. Parties to a treaty may design treaties which are made to fit their particular regional problems. According to Anthony Scott, international rivers expert and former Canadian member of the International Joint Commission,

> ...the dearth of general law on border streams is not a disadvantage. Rather it gives an opportunity for many kinds of arrangements to be tried and negotiated free from the restrictions of established rules.[3]

Perhaps the biggest effect of international law is to provide normative guidelines for the parties to use in deciding what is the best and most fair arrangement. Thus,

> the discovery of neighbourly consideration as a general principle of water law based on neighbourship and water rights in the municipal law of civilized nations has a direct and not unimportant significance for international law.[4]

Nations are repudiating the Harmon Doctrine developed in the early pre-treaty days between the United States and Mexico. The Harmon Doctrine, enunciated by United States Attorney General Harmon in 1895, said that the upper riparian, the United States, had no obligations to the lower riparian, Mexico. Now modern disputants have sought to base their arguments on different principles. According to the International Law Association,

> the Harmon Doctrine has never had a wide following among States and has been rejected by virtually all States which have had occasion to speak on this point.[5]

The ILA stated as an "agreed principle of international law" that:

> Except as otherwise provided by treaty or other instruments or customs binding upon the parties, each co-riparian State is entitled to a reasonable and equitable share in the beneficial uses of the waters of the drainage basin. What amounts to a reasonable and equitable share is a question to be determined in light of all the relevant factors in each particular case.[6]

The dominant "rule," perhaps more normative than binding, is that nations should share.

The role of international law in the case we are considering in this study is centered on the international law relating to treaties. A treaty has existed since 1909 between the two co-riparians, the United States and Canada. This agreement provided the authority for managing the international waters to which the two nations are co-riparian. This type of agreement has the blessing of international law experts who see the problem of managing the international river as best suited to a non-judicial arrangement.[7] This opens a new type of situation. The problem now becomes that of finding the best administrative arrangement

to accomplish the aims of the respective co-riparians. Whatever they decide becomes their international law.

> Under international law States may enter into agreements with respect to any matter unless in conflict with basic standards of international conduct accepted by the world community. Of course, this limitation would equally apply to the establishment of a binding custom among States. Thus, States may alter among themselves by agreement or binding custom the applicability of rules of international law so long as there is no conflict with these basic standards.[8]

These basic standards would include the principles of self-determination of nations, non-aggression, and respect for the integrity of other nations. Thus the principle of international law which is most applicable, given the treaty, is that

> StateStatesuare under primary obligation to resort to means of prevention and settlement of disputes stipulated in the applicable treaties binding upon them....[9]

The question now becomes one of institutional arrangements for management of international rivers.

SOME FACTORS TO BE CONSIDERED IN DESIGNING INSTITUTIONAL ARRANGEMENTS FOR INTERNATIONAL WATER RESOURCES PLANNING

The lack of a generally applicable and enforceable code of international law respecting international rivers provides for the settlement of boundary conflicts by means of negotiation and specialized agreement. This allows great flexibility. However, it also involves some very complex and difficult questions of institutional design for managing common resources. These questions draw on the expertise of many disciplines--political science,

economics, geography, engineering and so on. These disciplines each attempt to contribute to the answer of the most critical question: "How should international rivers be managed?" To get a perspective on the problem, let us begin by looking at the role of institutions.

The Role of the Institutions

The water management administrative institution promises to play a cardinal role in the management of international rivers. On this there is common agreement among students of these rivers. According to F. A. Butrico, C. J. Touhill, and I. L. Whitman of the Great Lakes study, Resource Management in the Great Lakes Basin,

> It has recently been recognized that policy and institutional questions often determine the course and eventual outcome of many water-related endeavors.[10]

H. P. Michael stated at a 1963 international conference on water development in less developed countries that

> Institutional shortcomings were found to be the major handicap to promotion, successful planning and efficient operation of all water development projects; in most cases failure is due to the non-existence of proper water development authorities, to conflicts between multiple agencies having divided authority and working under conflicting policies, and to the absence of up to date water legislation.[11]

Jerome W. Milliman, an economist, concludes that

> ...there are signs that the need for more effective management of water resources is rapidly approaching a "crisis" stage.[12]

In the 1962 Seminar on the Development and Administration of the

International River Basin, the conclusion was reached that

> ...it was the lack of personnel with imagination and determination, and the suitable administrative institutions to carry the schemes forward that were the real inhibitors... [to international rivers management] .[13]

The list could be extended. Unmistakably, the design of adequate institutional arrangements is a priority in water management. To get an idea of what should be the basis of such arrangements, we must look at what they are supposed to manage.

Water as a Resource

Above all, water is a fluid substance which moves with little regard to national or local jurisdictions. A river may cross a border, form a border, or stay within a jurisdiction. When a river crosses or forms a border it becomes an international river.

The fact that water is fluid leads to certain problems in water management. Since a river flows, the uses of the river in its upper reaches may affect the uses in the lower reaches. Thus, if pollution occurs upstream, it is suffered downstream. Hydroelectric power developments, consumptive uses, or related land management practices may all have an effect on the downstream uses. Where a river crosses a political boundary, this may mean that the effects will be felt in a different political jurisdiction. If these effects are harmful, it is likely that the downstream riparian will protest. Since this protest then affects upstream uses, a conflict may develop. International rivers then, because they are

fluid, may be sources of friction.

The factor of fluidity also presents a problem of property rights. Where a substance is not fixed in one location, it would be difficult to argue legal ownership rights.[14] The rights are held in common by the "society." This makes water a resource which Vincent and Elinor Ostrom call a "common pool resource" just like "wildlife, fishlife, oil, groundwater, lakes, streams, and the atmosphere..." These authors describe some of the problems associated with common pool resources:

> Particular problems occur in the utilization and management of these kinds of resources whenever the following conditions are present: (1) ownership of the resource is held in common; (2) a large number of users have independent rights to the use of the resource; (3) no one user can control the activities of the other users or, conversely, voluntary agreement or willing consent of every user is required in joint action involving a community of users; and (4) total use or demand upon the resource exceeds supply.[15]

When these conditions pertain, a situation develops in which a host of independent users overuse the resource. This overuse leads to exhaustion or monopoly of the resource. This exhaustion process occurs because no overall public authority exists to control overuse. In the end, everyone suffers because the resource is gone. Regulation is thus imperative.

Another aspect of water which is commonly recognized in studies of water management is that water resources are part of a system which includes many sub-systems and related systems which greatly affect the nature of the water system. For example, it is clear that surface water and ground water systems are intimately related,

and to affect one is to affect the other. Forest management practices can affect the run-off patterns of a river. Agricultural practices can affect the water quality. Likewise industry. The river must then be looked at as part of a larger system. The most commonly proposed boundary to this system is that of the river basin. The river basin, it is argued, should be considered a hydrologic unit. This unit, however, includes a river basin, but, in addition, it may also include elements outside the basin which affect the basin--such as hydroelectric demands from a city not in the basin. This demand could have a great effect on the resource. The point here is that water must be viewed in a complex way--it is an uniquitous and vulnerable resource. It is found everywhere and it can be damaged by seemingly unrelated activity.

Characteristics of User Behaviour

The nature of the water resource causes certain types of behaviour to be observed among those who use the resource. This behaviour is a natural outcome of the competition for the use of the resource. As Milliman puts it,

> underlying all water problems is the simple fact that there is competition for the use of water resources; this competition will increase and become more intense in the future.[16]

The water resource has the capacity to become scarce and yet there are few effective ways of managing it. Thus user behaviour tends to become chaotic. S. E. Goldston, M. H. Karr, Vincent and Elinor Ostrom of the Indiana University Department of Political Science

have offered some propositions which they feel explain this behaviour. A few of these are given below as examples of user behaviour.

> Proposition 1. ...individuals utilizing a scarce common pool resource without public intervention will be led to make decisions which produce social costs for others. They will tend to overinvest in facilities concerned with their own private use and underinvest in projects to produce joint benefits for a community of users.
>
> Proposition 2. Intense competition for the utilization of the resource will lead individual users to adopt any or all of the following patterns of conduct: (a) concealing information about resource utilization and the potential social costs for others; (b) ignoring the adverse effects on the use of the resource; and following a hold-out strategy when projects of joint benefit are proposed.
>
> Proposition 3. Without collective action, the predominant outcome of competitive use of a scarce common pool resource will be eventual domination by one use or user... The dominant use or set of uses will tend to be one that produces the largest accrued social cost to the total community of prior and potential users....[17]

These characteristics of user behaviour show how competition in the development of this resource operates. It tends to involve a heavy concern for private survival to the point where society suffers. While in some ways this may be good since a monopoly of the resource may have some benefits,[18] for the society as a whole it is detrimental. The social costs of user behaviour are not borne by the users.

Underlying the rapacious nature of unregulated user behaviour is the problem of uncertainty. If users knew they were destroying the resource and they could find a way of cooperating with each other, it is conceivable that at least some of the users could see

the greater benefit of joint cooperation. In a national context this cooperation might be gained by government action. In an international context there is no government jurisdiction applicable to everyone. But cooperation is possible, as demonstrated in the case of whales found in international oceans. Whales are an international pool resource. They were hunted until nearly extinct by a world of nations which saw no reason to cease hunting until everyone else did. Eventually the whale populations declined and this decline was duly noticed. Efforts were then made to gain international cooperation from all whale hunting nations (users) to limit or prohibit killing of whales. While this effort is not entirely successful and perhaps too late for the whales, it demonstrates how users may be brought to see the benefits of joint efforts.

The problem of uncertainty in common-pool resources is brought about because users do not make information on their use readily available. There is the danger in a competitive system in letting your adversary or the referee (government) know what you are doing. If you do, then these actors may know what you are doing and, if they do not approve, they may obstruct your behaviour--thus bringing you a smaller return. Hence, it should not be assumed that users will make information readily available.

The Nature of Conflicts

The resolution of conflicts is a fundamental responsibility facing every political system. The political system itself is a

response to conflicts in society which require authoritative decision. In order to decide how conflicts in water resource allocation could be resolved, perhaps it would be wise to look at the nature of conflicts.

In his book The Analysis of International Relations, Karl Deutsch discussed the problem of "how conflicts arise among states."[19] Deutsch uses the terms of Anatol Rapoport, a mathematician and game theorist, to label the three types of conflict which he feels are important: fights, games, and debates. In the following paragraphs we will explore these briefly.

Fights. Fights are conflicts characterized by mindless and automatic escalation of hostilities. This type of conflict escalates often to mutual self-destruction with no thought of the consequences of the quarrel. Here the analogy of a dog fight is given, where:

> a dog meeting another dog in the street may growl at him; a second dog growls back. The first dog growls louder, and the second still more so. The first dog snarls, and so does the second. In the classic sequence of escalation there follow bared teeth, snaps, and a dogfight.[20]

This type of conflict is irrational and accelerates quickly. It is difficult to control. Control may come through reasoning with the contestants or from fatigue or from destruction of at least one of the contestants.

Debates. A debate, as defined here, is a contest of ideas "where adversaries are changing each other's motives, values, or cognitive images of reality..."[21] This differs from the concept

of a high school debate where the object is to represent any point of view effectively. The object in conflict debates is to obtain some understanding from your opponent. Since your opponent in this type of conflict is undoubtedly trying to gain some understanding from you, the result might be some mutual understanding. There are theories of debating which are based on experience and research which promise to yield some informative insights into international relations. One such theory, in the field of psychology, may have some application. George Bach, a prominent psychologist and author of The Intimate Enemy,[22] has advocated a form of constructive fighting in marriage counseling which is directed at the "contestants" arriving at greater understanding of and sensitivity to each other. The rules are strict in such fighting in order to avoid escalation into what was earlier called a "fight." Certainly the idea will be getting greater research attention, but at this time theory is weak.

Games. Games are a form of conflict where each player maintains some control over his actions (i.e., games are not "fights"), even though he may have no say over the final outcome. Games have the objective of winning, or at least not losing, some contest (i.e., games are not debates). Games require strategy because the contestants are faced with a level of uncertainty. They may know what they want, what they can do, what they cannot do, what they know, and what they do not know. By definition, they do not know what their opponent can or will do. Hence, the contestants will

make a set of moves or tactics which are guided by some over-all game plan or strategy. This strategy is based on perceptions of their alternative strategies and of the capabilities of their opponents. The best strategies are ones which secure the objectives of the contestant--either to win or to avoid loss.

Conflicts and Water Resources

Given the nature of water resources, we have found that conflicts are inevitable. In some cases these conflicts may become fights. In such a case the element of irrationality is high. One would expect that in such a case, irrationality would have to be converted to some form of more malleable conflict such as a debate or game. In some cases conflicts over water resources may become debates. This may occur in certain legislative situations. However, given the nature of international relations, this form of conflict is apt to occur in special cases only. Rather, it is likely that contestants will be determined to seek their self-interest and thus try to win something from their conflict. This means that conflicts over international water resources will often be characterized by game type behaviour. It should be remembered that games, in this context, would include diplomatic, economic and political activity, and, ultimately, warfare.

The Role of Communication in Games

Communication in games is a complex process. It was said that contestants may know what they want, what they can do, what they

cannot do, what they know, and what they do not know. They do not know what their opponent can or will do. Immediately it becomes evident that to play the game, contestants need certain types of knowledge. They have to know what they want. This requires some interaction between their values and certain information. The information comes from communication. Also, they should know what they can do. This involves information about strategies available to them. This means communication regarding the rules. The same applies to information on what they cannot do. The contestants must also know what they know--the extent of their knowledge. In each case some communication is necessary. No poker player would bet on a hand in a game in which he did not know the rules, the objectives of the game, what his cards are, or what his opponent could do. Neither should we expect contestants in water resources conflicts to enter a water conflict without similar information.

The question now becomes "who should be allowed to enter water resources conflicts on international rivers?" National governments will definitely be involved. Regional governments will be involved, although perhaps in an indirect manner. They may, for example, represent their position to the national government, asking that the national government represent the regional government in the international forum. What about the citizen? In a democratic system, it is perhaps an element of definition that the citizen's wishes are carried out through elected repre-

sentatives. But how do the elected representatives determine what is the position of the citizen? Somehow, the citizen must communicate his position to his elected representative. Thus, communication will be a part of a democratic international rivers management arrangement. Let us look closer at communication in political theory for deeper perspective.

Communication in Decision-making

Communication is an essential component in any decision-making system. According to Robert C. North,

> Associations, organizations, societies, and the nation-state itself are built upon and held together by communications--by perceptions, by decisions, by expectations which people maintain of each other, by transactions, by their willingness to validate a considerable portion of the expectations by appropriate reciprocal behaviours. Politics could not exist without communications... In these terms a modern nation state may be viewed essentially as a decision and control mechanism which relies upon the exchange of messages in both its domestic affairs and its foreign relations.[23]

Discovery of the crucial role of communication has stimulated the development of some very useful theory based on analyses of communication aspects of social and political situations. These studies have led some, including Karl Deutsch, to see communication as a key focus to the study of politics.[24] It is clear, in any case, that communication studies have a strong role in political studies.[25] This role will increase our understanding of how demands upon decision-making processes of these systems

are communicated and received.

In his book Politics and Communication,[26] Richard Fagen describes three main directions in which communication studies are now directed. These are a concern with normative questions of the proper use of communication, the development of field work technique for analyzing communication, and the development of theory on the mechanics or systems of communications. The concern for the proper use of communications has much to contribute to any study of a democratic institutional arrangement, including one dealing with international rivers. This study will be an assessment of one such arrangement based on a specified normative standard directed at understanding a facet of proper communication. This will also require some of the new techniques being developed for the study of communication. Finally, this study will analyze the communication system in the case under consideration by applying a model based on the study of the mechanics of communication. This work, then, will be based to a large extent on the theory of communication.

NORMATIVE ORIENTATION

The area of interest of this study is communication. In this study, however, there is a value perspective which will be made explicit in the following paragraphs. This is the normative conclusion that the preferential system of decision-making is a democratic system.

The Democratic System

Leaving the question of communication aside for the moment, let us look at the concept of democracy. What attributes do we expect a democracy to have? The primary attribute is the principle that the decision-makers should be under the effective control of the citizens.[27] Practically, this means that the representatives of the citizens should be chosen by the citizens and should remain in office as long as they continue to enjoy the support of their constituency. If they do not, then at the next election they should be subject to replacement.

A second principle of a democratic system is that the citizens should be able to influence the decisions of the decision-makers.[28] This is another way of saying that the preferences of the citizens should count.[29] Thus preferences should not necessarily be expressed only at times of elections.

A third principle of a democracy is that all citizens should be politically equal. This would certainly mean that every adult citizen should have a vote in elections where representatives are chosen. It would also mean that each person had only one vote and that this vote should be counted equally with all other votes.[30]

The principle of political equality will be a major concern of this study. A difficult question of democratic theory is that of deciding how to weigh the influence which is brought to bear upon the political decision-makers. It is a fact that citizens are not equal in political effectiveness. Not every citizen is

able to communicate his preferences to the decision-makers. Some of this can be attributed to differences in personal competence; some persons are more articulate, more persuasive, more intelligent. It is also true that economic and social factors contribute to differences in political effectiveness. The modern democratic system puts a premium on the ability to use communication in order to reach a consensus. In many cases this can mean that those with superior education have more knowledge and expertise for promoting their preferences. Also, persons with greater wealth, income, or discretionary time can apply these resources to promoting a decision. If we are to accept that democracies should be based on political equality, then it is clear that the influence of the more able should not be excessive.

A fourth principle of democracy is that every citizen should be free to express his preference. Absolutely this means that voters should not be intimidated or coerced in their voting or in voicing preferences where these are done respecting the freedom of other citizens. This should mean institutional safeguards protecting minorities from abuse by the majority. This should also mean freedom of citizens to run for office unmolested. It should include freedoms of speech, assembly, and organization.[31] In this way the citizen may gain adequate information upon which to base his preferences. It means that he should be able to attempt to persuade others to adopt his preferences.[32] These freedoms all add up to a freedom to communicate.

A fifth principle of democracy is that the representatives should serve with the consent of the majority of the citizens and a majority vote of the representatives should be required for decisions. A democracy should be premised on the principle that it is the total citizenry that has authority and that no minority can bind the majority to a decision against its will.

A few practical constraints should be noted. First, it would be unreasonable for representatives to know exactly what the preferences of each of their constituents might be. In modern democracies, representatives have large constituencies and should not be expected to get explicit consent for every vote in a legislature. The system would quickly fail to act on anything. Rather, representatives should attempt to gain an impression of their constituents preferences.

A second constraint is on the citizen. It would be unreasonable for every citizen to be called upon to assimilate the increasingly complex, voluminous, and technical information necessary for developing an educated preference.[33] A democracy in these conditions would expect the elected representatives to study current problems and interpret their constituents' preferences in terms of their special knowledge and competence.[34] Also, it should mean that individuals may be able to designate a knowledgeable spokesperson who may speak for their preferences on issues of concern to them.[35]

These broad principles will be drawn upon in the assessment

of communication in this study.

Communication, Democracy, and International Rivers. In this study, we are concerned with the assessment of communication which is part of a decision-making arrangement for the management of an international river. It is the object of this study to look at certain components of this communicating process to determine if they are adequately democratic.

A second matter of concern in this study is whether these components of this communication process facilitate effective management of this particular river. While this study does not seek to answer these questions fully, it is important to shed some light on the role of communication in that management activity. It will be an assumption of this study that if the system is adequately democratic, then it will facilitate more suitable management. A system which is not sensitive to the desires of its citizens will inevitably overlook sources of discontent and conflict. When the level of alienation from the system exceeds the level of satisfaction with the system and no procedure exists for resolution of these feelings, the citizens will reject that system. Rejection may take the form of apathy or aggression.[36]

This inquiry into the role of communication in international rivers management should not be considered definitive in regard to principles of management. There are many factors involved in these arrangements. A University of British Columbia research

team on the management of international rivers, directed by Professor Irving K. Fox, is investigating a wide range of "factors suspected of influencing the nature of the agreement reached or responsible for failure."[37] At present it is plain that we do not know all of the factors which do influence the success of these arrangements. This study has a secondary interest in indirectly contributing to knowledge in this matter.

THE CASE UNDER INVESTIGATION

In this thesis we will be looking at a specific case. This case is the High Ross Dam--Skagit River Controversy. The Skagit River is an international river flowing from Canada into the United States. The Ross Dam is a project on the Skagit River in the United States which provides hydroelectric power, flood control and some recreation benefits to the State of Washington. The Ross Dam is designed so that it can be built to a higher level and thus be capable of producing greater benefits in hydroelectric power and flood control. The raising of Ross Dam was approved in 1942 by the institutional arrangement responsible for water management of joint waters in Canada and the United States--the International Joint Commission. The agreement seemed secure until 1969 when a movement began which opposed the agreement. Since the dam had not actually been raised and since new questions concerning recreational and environmental impacts had come up, decision-makers faced a conflict

between two alternative uses. They could allow the dam to be built and support one position. Alternatively, they could support the environmental-recreationist position and oppose the dam. Since the decision-makers' collective mind had not been decided irrevocably (at least according to the perceptions of the anti-dam contestants), there was a conflict.

The Focus of this Study. This study will look at the communication aspect of the High Ross Dam Controversy. More specifically, this study will look at that part of the communication process where messages are accepted by the decision-making process. The point of concern here then is where the process actually receives the message that the citizen decides to deliver. This point will be called the "intake" point. An example of an intake point is a public hearing. A public hearing presumably accepts messages that are delivered by the public. We are concerned here with certain aspects of this exchange. We want to evaluate (1) whether this exchange is capable of permitting reliable communication of preferences of the citizens into the system of decision-making (openness). We want to know (2) if this intake point inhibits or facilitates the acceptance of messages to the decision-making system (efficiency).

It should be apparent that in this study certain matters have been ignored. In this case we are not concerned with the "worthiness" of the message since presumably only the citizen can determine how valid his preferences are--they are subjective value

judgments. Neither are we concerned about the credentials of the decision-makers. Decision-makers are extremely important variables deserving lengthy study, but are outside the scope of this study. We are not concerned with the validity of the ultimate decision which is also a matter of judgment for the decision-makers and their constituents to decide. We are not concerned with the motivations of the citizens who present their preferences. We are not concerned with the details of how the decision-makers received the message from the hearings. We are not concerned with the activities of decision-makers except in relation to how they were involved in the intake process. Rather, we want to know if the citizen had a reasonable channel of communication to the decision-process.

There is a further limitation on the scope of this research. There are a myriad of ways in which a citizen may make his preferences known. He may write letters to his elected representative, to his newspaper, or to administrative tribunals with some authority to make decisions. He could perhaps bring action in court. He could contribute money to a political campaign for his preferences. He could even run for an elected office. What we are concerned with here, however, is a specific type of intake point. We are concerned with what has become perhaps the most popular form of public intake process--the public hearing. Although all forms of intake are influential, the focus here is made in light of research constraints.

A further limitation will be imposed. Beyond a simple descriptive mapping exercise, this study will be limited to a few specific public hearings. The public hearings that will be of concern here are primarily the hearings of the International Joint Commission, the Washington State Ecology Commission, and the Seattle City Council. The hearings of the Federal Power Commission will be considered to a lesser extent.

This study will now proceed to Chapter II where the High Ross Dam Controversy will be described. After this description we will briefly describe, in Chapter II, the decision-making units involved in the controversy and their context. In Chapter IV we will establish the research design that will be implemented to gather data for Chapter V. Chapter VI will be an exploration of the implications of this research for management of international rivers.

FOOTNOTES

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CHAPTER II

A HISTORY OF THE SKAGIT RIVER

The subject of this chapter is the Ross Dam on the Skagit River. The Skagit River is an international river which flows from British Columbia in Canada through Washington State in the United States. It empties into Puget Sound, an inlet of the Pacific Ocean. The Skagit is the largest river flowing into Puget Sound and the second largest in the state of Washington. The Skagit River is 24 miles long in Canada and drains 330 square miles of forest and park land. The Canadian basin is mountainous. In the United States the Skagit is 125 miles long and drains 2,700 square miles of forest and farm land.[1] In the United States the Skagit flows through an upper valley and then, on the lower reaches, across the flats. The upper valley in the United States is currently the centre of power development, logging, and recreation. The Skagit Flats are rich agricultural lands with growing industrial investment.

HISTORY

The Skagit River was probably discovered in the late 1700's. It is known that Spanish and English explorers were in the area around that time, but no one knows who actually discovered the river.

Settlement first began on the Skagit Flats. Though this area was frequently subject to flooding, a pioneer named Samuel Calhoun settled on these flats in 1863. He began a forerunner

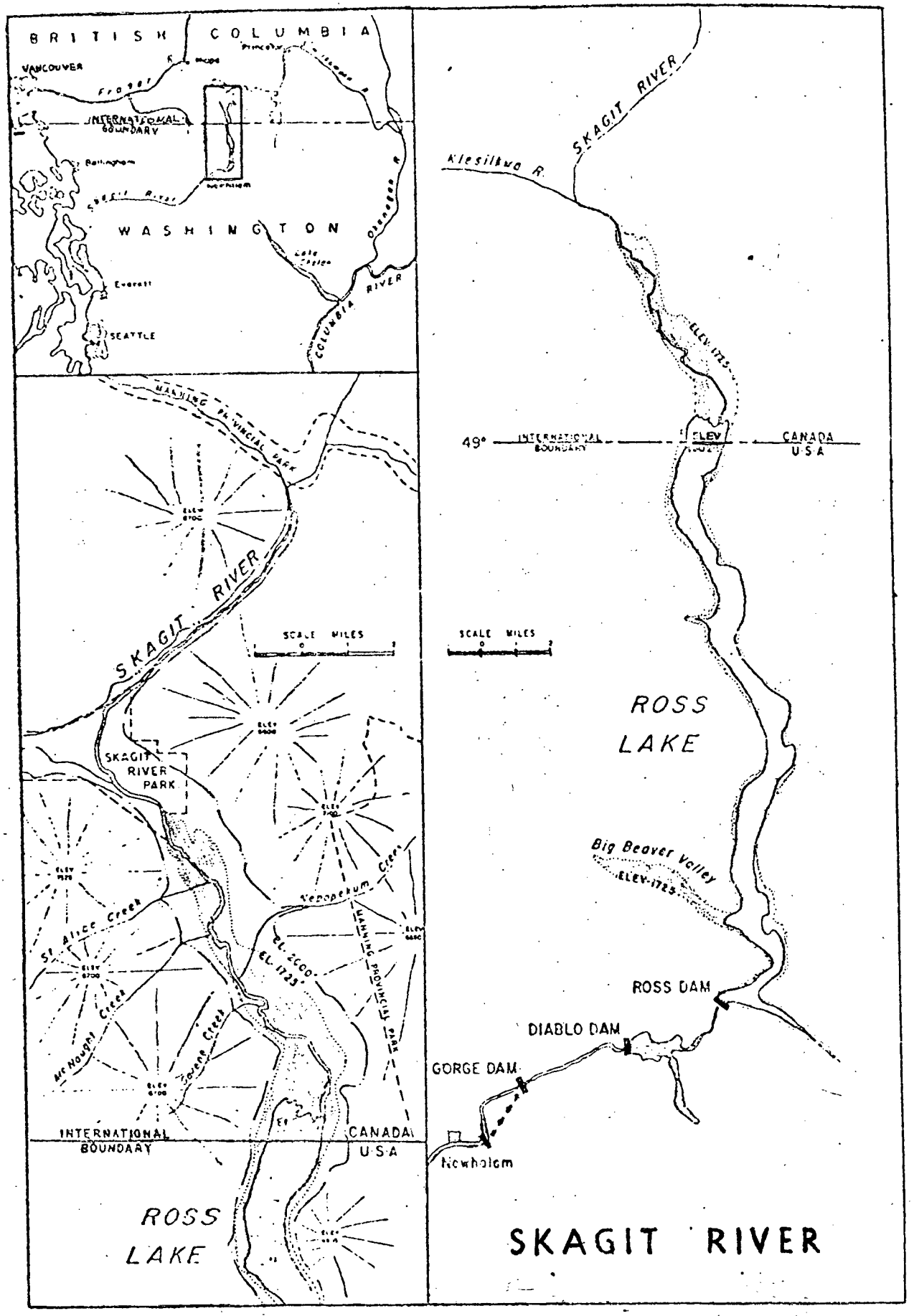

FIGURE 2.1 SKAGIT RIVER MAP

of a dyking and farming development on what became recognized as some of the richest farmland anywhere.[2]

The area grew rapidly. In 1879, James H. Moores dropped a gill net into the Skagit and initiated a fishing industry in the area. This helped stimulate industry and settlement. A food processing industry grew up.[3]

Growth was further spurred by developments in the upper U.S. valley. The logging interests showed interest in the valley for its timber and began modest operations in the valley in the late 1800's. This of course led to some support industry downstream.[4]

In 1878 gold was discovered in the upper valley. This led to a gold rush which brought several hundred prospectors and miners to the upper valley. This initial rush was short lived, however, and was cooling by late 1880. Many stayed behind, however, and operated toll bridges, ferries, river boats, and road houses. These enterprises got most of the gold then being mined.[5]

In the 1890's new mining activity awakened. This activity continued into the twentieth century. Silver was found in 1900. Many of the mining companies of this rush were marginal, however, and soon went bankrupt. Mining activity became minimal by 1913.[6]

The true significance of this mining effort lay in those who stayed and settled in the upper valley. The mining had brought many settlers to the valley and they determined to make

it their home.

Water Power

The upper river first became a source of water power in 1906 when a small water wheel and generator was set up to power mining operations.[7] This marked the beginning of waterpower development in the area which was followed by other mining oriented power developments of a modest scale.[8] These simple power developments were the forerunners of power planning of a much more massive scale.

A conflict inevitably developed between the residents of the upper valley and the power development concept. The residents slowly lost their claim to the valley because of the growth of importance of the power interests. In 1898 the area was put into a forest reserve. In 1906 the Forest Homestead Act was passed by the United States Congress defining the rights of residents of the newly appointed reserves. The homesteaders of the upper valley had to file a claim which then had to be approved by the Forest Service. Residents had to prove that they had been on the land a sufficient length of time prior to 1906 and that their claim was agricultural. Forest and power industries would have superior claims. The object of this legislation was conservation and the Forest Service was against settlement in the reserves.[9]

Very early it became evident that homestead titles would be

hard to get from the Forest Service. Slowly the electric power interests in the state became interested in the river. Competition for the river valley became intense in the second decade of the twentieth century with the winner, the City Light and Power Authority of Seattle, establishing its rights by 1917.[10]

The Gorge Plant

The planning for the development began immediately. First, sites had to be located and arranged into a development scheme for the whole river. The river was explored and surveyed. Questions of advisability and feasibility were tackled in Seattle and the valley.[11] It was decided that any scheme for development would include a dam at Gorge Creek near the site of the present Gorge Dam. The two main additional sites explored were at Diablo Canyon and Ruby Creek. Eventually the Superintendant of City Light, Mr. J. D. Ross, recommended a three step plan including all three damsites which would be scheduled for development as needed. In May of 1918 the Seattle City Council authorized City Light to proceed with the Gorge Plant, the first of the series.[12]

The Forest Service, desiring rapid development of the valley, put pressure on City Light to proceed quickly by threatening to revoke the company's permits if it hesitated. Construction began in 1919.[13] The site was barely accessible and a railroad had to be built. Delays arose and estimates of costs rose. The

dam was completed and power became available in September of 1924.[14]

The Gorge Plant established the Skagit's potential as a credible power resource. The river now was opened to further development for power. City Light now boasted that

> This great city [Seattle] ... now witnesses a victory of achievement against harassing odds of misled opposition, minority pessimism and selfish interests, with an additional 205,000 horsepower yet to come![15]

The Diablo Dam

The next phase of the Skagit development came with the further refinement of plans. In 1925 Seattle laid out plans which included plans for the future high Ruby (Ross) Dam as well as the more immediate Diablo Dam. In 1926 City Light sought approval of its plans from the Federal Power Commission. The FPC gave permission in 1927 for City Light to construct Diablo Dam. The Diablo Dam was begun in 1927 and completed in 1936. The construction of Diablo Dam left one major step to the Skagit development--the Ruby Dam.

The Ruby Dam

The idea of constructing a dam at Ruby Creek was not new. The idea was set in motion by the 1917 approval of the United States Forest Service for Seattle City Light to develop the Skagit. In 1920 Carl F. Uhden, the construction engineer for the Gorge

Plant, envisioned a dam at this point to elevation 1600 which would capture the entire flow of the river.[16] In 1925, City Light laid out its plans for the Skagit complete with the Ruby Dam.[17] In 1929 Seattle purchased the Witworth Ranch in British Columbia to prepare for possible flooding across the International Boundary.[18] In 1930 the area which was foreseen as a reservoir was placed into a land reserve for that purpose by the B.C. government.[19] In 1933 the U.S. Engineer Department sent a report and a proposed plan for Skagit development to Congress.[20] These events were unfettered steps toward construction of the Ruby Dam.

In 1939 the U.S. Federal Power Commission cleared the way for construction of the first stage of Ruby Dam by granting permission for the project to begin. Benefits of the dam were to include employment from reservoir clearing and dam construction, flood control, cheap hydroelectric power at site, and supplemental storage for the two downstream dams--the Gorge and Diablo Dams.[21] This storage, at completion to its ultimate height, would include the entire flow of the river.[22] Construction costs would be low relative to benefits.[23]

Public Power

A mystique greatly overshadowed these proceedings. This was the mystique of public power. Seattle City Light was founded in 1902 as a public utility.[24] Its superintendant, Mr. James D.

Ross, was extolled as a champion of the public interest over the private. Seattle was hailed as "America's Best Lighted City."[25] The virtues of this enterprise were proffered as ideal. Newspaper readers were told that

> whereas a privately owned utility erecting dams or transmission lines lays waste [to] its right-of-way with no concern for the natural beauties, Seattle does differently.[26]

In 1928 Seattle began tours of its dams[27] which undoubtedly were meant as a public relations effort to get Seattle residents to identify with their great utility. The grounds around the dams were well kept, featuring rock gardens, tropical and native plantings, waterfalls lit up at night with coloured lights, music emanating from the trees, boat and rail rides around the grounds, camping grounds, cottages, threatre, movies, and dances.[28] In the spring of 1939, the patriarch of this great enterprise, Mr. Ross, died.[29] Ruby Dam's name was changed to "Ross Dam."

Growth

Development in this period was legitimized by the reigning philosophy of the day. The early years of the twentieth century had witnessed a movement toward conservation. The wider issue of "the environment" was not yet salient, however. The salient issue was growth. Growth was to be unlimited. According to

The New American in Bellevue, Washington

> There should not, nor can there be, any jealousy or rivalry by different sections or factions when it comes to the question of state development... any growth anywhere in our commonwealth affects the whole state... any development should have in view this full and complete use of our rivers and streams.[30]

This view of growth was fostered by the experience of rapidly rising standards of living brought about by the growth of the late nineteenth and early twentieth centuries. The growth ethic received a boost from the hardships of the Great Depression of the 1930's. Finally, in 1939 the gathering clouds of war were seen in Europe and the Far East. The special role that Seattle had in this perilous situation was that of a producer of war materials--particularly aircraft. This industry required energy.

It was in this super-heated environment that Ross Dam's first stage was brought to completion in 1940.[31] As with all dams on the Skagit, construction was very difficult. When completed, the first stage reached 1365 feet in elevation and was 290 feet high from bedrock to crest.

The Second Stage of Ross Dam

The war which had been threatening broke by 1940 and the completion of stage one. The war in its early years constituted a very serious threat to the national securities of Canada and the United States. The war was a defensive war with allied armies retreating under the Axis onslaughts. Air power had proven its

crucial, perhaps determinant role in the war. As a supplier of aircraft, Seattle became a focus of allied attention.

In 1943 the U.S. Federal Government requested commencement of second stage construction. Work was delayed and construction began finally in 1945.[32] Work was still in progress when the city decided to proceed with stage three in view of the increased demand for power. Contracts were let for logging the reservoir site in 1945 and the Silver-Skagit logging road was built from the north in 1946.[33] The second stage of Ross Dam was completed in 1947. Ross Dam with the completion of the second stage reached 475 feet from bedrock to its crest at elevation 1550 feet.

The Third Stage of Ross Dam

Preparations for construction of the third stage began before completion of the second stage. The finishing work on second stage construction was simultaneous with the foundation work for the third stage.[34] Thus stages two and three proceeded without interruption from 1945 to 1949 when stage three was completed. Ross Dam stood at elevation 1615--540 feet high. Plans for completion of the fourth stage were postponed until more economical power developments in the Northwest United States were completed.[35] Construction of the fourth stage would require thickening of the dam at the base and increasing its height to elevation 1725. At this elevation the reservoir behind the dam would be backed into Canada and permission would be needed from the Canadians.

The Fourth Stage of Ross Dam

Permission to Flood. Raising Ross Dam to elevation 1725 would cause flooding in Canada. According to the Boundary Waters Treaty of 1909 between Canada and the United States, the International Joint Commission must approve all projects raising the natural level of boundary waters.[36] Thus to begin the fourth stage Seattle had to go to the Commission.

In 1941 the City of Seattle made application to the Commission. A hearing was held in Seattle on September 12, 1941. War was threatening and there was no opposition to the dam. The hearing lasted less than two hours and dealt mainly with engineering aspects and economic benefits of the dam. One Canadian testified and no non-official citizens from either nation testified. There was no mention of recreational or environmental questions[37]--an understandable situation given the reigning philosophies and necessities of the day.

In 1942 the International Joint Commission granted an Order of Approval giving permission to Seattle to raise the dam. The order was subject to a condition that the City of Seattle arrange an agreement with the Province of British Columbia for compensation for any damages caused in the province by the flooding.[38]

The Compensation Agreement. The next problem for Seattle was to obtain this agreement. The British Columbia Legislative Assembly passed the Skagit Valley Lands Act of 1947 which empowered the Lieutenant-Governor in Council to negotiate with the City in

order to make the agreement with the City required by the 1942 IJC order.[39] This effectively meant that the provincial cabinet minister responsible could make an agreement.

Agreement had still not been reached when the reigning Liberal-Conservative coalition in British Columbia was brought down at the polls by the Social Credit Party and its colourful leader, W.A.C. Bennett. The Socreds were concerned about possible precedents which could be set for the Columbia River Treaty negotiations and agreement on the Skagit was postponed.

The Columbia River Treaty was finally settled and British Columbia was ready to settle. Acting upon the authority vested in the government by the Skagit Valley Lands Act of 1947, Resources Minister Ray Williston of the Socred government signed the long-awaited agreement in 1967. The agreement was signed twenty years after the Act was passed and twenty-five years after the 1942 IJC Order. Seattle agreed to pay $5.50 per acre per year for 99 years in exchange for rights to flood the valley. This came to $35,566.21 per year. Seattle was also liable for provincial taxes on the valley.[40]

THE HIGH ROSS DAM CONTROVERSY

Launching the Fight

The controversy over High Ross Dam began with a protest developing in late 1969. The protest was originally led by a certain

Liberal Party MLA from North Vancouver-Capilano, David Brousson. The Vancouver Sun, the city's leading newspaper, popularized the opposition to the dam with ample coverage of the issue. The issue was one of environmental damage and loss of recreational assets which could result from the dam. Seattle spokesmen denied these claims. Another issue which added fuel to the conflict was that of nationalism--Americans were flooding a Canadian valley. Statements by Liberal MLA Patrick McGeer, anti-dam group leader John Massey, Vancouver Sun columnist Allan Fotheringham and others support this theory.[41]

Federal Canadian politicians became interested in October of 1970. Canadian Senator John Nichol wrote an article appearing in The Vancouver Sun opposing the damming.[42] The new Canadian Environment Minister, Jack Davis, an M. P. from British Columbia, vowed to do something to stop the flooding.[43] The Liberal Party in Canada went on record as opposing the damming at a Liberal Party policy conference in November.[44] But options of the Canadian federal government seemed limited when Prime Minister Pierre Eliott Trudeau indicated that the way to stop the damming was to "get rid of Bennett."[45] The Federal government feared any Federal action to stop the damming would mean deleterious effects to the reputation of the International Joint Commission. The IJC would have an increasingly vital role in protecting Canadian interests elsewhere and improper action would jeopardize the IJC's legitimacy.

Meanwhile, conservation groups in British Columbia and Washington State continued their campaigns against the dam. In October, 1970, 2,500 persons marched to the shores of Ross Lake behind the present dam and heard speakers condemn the High Dam for environmental and recreational reasons. They said the Province got a "raw deal" and Seattle would get power while B.C. lost fish.[46]

Canadian Parliamentary force stood solidly behind the anti-dam movement in November of 1970, with the entry of national Progressive Conservative Leader Robert Stanfield into the fight. Stanfield said it would take Canadian federal action to stop the flooding.[47] This was a rejection of Prime Minister Trudeau's earlier statements that stopping the damming would require dumping W.A.C. Bennett as Premier of British Columbia.

The Bennett government decided to remain uninvolved throughout this conflict. They contended that they were morally obligated to sign the 1967 agreement because of agreements made by previous governments as well as the 1942 IJC Order. They said that if Seattle wanted to drop the contract they would agree, but they would not force the City to drop it.[48]

By the end of 1970 a fight had clearly been launched. The package of opposition to the dam included important Canadian politicians: federal and provincial; Liberal, Conservative, and New Democrat. Publicity came from The Vancouver Sun and environmental groups. A march had been organized. In the forefront of the conflict were the long list of conservation and sports clubs who

wanted the valley saved. The Skagit flooding had become the top priority issue of the environmental groups in British Columbia. The issue now had "occupied centre stage among B. C. conservationists for more than a year."[49]

Seattle Digs In

The City of Seattle set the stage for the controversy by wanting the High Ross Dam. They had prepared for this dam for many years without major opposition. Now, when they finally decided to raise the dam, opposition developed. The City had known for some time that some of the policies of its agent, Seattle City Light, were not politically popular.[50] In early 1970 the Public Utilities Committee of the Seattle City Council decided to hold a series of nine hearings to explore public concern with City utilities policies. There were several policies of concern including plans for a nuclear reactor on Kiket Island on the mouth of the Skagit, the policies concerning underground wiring in the City, the role of City government in managing City Light, and the High Ross Dam. Descriptions of specific hearings are given in Appendix A. The hearings heard City Light witnesses explain its policies and citizens level criticism on a wide range of policies. Citizens felt it was time for wide ranging reform. Among the Seattle citizens protesting was a prominent spokesman of what was later to become a large Seattle-based coalition opposing the

High Ross. The leader of the North Cascades Conservation Council (NCCC), Dr. Patrick Goldsworthy, was to become a key organizer of the Seattle coalition. Spokesmen for what was later to become a large Canadian coalition, the ROSS Committee, were also present. The four-member Public Utilities Committee was supplemented by the presence of two hired consultants, Professors Douglass C. North and Yoram Barzel of the University of Washington. They wrote a report based on the hearings of the Committee.[51] The report was not entirely favourable to the dam, but the City Council was not discouraged in its plans to build the dam.

Meanwhile, in late 1970 City Light launched a strong counter-campaign to support its dam. It hired a public relations firm in Vancouver, Torresan and Associates, to support its plan.[52] F. F. Slaney and Company, Seattle's Vancouver-based resource planning consultant, released an environmental/recreational assessment of the damming plan on September 23, 1970 which turned out to be favourable.[53] It claimed that the reservoir would enhance recreational potential of the valley with minimal environmental impacts.[54] The report was strongly condemned by environmentalists and others. In addition, City Light continued publicity campaigns in Seattle newspapers. It was obvious that City Light had no intention of reversing its policy concerning the dam.

Some weakening in City Light's position was evidenced by the decision of Mayor Wes Uhlman to review the decision to flood the valley. The decision of whether to commit the City, however, was

a legislative option resting with the City Council. The campaign in support of the dam began with the consideration by the Public Utilities Committee of a request by the Mayor to drop the project. The Committee held a public hearing on the request on December 9, 1970. Hearings rules were strictly enforced. Few of the two busloads of Canadians were allowed to speak. Placards and applause were not allowed. The Canadian position was represented by Sierra Club president Ken Farquharson who spoke of the strength of Canadian opposition. There was one speaker in favour of the damming. The Committee voted three to one to recommend an ordinance to the City Council requiring Seattle City Light to proceed with its application to the Federal Power Commission for permission to build the dam.[55] The recommendation went to the City Council which approved it after a thirty minute debate. The only reference to the concern of Canadians was by Councilwoman Lamphere who said "the international political question disturbs me mightily."[56] There were no apparent Canadian conservationists in the audience. The vote was 6 to 2 in favour of the ordinance.

Application to raise the dam was made by Seattle to the Federal Power Commission on December 17, 1970. The filing of the application closed the issue from Seattle's perspective for the time being.[57] The City would proceed under the assumption that it did have valid rights to the valley and would be allowed to raise the dam.

Searching for Alternatives

The opponents of the dam thus faced strong resistance from

the City of Seattle. The problem for the opponents became one of finding the means for challenging the dam. While having many politicians on their side, they did not have an arena to bring their conflict to. The period following Seattle's answer was a period of searching. Various spokesmen for the movement suggested ways which might lead to prevention of the damming.

One proposal was to create an international part in the area. Parks were needed in the B.C.-Washington region and this part would be a valuable addition to the parks now along the border. This, it was hoped, would offer a "sop or sweetener" to Seattle residents.[58] Another suggestion was to delay the dam until delays and consequent expenses added up to rule out the dam. This position was suggested by Liberal MLA David Brousson who said "whatever happens it will be fought every step of the way."[59] Seattle would not be able to tie up its capital on a questionable project indefinitely.

A variation of this theme was introduced in January of 1971 by a call by Ken Farquharson for shared benefits. The idea was to make the High Ross Dam less attractive to Seattle by raising the costs. The precedent for shared benefits had been set by the Columbia River Treaty.[60]

The subject of shared benefits was brought down a notch by a proposal for shared costs in dumpinggthe project. Ray Williston, a Socred cabinet minister, indicated that it would take $8 million to compensate Seattle for its investment in preparation for raising

the dam. British Columbia would become liable for this sum if the Province stopped the project.[61]

Another alternative tried was to get the Canadian federal government to intervene. But the government continued to plead impotence. Meanwhile, the Canadian government was itself seeking a meeting with U.S. officials in hopes of setting up talks on the Skagit. Talks began on December 17, 1970 with the U.S. State Department, but they centered on environmental aspects and not the disposition of the dam.[62]

The Washington State Ecological Commission

Searching for alternative ways of stopping the damming was interrupted by a live option for protest created by the Washington Department of Ecology. On November 23, 1970, the Director of the Department of Ecology, John Biggs, said he would hold hearings on the High Ross Dam.[63] On January 12, 1971, Mr. Biggs announced that he had suspended City Light's state permits to raise Ross Dam pending hearings by the Department's advisory ecological commission. The Department had authority to issue or deny state permits for appropriation of water and creation or reservoirs. Biggs indicated that he would likely accept the commission's findings.[64] The Department could be overruled, however. There were precedents for the overrule of state agencies by court action and the Federal Power Commission.[65] The Washington State Ecological Commission Chairman announced that the hearings would

be open to the public and would accept testimony from anyone with a direct interest in the issue, including Canadian opponents to the dam.[66] Mr. Biggs was aware of the Canadian opposition and its existence encouraged the holding of hearings.[67] Biggs had asked the Commission to "test all levels of public opinion on the project and then to convey [the] findings to John Biggs..." The Commission's powers were to "advise and counsel" and had "no powers of action whatsoever."[68]

Public hearings were held March 16, 1971 in Seattle and March 17 in Mount Vernon, Washington.[69] Environmentalists were present. Many issues were raised. Seattle City Light argued its case for building the dam and presented several witnesses to support its opinion. Several business associations sent representatives in support of the dam.

A coalition of twelve Washington groups in opposition to the dam pooled their time to allow eight expert witnesses to speak on their behalf. This testimony represented the position of sixteen environmental groups. MLAs David Brousson (Lib) and William Hartley (NDP) from British Columbia also spoke in opposition.[70] Members of a large Canadian coalition, the Ross Committee, presented testimony.

The results of these hearings was a delay. The testimony convinced the Commission to hold off decision on recommendations and possibly hold hearings again in the fall of 1971. Commission Chairman Arpad Masley said that if the Commission did approve the

dam, it might consider "riders" such as a specification of maximum drawdown range. The decision was tabled.[71]

The hearings were attacked by John Nelson, Superintendent of City Light, who said they had "zero significance legally," and were "just a soap box on which people stood to make speeches." The Federal Power Commission would have the final say.[72]

The Ecological Commission hearings seemed to be a small victory for the opponents to the dam. They seemed to have made a strong case at a sympathetic forum, but the Commission had not given its answer and the Department of Ecology perhaps could not enforce actions to stop the dam anyway. The conflict would have to be carried to the next arena.

The International Joint Commission

The Skagit opposition socred another victory with the announcement of public hearings to be held on the issue by the International Joint Commission. Canadian Federal cabinet minister Jack Davis had been pressing the American government about reopening hearings on the dam.[73] The governments of Canada and the United States jointly referred the issue to the IJC on April 7, 1971. Hearings would be held June 6 in Bellingham, Washington, and on June 7 in Vancouver, B.C. The price paid by Canada for these hearings was to reopen another issue of concern to the United States--the issue of the American residents in Pt. Roberts, Washington.[74]

The issue of the validity of the 1967 compensation agreement

under the 1909 Boundary Waters Treaty was a prominent pre-hearings issue. MLA David Brousson opened the attack. He cited parts of the Treaty which stated that the IJC must approve compensation agreements such as the 1967 agreement. Brousson said that according to the Treaty the Commission "shall require that the injured party... get proper indemnity.... This is mandatory. There is no room for discretion on the part of the IJC."[75] Brousson's contention was backed by leading Canadian international law expert, Charles Bourne.[76] Practically, however, the only way to argue the case was to appeal to the IJC which alone had the power to rule on the issue of whether the IJC could delegate its power to approve the agreement.

It became clearer in the months preceding the IJC hearings that the terms of reference of the Commission's investigation might be restrictive. It was known that the hearings would focus on the environment. But, when the announcement in the papers came out, it was clear that the Commission was

> to investigate environmental consequences in Canada... and, to make such recommendations, not inconsistent with the Commission's Order of Approval dated January 27, 1942 and the related Agreement dated January 10, 1967...[77]

The opponents of the dam immediately attacked these restrictions. The principal objections were that the hearings were not allowed to consider whether the dam should be permitted but only how its negative effects might be mitigated. Also, the hearings were limited to consideration of environmental issues north of the

border in Canada. The opponents to the dam also wanted the Commission to consider the legality of the 1967 agreement between British Columbia and Seattle.

These issues were answered during the hearings, however, when the Commission reached "cooly" to suggestions it declare the 1967 agreement illegal.[78] The IJC would not consider the issue. The United States government attorney, Douglas F. Burns, read a statement on behalf of his government saying that the United States would not accept any agreement killing the dam.[79] The IJC was obviously not allowed to discuss this because its terms of reference forbad it to. Finally, the issue concerning whether the Commission should consider environmental effects on both sides of the border at the hearings was settled when the Chairman of the Canadian Section of the IJC, Louis Robichaud, doused the debate by indicating that the terms of reference were clear and that he would not comment further.[80] It was clear that the IJC was also barred from considering this issue.

The hearings were held on June 4, 5 and 6, with an extra day added in Vancouver to hear testimony, and the IJC retired to consider the matter. The pro-dam and anti-dam parties thus awaited the reports of the International Joint Commission as well as the Washington State Ecological Commission.

The Results Come

The IJC report was delayed until December.[81] Meanwhile, the

Washington State Department of Ecology issued a position paper strongly condemning the damming. The plan would have to be revised. The Department paper said that present plans would have "a substantial detrimental environmental impact." It went on to condemn Seattle City Light for its lack of concern for the environment and indicated that it would insist that the company come up with an environmental programme.[82]

The Department of Ecology's position paper came just days before the release of the IJC report. The IJC report was unexpectedly highly critical of the flooding plan. It was barred from recommending against the flooding by its terms of reference, but some United States' officials claimed that the Commission went beyond those terms anyway. But the report was approved unanimously by the Commission. It said that the damming would mean a one million dollar loss through the loss of other uses of the valley. It said little could be done to mitigate these losses. Further study would be required, and the Commission recommended that a proper study would take three years, not the six months the Commission had been given. The Commission recommended that the Federal Power Commission look at other sources of power for Seattle.[83]

The damming opponents were jubilant. The IJC had gone as far or further than their terms of reference had allowed them in condemning the damming. MLA David Brousson said he did not know how Seattle could now proceed with the opposition of the

State of Washington, the International Joint Commission, and the Canadian government.[84] On the other side, John Nelson, the City Light Superintendant, said he was surprised at some of the figures but would not comment further.

The Sides Respond

The opponents of the dam immediately applied pressure to the Seattle city government to reverse its stand and give up the dam plan.[85] The City Council voted 5 to 4 to reconsider the plan in February of 1972.[86] The hearings would be on March 31 and Canadians could participate.[87] The Council's reconsideration was important because of the opposition of the IJC, the State of Washington, and the Canadian government, but also because an election had replaced two of the original pro-dam councilmen. Now it was believed that a vote would kill the dam. The hearings were held as planned, but on April 10th the Council voted 6 to 2 to continue with the plan. The newly elected councilmen were the lone dissenters. Even the long term opponents of the dam on the Council voted to support the plan.[88] They decided to wait for the Federal Power Commission hearings to consider a final decision.[89]

It now seemed that the real showdown would be in the Federal Power Commission hearings. The opposition was optimistic about the hearings.[90]

The British Columbia Elections

The whole nature of the controversy changed with the August

1972 provincial elections in British Columbia. The Social Credit Party was badly beaten. The former official opposition, the New Democratic Party, now formed the new government. Opposition Leader Dave Barrett became the new Premier. The NDP was intent on a programme of massive reform and reversal of Social Credit policies. The Skagit was one such policy. The NDP was against the damming.

The NDP immediately announced government opposition to the flooding, saying that the flooding plan was "totally unacceptable to the province of B.C."[91] The federal government in Ottawa responded quickly by saying they would

> do everything possible to support [the Province] .... The people of British Columbia own that valley and if the people of B.C., through their government, say it isn't going to be flooded then it isn't going to be flooded.[92]

Seattle City Light responded by saying that "without being informed of this matter officially, all we can say is that we still have a valid agreement with British Columbia." Seattle indicated a willingness to pursue the matter to court[93] perhaps to get compensation for loss of its investment.[94] Meanwhile, a majority of the Seattle City Councilmen (five) indicated opposition to the dam, but the council appeared ready to drop the dam only if the Province made a move to kill it.[95] The issue was clearly now one of who was to kill the dam and become liable for compensation.

The Compensation Debate

The period which followed became one of a sometimes silent, sometimes noisy conflict between the Canadian government and the British Columbia government. Neither government wanted to become liable for compensation payments to Seattle. Neither would make the move to kill the dam. Each tried to shift the blame for inaction to the other. The two governments tried to frame a joint plan in a meeting on December 8, 1972.[96] But after the meeting the two governments went back to their maneuvering for position. The Liberal MLAs, party allies of the federal Liberal government, continued to attack the NDP in the B.C. Legislature. Opposition parties, especially the Conservatives, continued to harass the Liberal government in Ottawa.

Finally, in early June of 1973 the long awaited agreement between British Columbia and Ottawa on the dam was concluded. The details were kept secret. The strategy would be revealed "step by step" as it was put into effect. The two governments were sure that the strategy would save the valley.[97] But Liberal MLAs in Victoria continued to challenge the NDP government to take action.[98] This criticism subsided, however, after Attorney General Alex MacDonald of the NDP government vowed to resign if the valley were flooded.[99]

The Federal Power Commission

The whole issue now awaited the delayed Federal Power Com-

mission hearings. With these hearings would come a decision--a decision either ending the fight with an FPC decision to prohibit the damming or decision by one of the two Canadian governments to breach the agreements and incur liability for damages compensation for stopping the dam. The hearings would hear testimony from an already defeated Seattle city government, the Washington State Department of Ecology, the International Joint Commission, the Canadian Federal Parliament, and indirectly from the Province of British Columbia. It would hear from environmentalists and other citizens wishing to make appearance at the hearings in Washington, D.C.

Meanwhile, the Canadian House of Commons passed a unanimous resolution in opposition to the damming on November 2, 1973.[100] This added tremendous weight on the side of the opponents to the dam. The Canadian Liberal government, however, was still reluctant to deliver the message.[101]

As of this writing, public hearings have been scheduled by the Federal Power Commission in Bellingham, Washington, for April 23, 1974. Public hearings are also planned for Seattle. In addition, the FPC will hold evidentiary hearings in Washington, D.C. Dam opponents are planning to make a large appearance. Canadian opponents have received some financial support in their effort from the Canadian Federal government.[102] The Federal Power Commission has hired expert witnesses from the ranks of the Seattle opponents to the dam.[103] Canadian opponents are now apprehensive, however, about the hearings with no clear idea

how to proceed if the FPC approves the dam. They see no alternatives available for blocking the dam.[104]

Speculation about the future at this point is quite hazardous. It is possible that the FPC will approve the dam. It is likely that in this case the opposition will continue in some form. There seems to be no clear way to bring about an agreement between a Seattle City Council which seems willing to negotiate and the Canadian governments. The tragic scenario of the future still may include the raising of the dam and an unprecedented international incident whether or not environmental and recreational damage results.

Chapter II reviewed the history of Skagit River development and the High Ross Dam controversy. This history identifies three authorities holding hearings which will become the subject of this study. These are the hearings of the Seattle City Council and its Public Utilities Committee, the Washington State Ecological Commission, and the International Joint Commission. In Chapter III we will describe these authorities more clearly.

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[10]Ibid., pp. 62-63.

[11]"What's the Hurry? (Skagit River Project)," Town Crier, May 11, 1918, p. 4.

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[30]Banker, op. cit., pp. 23-24.

[31]Engineering News, September 20, 1945, loc. cit.

[32]"Ross Dam third step nears completion," Engineering News Record, April 1, 1948, pp. 487-89.

[33]Slaney, op. cit., p. 4.

[34]Engineering News-Record, April 1, 1948, loc. cit.

[35]"Ross Dam third step nears completion," Engineer News-Record, April 1, 1948.

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[39]An Act to authorize the flooding of certain Lands in the Skagit River Valley (The Skagit Valley Lands Act), Chapter 81, British Columbia Statutes (1947), p. 445.

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The Vancouver Sun, October 7, 1970, p. 3.
The Vancouver Sun, September 26, 1970, p. 19.

[42]The Vancouver Sun, October 7, 1970.

[43]The Vancouver Sun, October 10, 1970, p. 1.

[44]The Vancouver Sun, November 11, 1970, p. 14.

[45]The Vancouver Sun, November 25, 1970, p. 37.

[46]The Vancouver Sun, October 26, 1970, p. 35.

[47]The Vancouver Sun, November 26, 1970.

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[71]The Vancouver Sun, March 18, 1971.

[72]The Province, March 19, 1971.

[73]The Vancouver Sun, January 15, 1971.

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[87]The Province, March 3, 1972.

[88]Seattle Times, April 2, 1972.
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[89]The Vancouver Sun, April 8, 1972.

[90]The Province, June 1, 1972.

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Seattle Post-Intelligencer, November 19, 1972.

[93]Ibid.

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[97]The Province, June 9, 1973.

[98]The Vancouver Sun, September 19, 1973.
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[99]The Province, September 22, 1973.

[100]The Province, November 2, 1973.
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[102]The Province, April 4, 1974, p. 11.

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CHAPTER III

SURVEY OF RELEVANT INSTITUTIONS

In this chapter, we want to look at some of the institutional arrangements which have been involved in the High Ross Dam Controversy. The description of the controversy, found in Chapter II, gives us an indication of which of these institutions have had an effect on the final outcome of the controversy. We are interested in the public hearings associated with these institutions.

The description of the controversy indicates five sets of public hearings which have so far sought to sound public feeling on the controversy. This study looks at four of these hearings: (1) the 1970 Public Utilities Committee hearings (March 20 through May 25, 1970), (2) the 1971 Washington State Ecological Commission hearings (March 16-17, 1971), (3) the International Joint Commission hearings (June 4-6, 1971), and (4) the Seattle City Council hearing (March 31, 1972). The hearings of the Federal Power Commission are not considered in this study.

These hearings have similarities and differences. The most obvious similarity is that they all accepted public input with regard to the same issue--the High Ross Dam Controversy. This is an important point as it means that these hearings were all directed at an issue involving an international river.

The differences are more obvious. The hearings are held under local, regional and international authorities, respectively. The Federal Power Commission hearings bring this to the national level as well. The responsibilities of the respective authorities differ

with interest varying from international water use disputes to ecological protection to municipal power production to general municipal government. The relationships to the decision-makers also vary from having merely advisory powers to power to kill the dam. In the rest of this chapter the agencies in question will be looked at in terms of what authority they had in the dispute and in examination of their standing rules on public hearings.

THE INTERNATIONAL JOINT COMMISSION

The International Joint Commission was established by the Boundary Waters Treaty of 1909 between Canada and the United States. It was charged with the role of settling all disputes regarding "rights, obligations, or interests" of either nation or its inhabitants "along their common frontier."[1] The Treaty set up the Commission as a permanent arrangement with authority to make binding agreements between the two nations.

Authority

The IJC has authority derived directly from the national governments of the respective nations. One of the principal purposes of the agreement was to establish a

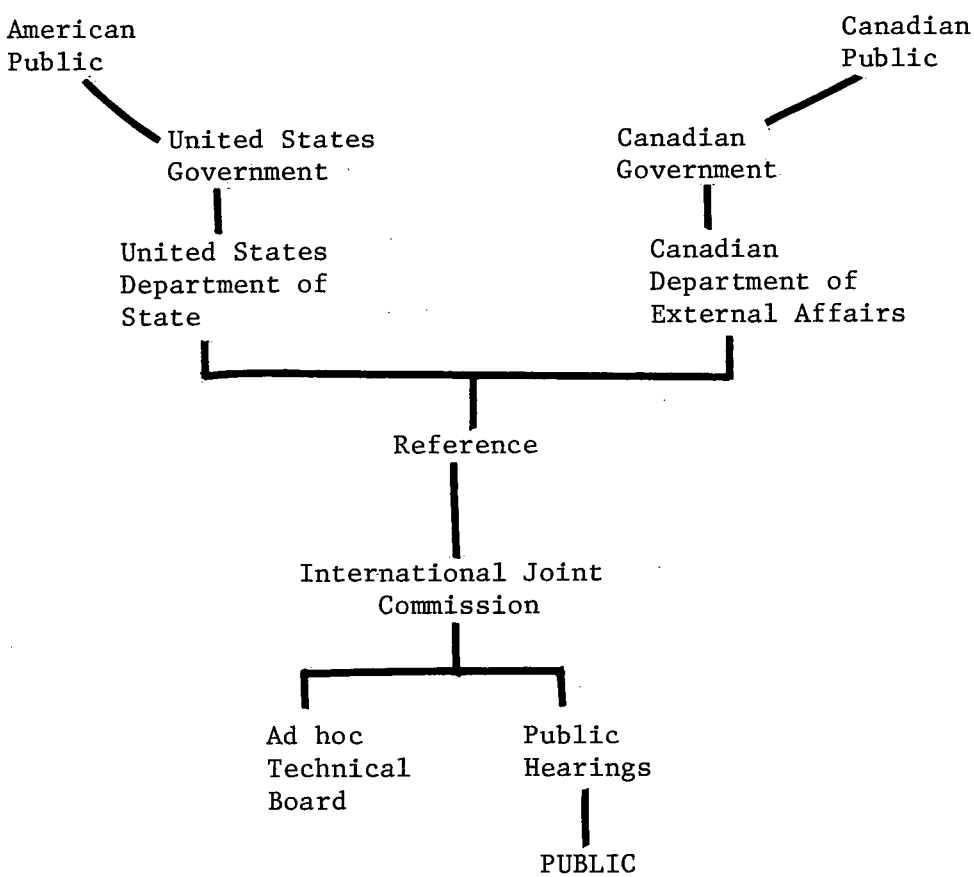
> permanent institution... free of local or sectional prejudice... able to act more expeditiously on matters arising along the boundary than was--or is--possible through usual procedures.[2]

Thus the IJC was meant as an institution intended as an instrument of the national governments. It was meant as an "alternative

to resort to the diplomatic channel on a case-by-case basis..."[3] It was meant as a go-between between the national governments for settlement of common disputes which had become too numerous for normal diplomatic channels. It was a standing negotiating committee with delegated powers of sealing decisions between the two nations.

FIGURE 3.1

Organizational Chart for International Joint Commission



The IJC was also intended to deal with controversial issues in a prompt and equitable manner. Boundary waters disputes, as we have seen, have a highly volatile content and must be quickly defused. The Commission, it was hoped, would be capable of rapid decision. It should be stated that the Commission has been quite successful in this context,[4] the High Ross Dam Controversy notwithstanding. Certainly a policy of negotiating agreements and even treaties through diplomatic channels on a case-by-case basis would not be efficient, prompt, or equitable. What was needed was a prestigious vehicle for legitimizing agreements. The IJC would be an institution with the authority to seal bargains.

The above comments would imply a limitation on the Commission's autonomy. The Commission has not been described as an independent legislature with wide powers but rather as an instrument of the national governments. Clearly the Commission is not an autonomous body with no accountability to its respective countries. The Commission is a creature of the two governments. The Commissioners are expected to represent the interests of their respective nations. Hence, they will often receive instructions from their respective governments. Indeed, the High Ross Dam hearings of 1971, as in most issues, were occasioned by the joint reference of the issue to the Commission by the two governments.

Applications and References

The International Joint Commission acts in two types of circum-

stances: (1) when applications are made for decisions within the Commission's jurisdiction, by private or governmental entities, with regard to boundary waters, or (2) when the Commission is granted jurisdiction in issues specifically referred to it by the respective national governments. Provision has also been made to use the Commission as an arbitration tribunal, but this provision has rarely been used.[5]

Applications. To make application, a national government submits an application complete with as much information as necessary and with stipulations specifying exactly what is requested. A private person must have his government transmit his application.[6] This was the procedure followed in obtaining the 1942 Order of Approval for raising Ross Dam. The applicant is required to "furnish all necessary information and data..."[7] Hearings are held and the action proceeds according to established procedures.[8]

Reference. The increasingly more common form of action by the Commission occurs when the Commission proceeds with a reference. The IJC hearings that we are interested in (1971) were in support of this type of deliberation. A reference to the Commission is a process whereby the Commission receives a request from either of the governments to consider a certain matter. In these cases, consultation between the national governments insures that reference will be well received by the respective governments. The Commission in these cases is authorized:

> to examine and report upon the facts and circumstances of the particular questions and matters referred, together with such conclusions and recommendations as may be appropriate, subject, however, to any restrictions and exceptions which may be imposed with respect thereto by the terms of reference.[9]

The decisions in these cases do not represent decisions on the disposition of the issue, but rather recommendations for action by the governments. The normal procedure is to appoint a board to study the issue and, after publishing its report, the Commission holds public hearings. The Commission then reports to the two governments.

Meetings

Behind the doors of the Commission's meetings for consideration of issues, discussion has been described as "open, frank, and spirited as well as deliberate... by a permanent body interested in principles rather than short-term expediency."[10] We would expect, then, a clear bargaining process where the long term national interests of the parties are considered and, by a process of bargaining, an agreement is reached by compromise and debate based on fact and circumstance. Common ground is built for consensual agreement and fifty-fifty splits along national lines are avoided.

Appeals

Once the Commission has approved an application, it may not change its mind in the face of new evidence in contradiction to its

decision. The Commission acts upon an application or a reference. Once an Order of Approval is issued for a certain application, the Commission is restricted against change or reversal of its decision.[11] It may have limited powers to amend its decision. However, the authority for reconsideration must come from the national governments. This was to protect the investment of those making application. The Commission's role in reviewing its own decisions was limited to investigations and advice to governments once the matter was referred.

In summary, then, the International Joint Commission in issues such as the High Ross Dam Controversy has authority to investigate and make recommendations only when the matter has been referred to it by the governments. It may consider only what is referred to it in the terms of its reference. It is expected to develop a recommended solution upon which the governments can act. Presumably the Commissioners will be able to represent their respective nation's interests and negotiate a recommendation with an interest in settling the dispute to the maximum common interests of the respective nations. It is likely that the Commissioners will seek advice from their respective governments where the issue is of great national importance. The IJC is thus a permanent vehicle for diplomatic contact on certain issues.

Organization

The Commission consists of six commissioners--three appointed

by the United States and three by Canada. There are two "sections," in other words, each representing a nation. Each section has a chairman who is the presiding officer for meetings of the Commission when it meets in his country. The Commission itself is assited by ad hoc technical boards which do research for them. The organization of the Commission itself is quite simple. It is small and in executive sessions it may operate informally to facilitate free exchange of ideas and feelings.[12]

Hearings

Since the subject of this thesis is public hearings, including certain hearings of the International Joint Commission, a discussion of the standing rules which apply to hearings of the Commission would be appropriate.

Before a final public hearing is scheduled, certain procedures are followed. First, as in the High Ross Dam case, the governments make a joint request for consideration of an issue. In this case the terms of the reference are closely specified as to what is to be considered.

Technical Boards

When the Commission receives the reference, it then appoints an "international technical board"--a panel of experts from both nations--to make a preliminary investigation.[13] This procedure is necessary in cases involving complex and technical issues which

may require time to investigate and analyze. These boards may be appointed by the Commission or by the governments themselves.[14] The boards are under the close supervision of the Commission.[15] When the board finishes its investigation, it is normally required to file a written report on its findings with the Commission which the Commission then publishes.[16]

The Commission then proceeds to schedule

> full dress public hearings, normally one in each country in the areas affected, at which any person, even the humblest, is given an opportunity to comment on the board's finding and recommendations.[17]

We can get an idea of what is meant by "full dress public hearings" from the "Rules of Procedure" of the Commission. The time of the hearings are set by the Chairmen of the Commission. A majority of the Commissioners is required to be present at the hearings.[18]

The Commission may require further evidence to be given either viva voce or by disposition taken before an examiner. Subpoenas may be issued or obtained by the Commission to compel attendance of witnesses or production of documents.[19]

The Commission may authorize persons to take dispositions from witnesses for inclusion in the record. The length of time (space) allotted to this testimony is determined by the Commission through its secretary.

Briefs, factums, pleadings, and documents may be submitted and the procedures for submitting these materials are specified and simple.[21]

The Commission may decide how many persons are to be heard. It may also decide "what interests may be united for purposes of the hearing." The Commission may determine the duration of the hearings. The hearing is to commence "from day to day" as far as it "may be practicable" in "the judgment of the Commission."[22] Since both nations are equally represented and the Commission attempts to operate on a consensual basis, the duration of the hearings will be based on agreements between the two sections of the Commission that the hearings have not exhausted their usefulness. In practice, time limits have been set on witnesses and the majority of witnesses wishing to present testimony have had a chance. In individual cases such procedures may vary, of course, since rules are at the discretion of the Commission.

A report of the findings of the Commission is then made available to the two governments.[23] Should no consensus be reached by the Commission, the separate sections may make separate reports to their respective governments.[24] This latter procedure has been rare--a tribute to the workability of the Commission's process.

Once the Commission's work has been completed, it has no further contact with the issue unless further formal instructions are forthcoming from the respective national governments. The issue is left to the national governments to resolve.

THE WASHINGTON STATE DEPARTMENT OF ECOLOGY

Authority

The Washington State Department of Ecology is an administrative

department of State government. It was established in 1970 "to protect the right of people to live in a healthful and pleasant environment and to promote the wisest use of the natural resources..." This duty includes statutory responsibility for "water resource management, water pollution control activities, air quality control, and solid waste management."[25] These functions were established activities transferred to the new Department. A new duty also given to the Department was "a legislative mandate to be the 'watchdogs' over the environmental resources of the state.[26]

New responsibilities were immediately added by the State Legislature which rapidly expanded the Department's powers and scope of authority. For our purposes, a new major power, granted by the "Environmental Policy Act," was for the Department to be a "vehicle for public scrutiny of major projects to insure that environmental concerns are taken into consideration."[27] Effectively, this meant a requirement for Departmental approval for any major project which potentially could have an effect on the state's environment.

The new Department received some challenges in its development as it sought to define its role and powers. These challenges have been met.

> The position of the Department was firmly established as the primary state agency with the total environmental programs and responsibilities. In this statutory delegation of authority, Department personnel have served as arbitrator, administrator, consultant and enforcer.[28]

Clearly the Department had authority to rule with the support of the legislature and executive in Washington State.

The authority of the Department, however, is subject to some limitation vis-a-vis the U.S. Federal government. A Supreme Court decision in the case of Pelton Dam in the state of Oregon indicated that an applicant did not need to secure a water right under state law as a condition precedent to receiving a licence from the Federal Power Commission. This effectively means that the Federal law takes precedence in water rights issues. The Federal Power Commission could over-rule the State of Washington by court action.[29] The power of the Department could be limited, therefore, if it were to challenge the authority of the Federal government.

It should be said that the Department's role is not exclusively environmental. The State of Washington has experienced severe economic hardships in recent years. Action brought against some industrial concerns for environmental reasons were cited as prime reasons for the closure of industry and increased unemployment. On the other hand, real abuses of the environment have led to criticism of lax enforcement of environmental laws.

> These diverse viewpoints re-emphasized the Department's position that environmental concerns must be compatible with economic needs. As concerns increase over the best and wisest use of resources, the Department has steadily moved to a role of arbitrator in the traditional question between environment versus economics.[30]

Organization

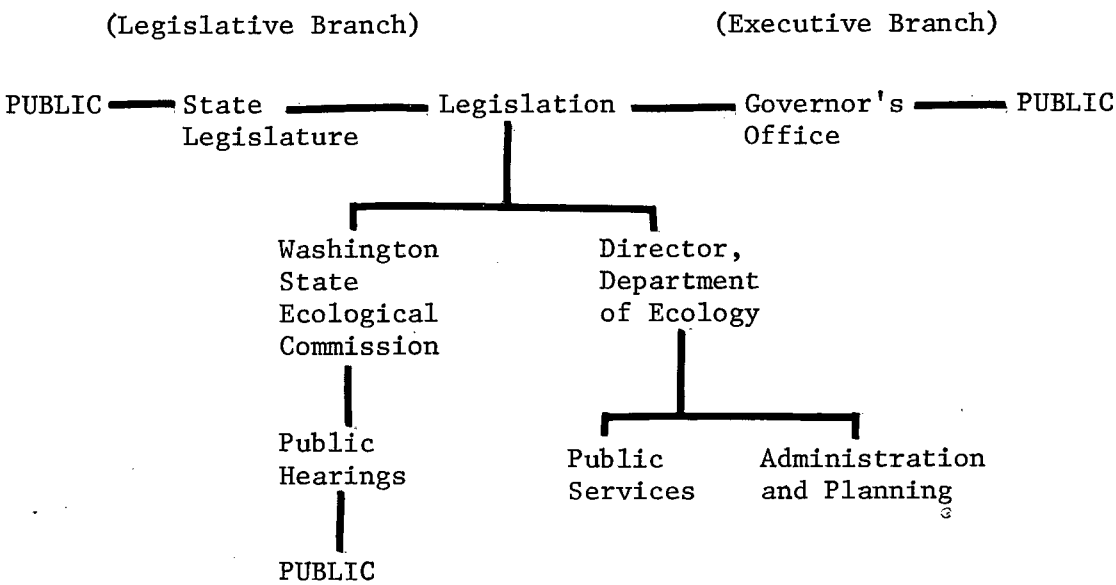
The Department's organization was the result of a special

in-depth management study. The model organizational design was proposed by the Stanford Research Institute.

The Department is headed by a Director who is appointed by the state Governor. Under the Director are the two operating branches--the Public Services branch and the Administrative and Planning branch. Public Services manages the day-to-day operations and Administration and Planning is concerned with supportive services and in-depth planning and programme development.[31]

FIGURE 3.2

Organizational Chart for State of Washington, Department of Ecology



Public Involvement

The Department of Ecology has been designed for public participation since its inception. The Department is moving toward decentralization to put its offices closer to the population in the various regions of the state.

Another design feature aimed at closer liaison with the public is the Washington State Ecological Commission. The Commission is a seven-member advisory body which holds periodic meetings in various locations throughout the state "in order to get the greatest participation on environmental matters from the public."[32] The Commission also holds ad hoc public hearings on issues such as the High Ross Dam case.

The Commission members are appointed by the governor and drawn according to a specific set of criteria established by statute. The Commission must have one member representing organized labour, one member representing the business community, one member representing agriculture, and four members representing the public at large.[33] Commissioners are also chosen with an objective of balancing representation from different regions of the state. This arrangement was intended to stimulate dialogue between various groups of the society.

Public Hearings

The Washington State Ecological Commission may hold hearings on any matter which the Commission believes is significant and which falls under the statutory authority of the Department of

Ecology.[34] The Department is required by statute to refer any new policy proposals to the Commission for its review and comment.[35] In the case of the High Ross Dam, the Director of the Department of Ecology asked the Commission to obtain public input on what position the Department should adopt with reference to the dam. The Department's authority in the matter derived from its powers to grant or deny permits for the creation of a reservoir and the appropriation of water for a certain use. Also, the Director wanted advice on what should be the Department's position in the Federal Power Commission Hearings.[36] Ecological Commission hearings can result from two sources then: from an initiative of the Ecological Commission itself or from the request of the Director of the Department of Ecology.

Hearings of the Ecological Commission may be of two types. One type might be called a "meeting," since it is more informal. The Ecological Commission meets periodically throughout the year in various locations around the state. All of its meetings are required by statute to be open to the public. The members discuss issues among themselves in an informal and candid manner.[37] They may hear witnesses from the audience who make statements and occasionally question members of the Department of Ecology staff. Witnesses may be supported by the Commission which may ask the Department staff for additional information or research. These meetings are well attended by staff from the Department, including its Director, John Biggs.[38]

A second type of hearing held on occasion by the Commission is

a full public hearing. These hearings would be held when an issue has created wide public concern. The subject of these hearings would be closely defined and witnesses limited to statements. Only members of the Commission or the Director of Ecology are allowed to question witnesses. Rules required to maintain order are established by the Commission. The Commission hears any witnesses desiring to make testimony. Some time after the hearings, the Commission meets and discusses the issue and the hearings in an open meeting. Votes on the issue are public.[39]

THE PUBLIC UTILITIES COMMITTEE[40]

The Public Utilities Committee is a standing committee under the authority of the Seattle City Council. It is charged with the responsibility of reviewing all legislation concerning City utilities policy proposed to the City Council and making recommendations. This would involve researching issues and holding public hearings where appropriate. The Committee is composed of City councilmen and ex-officio staff.

Authority

The authority of the Public Utilities Committee includes authority to review all legislation concerning the City utilities policies. This includes any matters concerning the City-owned utility, Seattle City Light. While City Light is operated semi-

autonomously, it must obtain approval of the City Council for any major policy changes. The Mayor of Seattle also has certain powers over City Light, but his authority may be subject to Council review. In any case where City Council decision may be contemplated, the Public Utilities Committee may be called upon to make an investigation. In this investigation, the Committee may request information from City Light which the company is obliged to report. It should be noted that in all cases the Public Utilities Committee derives from and is subject to Council authority.

Organization

The Public Utilities Committee is composed of four of the nine councilmen of the Seattle City Council. The Committee has a Chairman who presides at meetings and hearings of the Committee. During the hearings investigated in this study, the Committee utilized the services of two hired consultants who sat ex-officio on the Committee to ask questions and to make a report at the conclusion of the hearings.

Hearings

The hearings investigated in this study were held to make a general review of the policies of Seattle City Light. The hearings were general in nature and rules were determined by the hearings' officers.

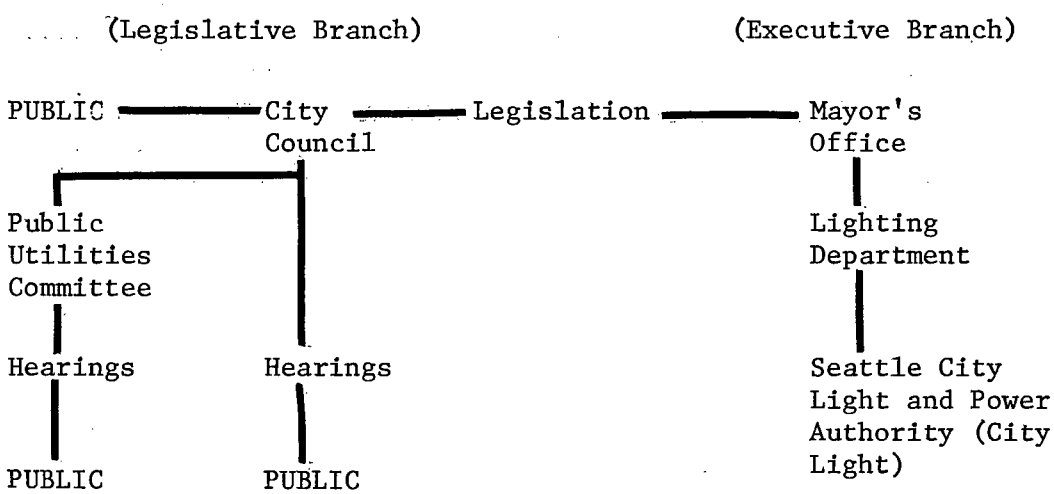
THE SEATTLE CITY COUNCIL

Authority

The Seattle City Council is the legislative authority of the City of Seattle. The City Council has the responsibility to consider and make decisions on all matters which come under the authority of the City. The authority to administrate the policies of the Council is given to the Mayor of the City, who is the City's chief executive. With reference to the High Ross Dam controversy, the City Council operates as owner of City Light with authority to pass legislation determining the general directions of company policy. This legislation is implemented by the City Mayor through the City Lighting Department.

FIGURE 3.3

Organizational Chart for the City of Seattle



There have been questions raised as to the cooperation of City Light with this authority. It has been said that City Light has had a mind of its own, stubbornly pursuing policies which it wanted, with little or no supervision from the City. It has been said that the company's officers come mostly from the company having worked their way up through the ranks. This inbreeding has caused a fossilization of company policies with little spirit of innovation.[41] This has led to considerable criticism, especially in terms of the company's lack of a viable environmental programme. Recent changes in this situation have come about, including the selection of a Superintendent from outside the company. Gordon Vickery, the new Superintendent, was formerly the head of the Seattle Fire Department. The company has begun to develop a small embryo of an environmental programme.[42]

The independence of City Light is perhaps partly the legacy of a City Council and Mayor which have not exercised their authority to the full. However, it is also the legacy of earlier struggles between the Mayor, the Council, and City Light. In the days of the popular and influential Superintendent James D. Ross, the political influence of the company may well have exceeded that of the City government. The illustrious Ross could appeal to the electorate and bring down elected officials at the polls.[43] The tide may be turning, however, as the City Council tries to reassert its primordial rights of authority. But the struggle will be

touchy, with City Light employees representing a potent electoral force of over 2,000[44] and a capacity to frustrate City policy by strikes against City appointed Superintendents.[45]

It has been said that one of the blocks to settlement of the current controvery has been the stubborn refusal of City Light to give up the dam despite the City Council's displeasure. Some opponents hold City Light accountable for blocking negotiations with the Canadians.[46] City Light officials claim they will not negotiate because it would jeopardize their legal standing and their position before the FPC. In any event, it does not seem that the Council will choose to negotiate until it has established some legal advantage, which may come with the possible FPC approval of the dam. In this case, Canadians will have little choice but to accept the dam or to pay some compensation to break the agreements. Under these circumstances, it is likely that the Council would assert its authority and demand that City Light hold its plans in abeyance pending negotiations with the Canadians. Of course, should it choose not to negotiate, it could build the dam. This does not seem likely.

Public Involvement

The Seattle City Council is the legislative arm of the City of Seattle. As such it represents the citizens of the City of Seattle. It is not responsible to persons outside the City, even though some of its decisions may affect citizens elsewhere. But, in the case of the High Ross Dam, the Council had the authority to hear testimony

from anyone. But in hearing this testimony, the Council was not bound to act upon what it heard, and could adopt any policy which seemed to be in the public interest of the City of Seattle.[47]

Hearings procedure is set by the Council, which has a President who is the presiding officer of the Seattle City Council. Procedures vary somewhat between hearings.

This chapter has surveyed some of the authorities which have been involved in the High Ross Dam controversy. Each of these authorities have held hearings. The hearings of these authorities will be examined in the rest of this study. Chapter IV will set out the approach that will be followed in researching these hearings. Chapter V will present the results of this study. Chapter VI will present the conclusions which have come from this work.

FOOTNOTES

[1]International Joint Commission, 1965, op. cit.

[2]Matthew E. Welsh, "The Work of the International Joint Commission," Department of State Bulletin, 59:311-314, September 23, 1968. (Matthew Welsh was Chairman of the U.S. Section of the International Joint Commission at the time of writing.)

[3]Griffen, op. cit., p. 57.

[4]Welsh, op. cit.

[5]F. M. Bloomfield and Gerald F. Fitzgerald, Boundary Waters Problems of Canada and the United States (Toronto: The Carswell Company, Ltd., 1958).

[6]International Joint Commission, 1965, op. cit.

[7]Welsh, op. cit.

[8]See International Joint Commission, 1965, op. cit.

[9]"Article IX" of Treaty in International Joint Commission, 1965, op. cit.

[10]Welsh, op. cit.

[11]Bloomfield and Fitzgerald, op. cit., p. 27.

[12]Welsh, op. cit.

[13]Ibid.

[14]Bloomfield and Fitzgerald, op. cit., pp. 50-51.

[15]Ibid.

[16]Welsh, op. cit.

[17]Ibid.

[18]International Joint Commission, 1965, op. cit.

[19]Ibid.

[20]Ibid.

[21]Ibid.

[22]Ibid.

[23]Welsh, op. cit.

[24]"Article IX" of the Treaty in International Joint Commission, 1965, op. cit.

[25]Natural Resources and Recreation Agencies, Annual Report 1971 (Olympia: State of Washington, 1972).

[26]Ibid.

[27]Natural Resources and Recreation Agencies, Annual Report 1972 (Olympia: State of Washington, 1973).

[28]Ibid.

[29]Federal Power Commission vs. Oregon, 349, U.S. Reports 435 (1955).

[30]N.R.R.A. Annual Report 1972, op. cit.

[31]N.R.R.A. Annual Report 1971, op. cit.

[32]Ibid.

[33]Washington, The Department of Ecology, R.C.W. 43.21 A.170.

[34]Arpad Masley, M.D., interview, Bremerton, Washington, 1:30 P.M., April 5, 1974. Dr. Mosley is Chairman of the Washington State Ecological Commission.

[35]Masley, interview.

[36]John Biggs in his introduction to the March 16, 1971 hearing in Washington State Ecological Commission, Hearings (Olympia, 1971). Mr. Biggs is the Director of the Washington State Department of Ecology.

[37]Mrs. Ann Widditsch, interview, Seattle, 3:30 P.M., April 4, 1974. Mrs. Widditsch is a member of the Commission.

[38]Observations, Meeting of the Washington State Ecological Commission, Longview, Washington, April 11, 1974.

[39]Masley, interview.
Widditsch, interview.

[40]Sources for information regarding the Public Utilities Committee are:
George Cooley, interview, Seattle, 3:30 P.M., April 1, 1974.
Public Utilities Committee, Hearing No. 1 through Hearing No. 9, March 20 through May 25, 1970 (Seattle, 1970).

[41]Richard J. Brooks, interview, Seattle, 3:00 P.M., April 2, 1974.
George Cooley, interview.
Patrick Goldsworthy, interview.

[42]Patrick Goldsworthy, interview.

[43]Superintendent J. D. Ross was dismissed from his position by the Mayor of Seattle in 1931. After a recall election defeated the Mayor, Ross was reinstated as Superintendent. See "Campaign Literature on recall of Mayor Edwards," Municipal Reference Library, 307 Municipal Building, Seattle, Washington.

[44]Councilman Timothy Hill, interview, Seattle, 11:30 A.M., April 5, 1974.

[45]Nine hundred City Light employees went on strike in April of 1974 while the author was in Seattle conducting interviews. Strikers were protesting the suspension of two line foremen for alleged violations of company policy with regard to rest breaks. Strikers demanded resignation of Superintendent Gordon Vickery, and, significantly, did not get it. Vickery was a City Council "new blood" appointment.

[46]Ken Farquharson, interview.
David Lemarquand, interview, Vancouver, B.C., 2:30 P.M., April 17, 1974.

[47]Councilman Timothy Hill, interview.

CHAPTER IV

THE RESEARCH DESIGN

In Chapter I the role of communication in game type conflicts was discussed. Communication was found to be an essential prerequisite for participation in a game (see pp. 16-18). The role of communication in decision-making systems was also discussed. This role was determined to be essential (see pp. 18-19). The concept of democracy was then analyzed, and some basic attributes specified. The role of communication was indicated to be essential for this form of decision-making system (see pp. 20-24). Finally, the objectives of this study were defined to include a goal of assessing the role and adequacy of communication from the public in the High Ross Dam Controversy (see pp. 24-27).

Communication is thus the central concern of this inquiry. In this study we are concerned with a mechanism by which the decision-makers receive the message from the public upon which they are asked to act.[1] This study will seek to evaluate how openly the message was taken and what impediments were involved in the process. Until these impediments are isolated and removed where possible, the system will not be operating with maximum fidelity.

In this chapter, a research design for the assessment of a communication process will be developed. In order to do this, this chapter will proceed according to the following steps:

(1) a paradigm communication model will be stated in operational terms,

(2) the elements to be focused upon will be described in greater detail,

(3) the normative criteria to be used in assessing the specific communication under investigation will be specified in operational terms, and

(4) the methodology for gathering data for assessment of the performance of the communication system will be described.

A PARADIGM COMMUNICATION MODEL

The model used in this study is a paradigm model.[2] A paradigm model as defined here is a theoretical construction which contains the elements found in any simple communication system. It does not specifically describe the situations existing in the real world. Rather, in order to make sense of this real world, the paradigm model sets a pattern which may be used as a functional overlay on the real world pattern. In this way the communication system may be mapped. This paradigm model could be applied to any communication system, since it is an organization of the essential functional requisites of a communication system in its simplest form. To clarify what is meant by a paradigm model one can consider language paradigms. A paradigm example is used in demonstrating how to conjugate verbs and decline nouns in language training. Anyone who has taken a second language will recognize this familiar form (in this case in Spanish):

tengo	I have	tenemos	we have
tienes	you have	teneis	you (pl.) have
tiene	he, set, it has	tienen	they have

In this case the Spanish verb tener--to have--was conjugated.

Using this paradigm as an example, a large number of verbs can be conjugated using the same pattern. The same is true of the paradigm model of communication. It represents a pattern which, by supplying the specifics, can organize the real world communication system conceptually. It can be used for looking at more complex systems. It provides the basic rules for mapping out the pattern found in the real world.

The High Ross Dam decision system involves the application of the simple paradigm model to a more complex system. This system is not the same as the formal organizational descriptions would lead us to believe. This system is defined to include the set of all institutions which have some authority to make decisions which would help determine the final disposition of the plan to raise Ross Dam. As such independently operating persons and groups are assumed to be functioning as part of the same decision-making system with respect to the dam. Thus, the International Joint Commission and the Seattle City Council are assumed to be part of the same decision-making system. They both functionally have some power to make decisions with regard to the High Ross Dam Controversy. The same can be said for other institutions such as the U.S. Congress, the Canadian Parliament, the Federal Power Commission, the British Columbia Legislative Assembly, the Washington State Department of Ecology, and others. Collectively they are the decision-makers in the system of decision-making which determines the fate of the

Ross Dam. This is true even though they are not otherwise all directly related organizationally or functionally. But in this particular decision case, they form a unit--a system.

The Paradigm Communication Model

The paradigm model here is simple. It is based on communication theory, especially on the works of Karl Deutsch[3] and David Easton.[4] This model will borrow generously from each.

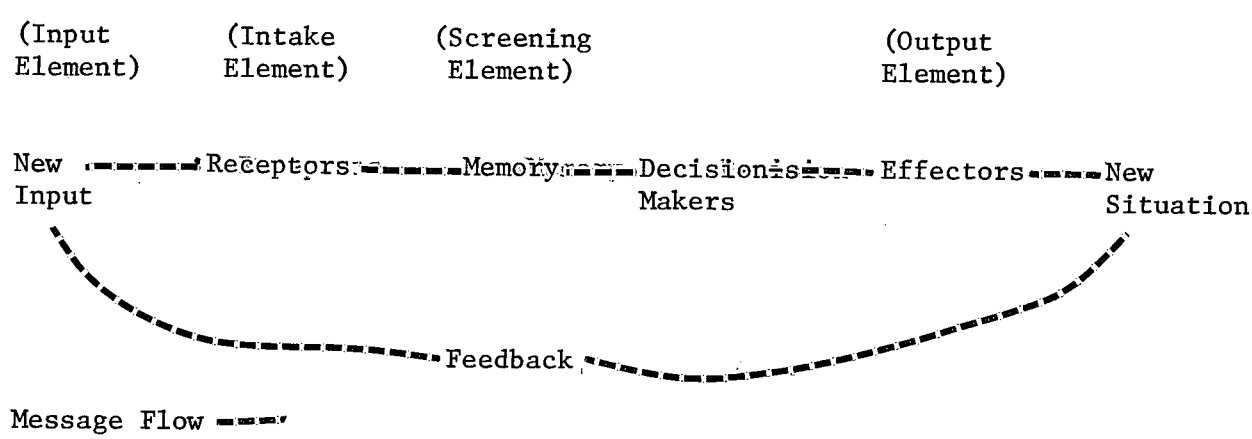
A communication system in its simplest form has several components. In a self-steering system (which should include decision systems), a system will "have receptors and effectors, and some feedback channels to connect them."[5] Thus we are describing a cybernetic process where there is interaction with the environment in order to determine what course to pursue. The system has receptors (intake elements) which "listen to" or "see" the environment. A walking man is such a machine--using his ears for balance and eyes for direction. This man also has effectors, i.e., organs for moving, in this case his legs. The feedback channels are the eyes and ears again, which tell him if his walking is accomplishing his objectives by steering him in the right direction. If not, the feedback is then integrated into his decision information and used to correct his course. The same is true of any self-steering system. It must rely on input to see where to go and input to keep it on course. It must have effectors which move it in the desired directions.

In complex systems a new element is required. This is some sort of memory.[6] The memory is the screening element. It is the use of the information present in the system including operating instructions which permit it to evaluate new information. The new information and the memory interact to produce a new interpretation of the status of the environment of a system. According to Deutsch:

> There must be a stream of 'intake', i.e., of incoming information from the outside world, including the system's own position in it; and there must be a stream of recalled information from memory, to act upon selection and treatment of intake data from the outside world and on feeding back orders to the effectors for action.[7]

FIGURE 4.1

A Paradigm Model of Communication in a Decision System



This is a fairly simple model incorporating the elements which most enable us to locate the communication function in the High Ross Dam decision-making system. Effort will be directed at finding the parts of the system which fit into it. To assess the system, a rough map of the decision system will be constructed showing basic organizational structures. All institutions with the capacity to make final or instrumental decisions having an influence on the final outcome of the issue are collected into the same system. Then the elements of concern are located and examined. These elements will be the components of the communication network of the decision system most essential to our assessment of the system. These elements will be at the interface between the decision system and the citizen--the intake point. The specific intake point of concern here is that of certain public hearings, to be specified later. The mapping of the system will put these hearings into perspective with the overall decision system of which they are a part.

THE FOCUS OF THIS STUDY: THE INTAKE POINT

This study will not be concerned with the entire communication network. Rather, we are concerned with a part of the network where the preferences of citizens are presented to and accepted by the decision-making system. Hence we are not concerned with how citizens obtained preferences or information about the world. Also, we are concerned with only the intake point; hence we are not concerned with either communication or decision-making beyond the

intake point. Thus, communication between different actors of the decision-making system, or between collectors of information and decision-makers is not a central concern of this study. What then are the points of interest in the decision-system map? The elements are interest are: (1) the citizen or input source, (2) the receptor or intake element, and (3) the authority or screening element. These will be defined below.

The Input Source

The input source is essential to this analysis because it is the source of communication regarding preferences received by the intake elements. The making input is defined here as the activity of interested citizens in making their preferences known to the decision-makers.[8] The input source is not strictly part of the decision-system, but rather a force which approaches the system from the outside.[9]

In this definition we are aware of two categories of citizen: those who actually made input and those who did not. Those who did attempt to communicate their preferences are "known" to the system.[10] Those who did not attempt to communicate preferences are "unknown" to the system. This latter group cannot be easily spoken for. That they did not present input does not imply that they did not have "preferences." But, what we are concerned with here is what Easton labels "demands" as opposed to "wants." Demands are wants or preferences which have been articulated with a

goal of gaining attention from the decision-making system.[11] Hence we are concerned with a certain type of preference--an articulated preference. Unarticulated preferences should be and are the concern of other research, but will not be dealt with here because of research constraints.

One final point regarding input. Not all questions need to become politicized. Preferences should be based on a realistic perception of the world in a rational system. Certain facts can be gathered with some objectivity and their implications evaluated according to individual preferences. In every major project there are technical questions which must be resolved. These might be responded to by an administrative arrangement designed for objectivity and legitimacy. Here perhaps some institutional arrangement associated with the decision-making system can facilitate consideration of issues by providng reliable information, such as in the case of the IJC technical boards described in Chapters III and V. This arrangement should include the capacity to analyze technical issues according to a procedure widely accepted as objective and thorough. This would mean that persons who are part of this arrangement must either be chosen to eliminate conflict of interest and political influence, or they must be balanced so that no one perspective--environmental, developmental or other--is dominant in the group. These considerations might reduce the duplication involved in each interest group conducting its own studies.

The Intake Element

The intake element is the reciprocal of the input source. The intake element is the mechanism or channel consisting of institutions and procedures which the process employs to accept input.[12] It exists at the interface of the society of citizens and the decision-making system. Although theoretically this mechanism could be considered quite loosely to include perceptions of "public opinion" or "public interest" for example, we are concerned only with a specific type of communication--the public hearing. Thus we are looking at how the system "hears" the preferences of citizens presented by the input source by means of the public hearing.

At this point, it should be made clear that the intake element not only accepts the message, it also conditions the message.[13] The transmission of the message is conditioned by several factors including the perceptiveness of the receptors and the limitations on the media. If the receptors of a message are unable to adequately perceive what has been communicated, the message may be misinterpreted and distorted. An example of this is the desire of French Canadians to have bilingual administrators in the federal Canadian administration. Significant meanings are lost in translation and many French Canadians are concerned with more precise interpretation of their messages. A second example is the call for local control in decision-making--a call based on the conclusion that remote governments make decisions which do not consider local contexts. The assumption is that more special

perceptions of the local context are necessary in order to make local decisions.

A second conditioning factor on the transmission of messages is that of the adequacy of the receptors. No single media is capable of transmitting any and every message. Concepts such as "one picture is worth a thousand words" or "religion is an experience beyond words," point out two obvious limitations. In decision-making, the receptor of public hearings may not be as democratic in terms of sampling of a wide variety of preferences of the society at large as some other form of receptor--an opinion poll, a referendum, or a letter count. Where possible, a democracy should use the best and most perceptive receptors.

The Screening Element

The criteria for what is accepted as input determines what input will become part of the output--the decision. The screening element is the activity of determining the scope of input to be accepted.[14] Hence it is really a functional part of the intake element, though separated here for analytic purposes. The screening element is controlled by authorities exogenous to the intake element (the public hearing). The screening element or scope of allowable intake for the hearings is set by institutions and decision-makers not necessarily present at the hearings. In this study, as we shall discuss later, the scope of allowable intake will be very important to our assessment.

There are three types of scope we are concerned with. These are: (1) the geographic scope, (2) the jurisdictional scope, and (3) the decision scope. These will be defined below.

The Geographical Scope. Geographical scope refers to the area of concern of the hearings. It refers to the geographical boundaries over which the intake element may accept input. This would include the geographic address of the citizens who are eligible to testify as well as the geographical area to which the study is limited. These areas may be local, regional, national, or international.

The Jurisdictional Scope. Jurisdictional scope refers to the range of subjects over which the process has authority. Examples of subjects include environmental, legal, resource development, economic, social, administrative, political, and so on. Here we are concerned with the range of subject content acceptable for intake.

The Decision Scope. Decision scope refers to the scope of alternative decisions upon which the hearings are allowed to accept testimony. It is possible that a hearing may be designed not for aiding decision-making, but rather as socially therapeutic activities or mere formalities. On the other hand, they may be seen as having some direct effect on a decision. They may be limited to influencing policy in the way of making minor changes to soften the impact of policy on certain groups. On the other hand, they may be seen as controlling policy in the way of determining the final decision. In any case, the type of decision over which hearings may have some influence is important. The decision could be, in the case of the

High Ross Dam, a decision to block or to allow the dam, or a lesser decision to mitigate environmental damages with the dam or provide for compensation and not allowing the dam. The decision scope thus has a great effect on the potential influence hearings may have on decision-makers.

ASSESSMENT CRITERIA

This study then focuses on the interface between citizens and the decision-makers--the intake point. It looks as one specific type of interface--the public hearings. We want to look toward a set of criteria or standards to be used in assessing these hearings.

We want to assess a particular process. To do this, certain standards must be set. These standards will be normative by definition. They say what the system should be. They will measure the adequacy of the process to facilitate democratic communication. It is obvious that these are ideal type criteria and no system will perform perfectly according to them. Therefore, the performance must be measured in terms of adequate performance given the constraints operating on the system. Also, these standards are not meant to be exhaustive, but rather to assess certain aspects of the democratic nature of the communication system to be studied. The standards set here then should be considered normative ideals and must be seen in light of circumstances. The question is how well does communication support these ideals? Evaluation according to these standards, then, will rely heavily upon descriptive and

analytic observations for assessment, rather than on qualitative observations. We will begin the development of standards by reviewing the attributes of a democracy.

In Chapter I, the attributes or principles of a democratic system were listed. These were (pp. 20-23).

(1) that decision-makers should be under the effective control of the citizens,

(2) that citizens should be able to influence decision-makers,

(3) that all citizens should be politically equal and have an equal opportunity to have an influence,

(4) that every citizen should be free to express his preferences, whether part of the majority or a minority, and

(5) that decisions should be made according to the majority principle.

Not all of these criteria are relevant to this study, since we are concerned only with the communication aspect of a democratic decision-making system. Whether the decision-makers are under the effective control, i.e., chosen by, the citizens by means of the vote is not a concern of this study. We are concerned with other aspects of democratic systems. In the conduct of a public hearing we are concerned that every citizen should be able to influence public decisions, not just to "ventilate." We are concerned that citizens be free to express their preferences and have an equal opportunity to have an influence on decision-makers. We are also concerned that it be possible for the majority to express a preference, while respecting the rights

of minorities.

These concerns will be condensed into operational criteria for assessment. These criteria are (1) efficiency in operation, and (2) openness of operation.

Efficiency of Operation

The criteria of efficiency of operation is premised on the assumption that a democratic system is one that facilitates the acceptance of useful messages. Efficiency means the receipt of the most results for the least effort. Here it is assumed that the least effort required from the citizen, the more he will be inclined to make his preferences known. The citizen's time is precious and he must budget it. As Robert Dahl puts it well:

> Consider time. Without getting off to varying philosophical poetic, or psychological characterizations of time, let us accept the palpable fact that your own time is limited. There are, as we all too frequently say, only so many hours in a day. And also in a year. Or in a life. The mechanism of time is absolutely ruthless. It is implacably irreversible. Once gone, you cannot regain that lost second, minute, hour, weekend, youth, lifetime. In its interactions with space, time compels exclusion. When I write, I cannot play tennis. (It is all very well to let one's fancy loose on these matters, but the fact is that when I write I cannot play tennis.) Thus time insists upon sacrifice. In order to do one thing at a particular time, I am compelled to forego doing other things. Time is of value, whether for work, play, rest, leisure, creation, puttering, loving, fighting...15

Thus, decision-makers should consider that participation for citizens has a cost for citizens. This is perhaps one of the most neglected notions in planning. Decision-making and administration in a modern,

complex society involves attention to more issues and a more politicized citizenry. Thus planning with increased emphasis on citizen participation has meant citizen input on more and more issues.[16] The danger is that the level of participation required excludes many from participation who have competing priorities on their time. The question of participation, then, for the citizen is not a simple matter. It will depend on a number of factors, according to Dahl. Among these are how much the citizen enjoys participating, how important the matters under consideration are to him, the differences among possible outcomes without his participation, his ability to make a difference in the decision by participating, the likelihood of a decision resulting that he would not like, and his special competence with respect to the matters to be considered.[17] In many matters he will just not be interested in participation. Therefore, he will probably not participate.

This non-participation may not necessarily be detrimental to democracy, however, since as Alexis de Tocqueville said in his classic book, Democracy in America, a democracy with low participation could mean that there are no important concerns about the management of society's affairs.[18] Therefore, we are concerned here with how efficient the system is for those who are participating under the assumption that the more efficient the communication is presently, the more efficient it would be when called upon to "hear" more demands.

Another concern with efficiency is based on the concern for

political equality. As mentioned above, different persons set different priorities on their time. Thus, for some, priorities may be golf, work, theatre, school. For others, the political activist, for example, the priority may be participation. They become, in a sense, elite participators. Often they are the ones with the least alternatives on their use of time and money. They are often the most articulate and get the most say. This means that a minority often dominates the channels of communication with the decision-makers. The irony is that beginning with a plea for a channel for democratic input from citizens, the means of obtaining that input could undermine the whole democratic nature of the system.[19] The communication process, therefore, should allow participation within a framework as streamlined as possible, with a minimum of time and cost obstacles to participation. This might mean, for example, a limit to the number of forums to which cases might be submitted, if this can be done without inhibiting responsiveness. It can mean locating hearings closer to the citizen, or at times more convenient for the citizen. If procedures are complex where certain forms of expertise are required, then perhaps these procedures should be simplified where possible.

Openness of Operation

An important consideration in assessing an intake point is the determination of how open it is to citizen input. This would include a determination of what types of citizen input is excluded. In considering openness we want to know what input would be acceptable for

intake assuming a citizen were committed to making an input at any cost in effort (level of efficiency). Broadly speaking, to be democratic, decision-makers should be open to input from the citizen. The citizen should not be denied his right to speak arbitrarily. This means that a citizen should have a channel to the decision-maker. He should know the rules of participation so that he knows how to participate. And, if public hearings are not a channel adequate for conveying the message, then some alternative channel should be available.

Mere openness, however, does not insure democratic communication. The scope of what input is allowed is important. For communication to be meaningful, it should be premised on the possibility that the system can respond.[20] This means that communication should precede decision and that policy should be open to consideration of review and possible modification at all times. Beyond this, openness means that the system should be open to unrestricted, non-coercive input. It should give rapid hearings to problems. It should allow for equitable, non-coopted access to the decision-maker. In other words, the communication process should be open to input that will be listened to. The question that should be asked, then, is "how capable is the process for listening and responding to democratic input?"

The action of listening to input is a very important element in the assessment of the democratic-ness of a political system. Communication relays messages to the decision-makers. The message is the stimulus to which the decision-maker responds. The response

will not be forthcoming if the stimulus is blocked.[21] Ultimately the system is inadequate if it allows unexpressed feelings to be ignored.[22] Only by listening to a great deal of relevant input will a democracy get the comprehensive information and participation it needs to function best. Democracies are weakened to the extent that they rely on poor information and ignore valid input. Ultimately, alienation can result from such neglect.[23] If policy becomes like "the laws of the Medes and the Persians," where not even the king who has made the policy can change it, then communication of demands is irrelevant. In communication theory, it is postulated that decisions will be hardened at some point.[24] This means that at some point decision-makers will necessarily conclude that they have enough information to make a valid decision and therefore stop receiving input. But hardening must not allow decisions to be frozen in a position greatly inconsistent with the current interests of citizens merely for the sake of hardening.

On the other side of the issue, there are constraints upon the capacity of a system to hear input. The scope of reference of the process should be set with discretion. A part of discretion is based on feasibility. The decision-making process is constrained by certain factors including the availability of the time and money needed to listen to its constituents. Hardening, as mentioned above, is not always arbitrary, but is necessary due to realistic constraints. Unless new and highly potent information comes to the attention of decision-makers after hardening, they will be obliged to hold to

their decision. Otherwise, response to input from the citizens could deteriorate into a meaningless chaos of changing decisions and policy. This unstable environment would be disastrous for certain long range investments which depend on stable decisions--such as hydroelectric facilities, education, and so forth.

There are some further limitations on the feasible openness of the decision-making process. Input can greatly affect the stability and perceptiveness of the decision-making system. Input which is too intense may overload or disable the system--a condition Easton calls "content stress."[25] An example of this intensity would be a violent input into a non-violent system. This system would have no means of processing the violent input and would therefore be unable to respond. Input can also be too extensive and overload the system--a condition that Easton calls "demand input overload."[26] A system which receives too much input on too many subjects thus becomes disrupted. It becomes spread too thin and concentrates on some input and ignores other perhaps more important input. Whether the input is too intensive or too extensive, it can be seen that the perceptions of the decision process of the nature of the input can have an important bearing on how the process reacts to the input. A digestible demand is much more able to obtain a response. Equally relevant--the digestibility of the input can perhaps determine whether the conflict can be resolved by the process. If the input is too extensive or too intensive, the communication channels beyond the intake point may not be capable of handling the messages. Messages may be confused or lost in transmission.

This myriad of messages received by some decision-makers necessitates some summarizing and organizing of messages into some coherent and digestible form. This will mean inevitably some modification of the messages. The concern here is that the modification does not distort the input. The decision-maker should see what is demanded by whom. On the other hand, the decision-maker should not be precluded from seeing the input because it is too voluminous. Ultimately the decision-maker can only assimilate so much information in the time that he has available and therefore some modification and summarization is necessary. But the message should be accurately conveyed. This means that the channel should present the message in a form readily conveying the meaning of the citizen who sent it.

TARGET DATA

The information required will determine the type of methodology required to get it. According to W. Richard Scott, an authority on organizational research,

> it is the nature of the phenomena under investigation and the objectives of the study which must determine what approaches are taken and what materials are gathered by what methods.[27]

In the following paragraphs, then, the relevant target data items will be listed.

Input Sources

Earlier we discussed input sources. The assessment of public hearings must include an appraisal of the role and activities of

citizens in making input. The adequacy of an "ear" or receptor cannot be judged without knowing something about the "sound" or message. It is clear from our discussion of openness that the message may condition the response to some degree. A well organized and articulate input may have a greater impact on the decision process than a diffuse and cryptic input. Also, a large input which suggests a consensus of opinion among citizens may be significant to decision-makers. Thus we will want to know certain things about the input sources in order to assess the intake process. These things are:

(1) the identity in broad terms of the input sources and their visible organizations and leading spokesmen,

(2) an examination of the strategies open to input sources in the hearings and which they used,

(3) an examination of the cost to citizens in making testimony at hearings in terms of expertise, time, or money, and

(4) an examination of special impediments and difficulties encountered by citizens and input groups in using these hearings.

Identification of input sources (1) will indicate which citizens and groups were included in this study, what their position was, in reference to the raising of the dam, and what interests or groups they came to the hearing to represent. An examination of the strategies open to these input sources and which they chose to use (2) will indicate how the citizens prepared for their appearance at the hearing and how they organized that appearance. This should give some insight into the nature of the message they came with and the receptivity of the intake process to this message.

Items (1) and (2) relate to the identification of the input source and the input. Items (3) and (4) deal with the means available to meet the requirements of the intended plan of action. First, the costs of the particular strategy are examined. As this cost is determined, a description of the means of meeting these costs can be specified (3). Finally, an examination of the difficulties and impediments encountered by the input sources in using these strategies sheds light on the adequacy of these resources and strategies. It should be remembered, of course, that the purpose of this study is to look at the openness and efficiency of the hearings process. Thus, examination of the input target items is meant as an approach to assessing this process. It is not meant for assessment of the input sources.

Intake Elements

A key factor in assessing the communication process is an examination of the intake element itself--the public hearings. The intake element can condition the transmission of the message. This is a basic assumption of this work. It can condition the message by not being open (openness), or making it difficult to present the message (efficiency). What we want to know is how the intake element performs according to our criteria. To make this assessment, we must look at the following items:

(1) an identification of the intake elements (public hearings) under study,

(2) an examination of the physical arrangements, recording, and announcement of the hearings,

(3) an identification of the operating rules and procedures of the hearings,

(4) an analysis of the volume of testimony received at the various hearings,

(5) an analysis of the shares of time used at hearings for different classifications of witness,

(6) a description of the expertise available on hearings boards for understanding and perception of testimony received, and

(7) an examination of the technical and research support available to the intake hearings boards.

Identification of the hearings to be investigated (1) indicates which hearings were included in this study. This also includes reference to other hearings which were pertinent. Examination of the physical arrangements (2) helps to identify the hearings by giving their location and times. Arrangements for announcement (2) indicates the attempts made by hearings officers to notify all affected persons of hearings potentially significant to them.

Identification of the operating rules of the hearings (3) indicates the boundaries within which the witnesses must act in order to make use of the hearings. These rules and procedures immediately condition what is accepted at the hearing. Time rules, for example, may determine the extensiveness or intensiveness of a message or brief delivered. This may encourage conciseness or, alternatively, discourage thoroughness or effectiveness.

Analysis of the volume of testimony presented at the hearing (4)

and how it was distributed among witnesses (5) indicates the actual accessibility of witnesses to the 'floor' of the hearing. It also indicates something of the enforcement of the hearings rules.

Examination of the expertise available on the hearings board (6) and in supporting capacities associated with the boards (7) indicates how perceptive the hearings board may be in judging the veracity of testimony.

The Screening Element

The screening element is concerned with the scope of allowed intake. Certain types of input are clearly not permissible at a public hearing on a hydroelectric dam--such as a recipe for apple pie. On the other hand, certain types of input should have a channel (openness) and that channel should not be unnecessarily difficult (efficiency). To apply the criteria of efficiency and openness to the communication process studied here, we must look at the following:

(1) an identification of the authorities setting the terms of reference (scope of allowed intake) for the hearings,

(2) a listing of relevant rules for determining this scope,

(3) the rationale for particular limitations upon what is acceptable for intake,

(4) a determination of the scope of coverage these rules permit, and

(5) an assessment of the organization of the intake necessitated by this scope.

The identification of the authorities determining the scope of coverage of the intake process (1) is useful in assessing the reasons for the scope of reference. It identifies the source of the limitations upon the scope.

The listing of the rules for determining the scope (2) is necessary before the rationale for this scope (3) can be determined. This rationale must be taken into consideration in assessing the hearings process. Also relevant is the scope of coverage the rules permit (4) which indicates how open the hearing is and the organization of input required (5), which indicates how efficient the hearings are.

METHODOLOGY

This study employs a package of methodologies in its research design, rather than a single method. This is considered a superior approach for this study. According to W. Richard Scott,

> the study design specifies the kinds of data which must be assembled by the researcher to fulfill the objectives of the investigation. Where a number of different kinds of material are called for, the researcher must be prepared to employ a variety of techniques in his study.[28]

The methodologies employed in this study were chosen on the basis of what data was needed. Where possible, the most appropriate method was used after promising opportunities presented themselves. Availability of transcripts of hearings, for example, led to use of a simple form of content analysis which had large returns for minimal time involved. In this research, then, the advise of Bollens and Marshall

was followed:

> Having become familiar with the strengths and weaknesses of the different methods for gathering empirical evidence, the researcher should be ready to select the methods best fitted to the problems he has chosen for investigation. The techniques he selects should give the most accurate and pertinent information on the topic. Ingenuity is a crucial trait at this stage. He might ask, What is it I want to know? What methods will give me the information I need?[29]

A second facet of this approach is to employ a multi-method approach. Rather than employing one single method widely, a set of approaches were used. These approaches were arranged in a pattern to reinforce the data stemming from other approaches. According to Bollens and Marshall:

> Typically a decision is made to combine several methods because of the strengths and shortcomings can compensate for each other. Diversity gives helpful multiple fixes on a problem. Thus unstructured interviews with selected planners in a given city can supplement questionnaire results from a wider spectrum of planners.[30]

In this study several avenues proved fruitful: (1) a review of newspapers, periodicals, reports, and books, (2) a simple content analysis of the transcripts of testimony at pertinent hearings, and (3) directed interviews with selected persons who had been associated with the controversy or participated in the hearings.

The Methods Used

Below is a brief description of the methodologies which were used in this study.

(1) A review of newspapers, periodicals, reports, and books. In order to understand a hearing, or any event for that matter, it

is useful to understand the context of that event. To do this an extensive newspaper survey was embarked upon which included review of over 400 news articles. To balance the impact of editorial biases all four of the major newspapers of Seattle and Vancouver, B.C. were searched. This was supplemented by review of various periodicals including the Seattle City Light News and the Wild Cascades. Certain books were helpful, including Waterfield's book The Continental Waterboy.[31] Several reports were useful including those of the various hearings, tribunals, and interest groups.

(2) A simple content analysis of the transcripts of testimony at pertinent hearings. In this study, there seemed to be a need for some indicator of the amounts of time allocated to each side of the controversy. Access to the rostrum is a crucial indicator of the openness of a hearing. One way to measure access was by looking at the rules announced for participation. However, the rules do not indicate exactly how the hearing was operated. Thus, a rough measure of time allocation was used. This consisted simply of counting the lines of testimony appearing in the transcripts of the hearings.[32] The number of lines allocated to each side and to various classifications of witness was determined. Insight gained from this method was compared with evidence gathered through interviews.

(3) Interviews with selected persons. Several people were interviewed. Each of these was in some way a participant in this issue. The sample is not considered large or representative in the sense of a survey research modality. Rather, these interviews were

an attempt to reach a balanced group of key individuals. These individuals were not rank and file participants, but leaders on both sides of the issue and on the hearings boards. It is conceded that a different set of answers might be obtained from the rank and file or from those not involved. The conclusions of this study must bear this qualification.

The interviews themselves varied from an interview in the lobby of the Seattle Municipal Building to one in the office of the Superintendent of Seattle City Light. Without exception interviewees were gracious and unexpectedly candid in light of their very busy schedules and the tricky legal and political situations at the time.

The interviews were directed at gathering specific pieces of information, but were not structured closely. Respondents were not held rigidly to plan and frequently opened new and highly pertinent avenues with their ideas. The result of this semi-structured approach was a great deal of valuable insight based on much collective experience.

The important point to remember is that these methods are intended to be used in tandem, not separately. In this way there are checks on the validity of information gathered by one source in information gathered from another.

The next chapter will apply this approach to an analysis and assessment of the public hearings concerning the raising of Ross Dam on the Skagit River.

FOOTNOTES

[1]See David Easton, A Systems Analysis of Political Life (New York: John Wiley and Sons, Inc., 1965), p. 25 ff.

[2]For a theoretical discussion of paradigms, see Thomas S. Kuhn, The Structure of Scientific Revolutions (Chicago: The University of Chicago Press, 1962).

[3]Karl W. Deutsch, The Nerves of Government (New York: The Free Press, 1963).
_____, Nationalism and Social Communication (Cambridge, Mass.: The M.I.T. Press, 1953), esp. pp. 165-186.
_____, The Analysis of International Relations (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1968), esp. pp. 74-86, 112-132.
_____, "Communication Models and Decision Systems," in James G. Charlesworth (ed.), Contemporary Political Analysis (New York: The Free Press, 1967), pp. 273-299.

[4]Easton, op. cit.

[5]Deutsch, 1965, op. cit.

[6]Deutsch, 1965, op. cit., p. 167.
Easton, op. cit., p. 55. Easton calls memory "withinputs."

[7]Deutsch, 1965, op. cit., p. 167.

[8]Easton, op. cit., pp. 26-27.

[9]Easton, op. cit., pp. 38-39.

[10]Easton, op. cit., pp. 41-47.

[11]Easton, op. cit., p. 70 ff.

[12]Ibid., pp. 87-97.

[13]Ibid., p. 90.

[14]Ibid., p. 128 ff.

[15]Robert Dahl, After the Revolution? (New Haven: Yale University Press, 1970), pp. 42-43.

[16]Easton, op. cit., p. 64.

[17]Dahl, op. cit., pp. 46-47.

[18]Alexis de Tocqueville, Democracy in America (New York: The New American Library, 1965).

[19]Dahl, op. cit., pp. 40-56, and
Easton, op. cit., pp. 57-68.

[20]Easton, op. cit., p. 18.

[21]Ibid., p. 66.

[22]Ibid., pp. 31-33, and
Amatai Etzioni, Political Unification (New York: Holt, Rinehard and Winston, Inc., 1965), pp. 74-77.

[23]Etzioni, op. cit.

[24]Deutsch, 1953, op. cit., pp. 165-186.

[25]Easton, op. cit.

[26]Ibid., pp. 57-59.

[27]W. Richard Scott, "Field Methods in the Study of Organizations," in James G. March (ed.), Handbook of Organizations (Chicago: Rand McNally and Company, 1965), p. 269.

[28]Scott, op. cit., p. 269.

[29]John C. Bollens and Dale Rogers Marshall, A Guide to Participation (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1973), p. 40.

[30]Ibid.

[31]Donald Waterfield, The Continental Waterboy (Toronto: Clarke, Irwin Company Ltd., 1970).

[32]In this case, the definition of a "line" is any portion of a line over one-half of a line on a transcript of a hearing. This is about ten words or six seconds if a reader covers 100 words per minute.

CHAPTER V

RESULTS AND ANALYSIS

The purpose of this chapter is to reveal what was discovered through research conducted upon the hearings held in connection with the raising of Ross Dam. This will begin with a rough description of the larger decision system to which these hearings belong. Following this, the pertinent elements of that system which were defined in Chapter IV will be examined more closely.

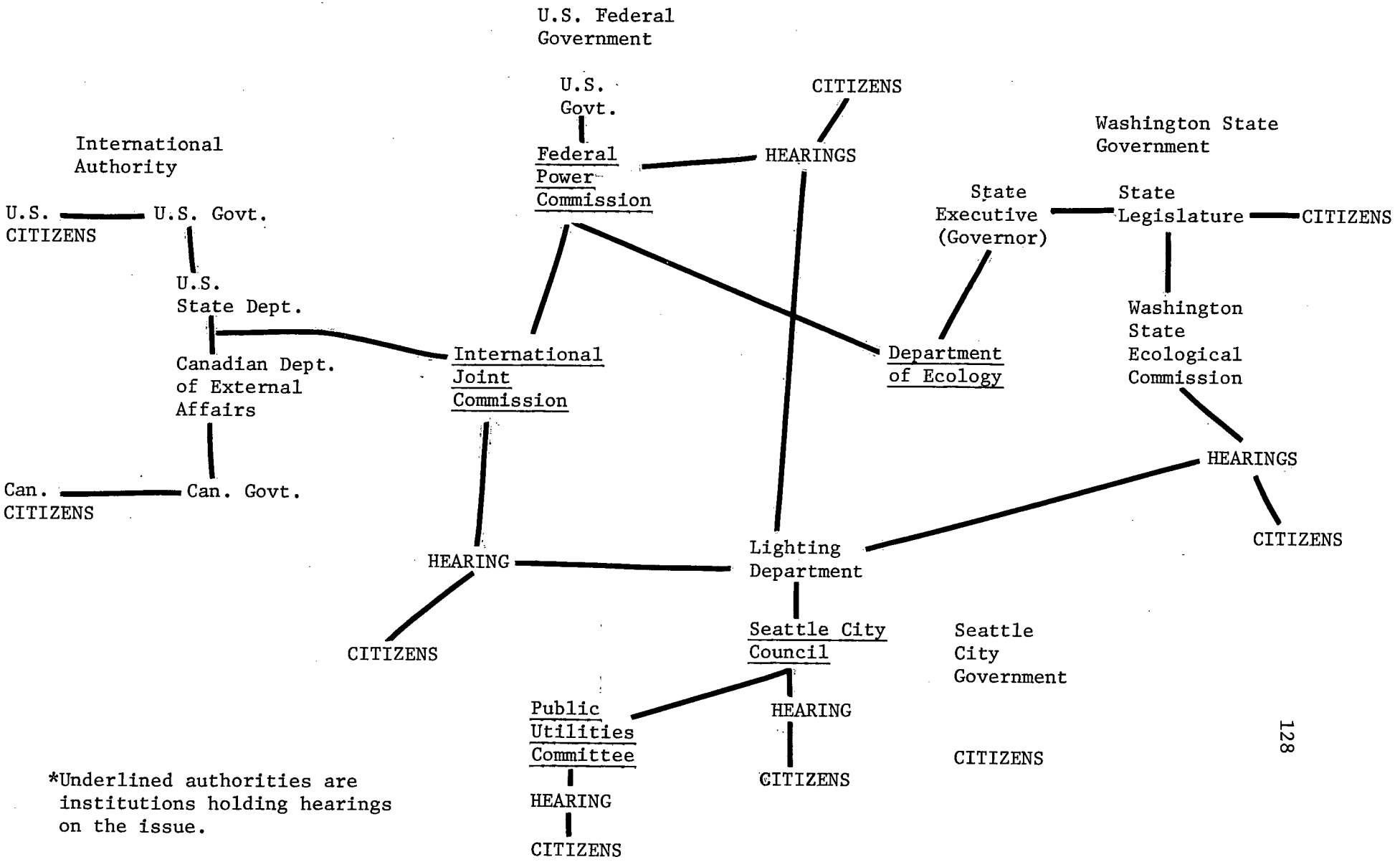
THE DECISION SYSTEM

In Chapter IV, the concept of a paradigm communication model was discussed. It was shown how a paradigm model is used to find patterns in real world activities or phenomena. In the case of the High Ross Dam, we are concerned with a decision-communication model which includes the set of all institutions which have some authority to make decisions which would help to determine the final disposition of the plan to raise Ross Dam. This would include the Seattle City Council, the State of Washington and its Department of Ecology, the U.S. Federal Power Commission, and the International Joint Commission. It would also include the United States and Canadian federal governments and the British Columbia government. Figure 5.1 gives an interpretation of how these institutions are interrelated in the same system with respect to decision-making on the Ross Dam. Note that each of these institutions is related to the others either directly or indirectly. A more precise description of the separate institutions is found in Chapter III.

This map was constructed according to the procedure outlined

FIGURE 5.1

Citizen Communication Map of High Ross Dam Decision System



in Chapter IV. The information supporting this model is taken from Chapter III and from interviews.[1] The hearings of interest soon become clear. These will be listed later. The interconnections between hearing boards (intake elements) should be borne in mind in succeeding analyses.

THE COMMUNICATION ELEMENTS

The elements of a communication system isolated in Chapter IV as relevant to this inquiry were the input source, the intake element, and the screening element. For the sake of clarity, the order of presentation used so far will be altered--the input element being considered last. In the following pages a summary of the data gathered concerning these elements will be given.

The Intake Element — THE INTAKE ELEMENT

The intake element was defined in Chapter IV as The intake elements to which this study is limited are the pertinent public hearings. The information important to assessment of the openness and efficiency of the public hearings is specified in the target items listed in Chapter IV. These were:

(1) an identification of the intake elements (public hearings) under study,
(2) an examination of the physical arrangements, recording, and announcement of the hearings,
(3) an identification of the operating rules and procedures of the hearings,
(4) an analysis of the volume of testimony received at the various hearings,
(5) an analysis of the shares of time used at hearings for different classifications of witness,

(6) a description of the expertise available on hearings boards for understanding and perception of testimony perceived, and
(7) an examination of the technical research support available to the intake hearings boards.

These will be considered below.

(1) Identification of the intake elements (public hearings) under study.

From searching the newspapers, transcripts of hearings, and interviews, the relevant hearings were determined. Relevant hearings are defined here to include all hearings at which testimony (input) on the High Ross Dam was made in 1970 or after.

There were at least 14 hearings at which testimony on the Skagit was delivered. These are:

1. The Public Utilities Committee, Seattle City Council Hearing # 1, March 20, 1970.
2. The Public Utilities Committee, Seattle City Council Hearing # 2, March 26, 1970.
3. The Public Utilities Committee, Seattle City Council Hearing # 3, March 31, 1970.
4. The Public Utilities Committee, Seattle City Council Hearing # 4, April 8, 1970.
5. The Public Utilities Committee, Seattle City Council Hearing # 5, April 16, 1970.
6. The Public Utilities Committee, Seattle City Council Hearing # 6, May 1, 1970.
7. The Public Utilities Committee, Seattle City Council Hearing # 7, May 7, 1970.
8. The Public Utilities Committee, Seattle City Council Hearing # 9, May 25, 1970.

(The Public Utilities Committee hearings were held as a general review of all of the policies of Seattle City Light and dealt with other issues in addition to the High Ross Dam. Hearing # 8 did not deal with the issue at all. See Appendix A for a description of individual hearings.)

9. The Public Utilities Committee, Seattle City Council Special Public Hearing, December 1970.

10. The Washington State Ecological Commission, Seattle Hearing, March 16, 1971.
11. The Washington State Ecological Commission, Mt. Vernon Hearing, March 17, 1971.
12. The International Joint Commission, Bellingham Hearing, June 3, 1971.
13. The International Joint Commission, Vancouver, B.C. Hearing, June 4 and 5, 1971.
14. The Seattle City Council Hearing, Seattle, March 31, 1972.

In addition to these hearings, the U.S. Federal Power Commission is planning to hold three hearings on the High Ross Dam. These hearings have been repeatedly postponed. They are:

1. The Federal Power Commission, Seattle Public Hearing (date undetermined)
2. The Federal Power Commission, Bellingham Public Hearing (April 23, 1974)
3. The Federal Power Commission, Washington, D.C. Evidentiary Hearing (date undetermined)

This study does not directly consider the Federal Power Commission hearings. Mention of them is made to include all known hearings in 1970 or after.

At the conclusion of the F.P.C. hearings, 17 hearings will have been held on the High Ross Dam, assuming no other agencies undertake hearings on the issue.

(2) An examination of the physical arrangements, recording, and announcement of the hearings.

The physical arrangements of the public hearings usually involved the hiring of a public auditorium or theatre or utilizing government facilities. Effort was made to provide enough room for the expected crowd. Hearings were located in a central location in each city.

In the paragraphs below, the cities where hearings were held are specified.

Hearings were recorded in all cases and a description of recording procedures is found below.

The importance of wide notification was well recognized.[2] Interest groups saw the job of getting supporters to the meeting as having a crucial impact.[3]

The Public Utilities Committee Hearings. The hearings of the Public Utilities Committee were all held in the Seattle Municipal Building. The hearings were held on weekday evenings of different weeks.

Hearings were recorded on tape and transcribed to typed copy and xeroxed. They were sold at cost to the public. The quality of the transcripts varied, due to poor quality tape. There were frequent to occasional gaps in text. Witnesses were wrongly identified in places. It should be stated at this point that producing transcripts is sometimes expensive and taping is relatively less expensive.[4] The tape system used in 1970 was replaced in 1971.[5]

Written statements were presented at several of the hearings. These were included with the transcripts for public release. They represent a small amount of time in most cases, but in some cases do entail substantial effort. In the case of City Light, for example, the costs were very high.

Notification of hearings was principally carried out through a mailing list which grew between hearings. Ultimately, it reached

over 500 names of interested persons and groups.[6] Some notification was accomplished through citizen efforts at encouraging their peers to show concern through numbers.[7]

The Washington State Ecological Commission Hearings. The W.S.E.C. hearings were held in Seattle and in Mount Vernon, Washington. The hearings were held during the day and occupied a full day's time each. They were held during working days (Tuesday and Wednesday, respectively).

The hearings were recorded by special reporters who transcribed testimony to typed copy which was xeroxed and made available to the public at cost. Hearings transcripts were of high quality.

Written statements were often included along with or in place of oral testimony. In some cases, written statements represented great expense and effort by the witnesses.[8] These efforts were given great attention by the Commission which "read everything" presented.[9] This included "two boxes" of written statements. Obviously, to print this material for public sale at cost would not be economic. Written statements were not included in the transcript release.

Notification of the hearings was implemented through a legally prescribed procedure supplemented by special attempts at getting the message spread. These procedures include such activities as distributing press releases, using selected mailing lists, and making telephone contacts with the media. In addition, newspapers in the United States and Canada carried stories on the hearings. New procedures adopted following May of 1973 have strengthened this policy

of wide notification.[10]

The International Joint Commission Hearings. Hearings were held in Bellingham on Thursday, June 3, 1971, and in Vancouver, B.C., on Friday and Saturday, June 4 and 5, 1971. No hearings were held in Seattle presumably because the hearings were meant to consider environmental effects in Canada from the High Ross Dam.

Testimony was recorded by Commission reporters, transcribed to typed copy, xeroxed, and made available to the public at cost. The transcripts are of high quality.

There were a certain number of written statements filed with the Commission. These were not released with the transcripts because the volume of written statements precluded economic reproduction.

The public was notified through announcements published by the Commission in local newspapers. News articles gave substantial coverage to the hearings, giving them substantial publicity. Interest groups also helped to spread the word.

The Seattle City Council Hearing. The Seattle City Council held a hearing on Friday, March 31, 1972, at the Seattle Center in Seattle.

The hearings were taped. There was a rumor that the tapes were transcribed, but the whereabouts of both tapes and transcripts is unknown.[11] Copies of written statements submitted are on file at the Seattle Municipal Building.

The exact procedures used for notification of the public were not ascertained. There were news stories covering the hearings.

(3) An identification of the operating rules and procedures of the hearings.

Two types of rules were evident in the hearings: rules respecting order and rules respecting the allocation of time among witnesses.

Rules respecting order were established to maintain an atmosphere conducive to orderly presentation of testimony and protection of the witnesses from interruptions by the crowd.[12] In all hearings questioning of the witnesses was the prerogative of the hearings boards, although there were occasional questions from the crowd in some hearings. Questions could be suggested to the boards during oral testimony. Applause was generally limited to the period immediately following the witness' oral statement and was discouraged during the presentation of the statement. At the Public Utilities Committee hearings, placards were prohibited. Rules were not always rigidly enforced and exceptions could be allowed as long as the hearings were not disrupted.

Witnesses were generally allowed substantial freedom in choosing how they wanted to make their statement. Witnesses delivered testimony in the form of slide shows and self-written songs and poems. These forms of testimony seemed generally accepted[13] but there were respondents who felt such testimony was a misuse of time.[14] Testimony where witnesses delivered emotional speeches with little informational or rational content were generally discouraged.[15]

Rules respecting time allocations varied somewhat among hearings. The necessity for some type of time limit on speakers

was unquestioned. The exact rules, however, are disputed. One respondent indicated that listening to all witnesses was wasteful and unnecessary. He suggested that at a busy hearing, every fifth person on the speakers list should be heard. It was his opinion that open hearings are fine, but if the hearings are too open the people who are most affected are driven away. Lack of rigid time limits can lead to a "filibuster" of the issue.[16]

Most respondents, however, felt that everyone could state his position briefly and hand in a longer written statement.[17] Brevity was considered important,[18] but it was felt that everyone should have a fair and equal say.[19]

A problem, however, was recognized in granting a fair and equal say. Time rules at the hearings usually granted a special block of time to City Light. There were complaints of a lack of time for rebuttal.[20] Finding some group to represent the opposite side was suggested.[21] There was some question as to who, in fact, represented "the party of the second part."[22] The rebuttals thus were piecemeal in most cases,[23] testimony of the N.C.C.C. coalition and the R.O.S.S. Committee excepted.

Another problem mentioned was the problem of hearing individual witnesses at the end of the hearing.[24] This discouraged citizens who might be "scared," or might not allow them a chance to speak.

The procedures for registering to speak were simple in all cases, usually amounting to signing up when arriving at the hearing. The procedure was frequently announced during the hearing.

The Public Utilities Committee Hearings. There were eight P.U.C. hearings which dealt with the dam. There were substantial differences in the rules applied with regard to time between individual hearings. It should be remembered that these hearings were often not designed to look specifically at the Skagit. Other issues such as City Light financing, the Kiket Island nuclear plant, and underground writing policies were also considered (see Appendix A). The intended plan of time allocations which was started at the beginning of the hearings was to allow blocks of time to three classifications of witness: (1) a block of time, usually an hour or more, was allocated to City Light officials to describe company positions and policies with regard to the topic selected for the hearing, (2) a second block of time was devoted to public input, usually an hour or more, and (3) a smaller block of time, usually half an hour, was allocated to hearings board members and staff to ask questions of any witnesses. This format was not closely adhered to. Generally speaking, citizen witnesses were implored to take five minutes or less to state their testimony. Ten minutes was set as the upper limit. Upper limits were not strictly enforced.

The Washington State Ecological Commission Hearings. The format of the W.S.E.C. hearings allowed for two blocks of time. The first period was devoted to the presentation of the case for the dam by testimony from City Light and its official witnesses, followed by a second period with testimony from the general public. The testimony in the latter period was to be limited to five minutes for groups and three minutes for individuals. In several cases testimony was

allowed to exceed the limits. During this second period, testimony was first heard from government representatives, then from groups and organizations, and finally from individuals. Toward the end of the hearing, witnesses were implored to avoid repeating testimony made by earlier witnesses and several witnesses did not deliver all of their statements. The reason for this was the length of the hearings and the number of witnesses. Toward the end of the hearing, the chairman encouraged witnesses to hand in written statements and summarize them orally.

The International Joint Commission Hearings. A substantial block of time was reserved at the beginning for City Light to present official witnesses to explain its case for the dam. Following this presentation, witnesses from the general public were allowed five minutes per group and three minutes per individual to make statements. These rules were not always enforced strictly. Toward the end of the hearing, as in the W.S.E.C. hearings, witnesses were encouraged to avoid repeating earlier testimony.

The Seattle City Council Hearing. The exact rules for the allocation of time among witnesses was not ascertained.

(4) An analysis of the volume of testimony received at the various hearings.
(5) An analysis of the shares of time used at hearings for different classifications of witnesses.

The analysis of the volume of testimony heard at the hearings and its distribution among witnesses relies upon the transcripts of the hearings. The index used for measuring this time was based on

the number of lines in the transcripts used for a specific purpose. This means that the S.C.C. hearing can not be gauged since transcripts were unavailable. Consideration of the P.U.C. hearings is limited mainly to P.U.C. hearings # 5 and # 7, since these are the hearings where testimony concentrated upon the High Ross Dam.

There are several variables which we will consider in this analysis. These are:

A. The total number of witnesses appearing at each hearing and the position they represented.

B. The total volume of testimony delivered in favour of and against the dam.

C. The total amount of testimony delivered by selected classifications of public witnesses including:

1. City Light witnesses vs. all other witnesses,
2. Canadian witnesses vs. American witnesses, and
3. Coalition witnesses vs. all other witnesses.

The data collected will be presented below.

A. The total number of witnesses appearing at each hearing and the position they represented.

In all, witnesses made 212 appearances at the hearings studied. Some of these witnesses appeared at several of the hearings. Table 5.1 lists the number of witnesses at each hearing by hearing and by the position they represented. It should be noted that many of the witnesses in favour of the dam were representing City Light.

TABLE 5.1

Classification of Witnesses by Hearing and Position

Hearing	Position				
	Pro	Con	Neutral	Unknown	Total
P.U.C. # 5	5	22	1	0	28
P.U.C. # 7	3	3	1	0	7
W.S.E.C. (Seattle)	24	43	1	7	75
(Mt. Vernon)	19	35	2	0	56
I.J.C. (Bellingham)	5	9	2	0	16
(Vancouver)	4	26	0	0	30
TOTAL	60	138	7	7	212

B. Total volume of testimony delivered in favour of and against the dam.

In order to measure the volume of testimony delivered at the hearings, the lines of testimony appearing in the transcripts of the hearings were counted. Any portion of a line over one half of a line was counted as a line. The results are reported in Table 5.2.

TABLE 5.2

Lines of Testimony at Hearings, by Position on Dam

Hearing	Lines Pro	Lines Con	Lines Neutral	Total
P.U.C.				
Hearing # 5	516	1394	0	1910
Hearing # 7	713	563	0	1276
W.S.E.C.				
Seattle	2334	2439	70	4843
Mt. Vernon	2141	2369	54	4564
I.J.C.				
Bellingham	1426	1961	226	3613
Vancouver	1291	134652	222	6165
TOTAL	8421	13,378	572	22,371

It is clear from the above that witnesses in opposition to the dam had more time at the rostrum collectively than those in favour. In fairness, it should be said that most witnesses who came to the hearings were heard from. Also, the reader should note that in the end, it is not how much is said, but what is said and how well it is said, which counts. The above figures, however, give an indicator of access to the rostrum.

It should be noted, however, that City Light witnesses had special blocks of time available to them. This time was not regulated by the normal time rules. On the other hand, the opponents were under time

rules which specified limited periods from three minutes to five or ten minutes for presentations. Thus, while these figures indicate that opponents to the dam did have access, they did not indicate that they had the same type of access. Indeed, it could easily be posited that, if there were no special time rules, opponents would have given a good deal more testimony.

C. The total amount of testimony delivered by selected classifications of public witnesses.

In Table 5.3 the volume of oral testimony given by City Light in favour of the dam is compared with the testimony given by all other witnesses.

TABLE 5.3

Lines of City Light Testimony in Comparison with Other Testimony

Hearing	City Light	Other Pro	All Pro	Total (All Witnesses)
P.U.C.				
Hearing # 5	309	207	516	1910
Hearing # 7	713	0	713	1276
W.S.E.C.				
Seattle	1232	1102	2334	4843
Mt. Vernon	1363	778	2141	4564
I.J.C.				
Bellingham	716	710	1426	3613
Vancouver	1023	258	1281	6165
TOTAL	5356	3055	8411	22,371

It is clear that City Light testimony was a substantial component of testimony in favour of the dam. City Light testimony accounted for 63 per cent of testimony in favour of the dam and 23 per cent of all testimony at the hearings.

In Table 5.4 testimony from Canadians is compared with that of Americans by hearing. This is done to indicate access to the rostrum by nationality.

TABLE 5.4

Lines of Testimony by Nationality

Hearing	U.S. Citizens	Canadian Citizens	Total
P.U.C. Hearing # 5	1059	851	1910
Hearing # 7	1276	0	1276
W.S.E.C. Seattle	4522	321	4843
Mt. Vernon	2669	1895	4564
I.J.C. Bellingham	3343	270	3613
Vancouver	353	5812	6165
TOTAL	13,222	9149	22,371

It is clear from this table that Americans dominated the hearings. They accounted for about 59 per cent of the testimony. This may be partly attributed to the location of the hearings. Of

the six hearings above, five were held in the United States. In only one case, the I.J.C. hearings held in Vancouver, Canada, did the Canadians dominate the hearings.

Table 5.5 indicates the volume of testimony given by the two coalitions at the hearings.

TABLE 5.5

Lines of Testimony by Coalitions at the Hearings

Hearing	N.C.C.C. Coalition	R.O.S.S. Committee	Both Coalitions	All Testimony
P.U.C. Hearings (Nos. 5 & 7)	207	516	723	3186
W.S.E.C. Hearings	1507	887	2394	9407
I.J.C. Hearings	1917	2837	4754	9778
TOTAL	3631	4240	7871	22,371

It is evident from this table that the coalitions accounted for a sizable share of the testimony at the hearings. The R.O.S.S. Committee accounted for 46 per cent of Canadian testimony and 19 per cent of all testimony given at all of the hearings. The N.C.C.C. Coalition accounted for 27 per cent of the American testimony and 16 per cent of all testimony. Together the coalitions accounted for 35 per cent of all testimony. City Light and the coalitions combined

accounted for 59 per cent of the testimony, leaving 41 per cent to all other witnesses.

(6) A description of the expertise available on hearing boards for understanding and perception of testimony received.

The Public Utilities Committee. The backgrounds of the members of the Public Utilities Committee were general. The committee was composed of elected city councilmen. Among the members, there was a drug salesman (Chairman Cooley), an ex-police officer (Larkin), a housewife (Williams), and two lawyers (T. Hill, Tuai).[25] Members of the committee expressed some difficulty in understanding the frequently technical and complicated issues with which the committee had to deal in its consideration of the High Ross Dam.[26]

The Washington State Ecological Commission. The Commission has members who were knowledgeable in a variety of matters relevant to the High Ross issue. Commission members were appointed with an objective of reviewing projects and issues with reference to the environment. They were chosen to give representation to different sectors of the general population with special representatives from industry, agriculture, labour and the general public. A review of the backgrounds of the members gives an indication of the expertise of the Commission. Dr. Arpad Masley, the Chairman, is a physician with insight into environmental health issues. Professor Gordon Orians is an ecologist at the University of Washington. Ann Widditsch is an activist formerly with the American Civil Liberties Union and the Washington Environmental Council. Harold Heacock is an employee of

Douglas United Nuclear and has special knowledge of nuclear power issues. John McGregor owns a large farm in eastern Washington and has wide experience in the agricultural industry. Charles Stewart Sargent is an expert on pollution control and solid waste management who works for Boeing Aviation. Sam Kinville is a professional labour leader with knowledge of labour issues. While the Commission may perhaps have had some gaps in representation of minority groups and expertise, it was chosen with a view to depth and balance.

The International Joint Commission. The Commission has two sections: an American section and a Canadian section. Each section is chosen to interpret the issues before the Commission in light of the needs and policies of its respective nation. Commissioners are thus chosen with a view toward balance and technical expertise. At least one of the commissioners in each section will be an engineer who can interpret complex and technical engineering issues. Another will be a lawyer who can grapple with international legal questions which frequently arise during Commission business. The third member will be of some other profession such as an economist in order to add special expertise. There is also an attempt to balance the Commission by region is that not all of the Commissioners are from one area of their country.

The Seattle City Council. The 1972 hearing on the High Ross Dam was held to "brief" new councilmen who had won a recent civic election. This briefing particularly involved two new councilmen who had replaced pro-dam incumbents. Because of a lack of transcripts, it was

not ascertained who sat on the hearings board. Since it was a City Council hearing, however, the composition of the board would be entirely composed of elected councilmen. These councilmen were similar in background to the Public Utilities Committee which is a part of the larger council.[27]

(7) An examination of the technical and research support available to the intake hearings boards.

The expertise on a hearings board may be supplemented by staffs which can look into questions raised by the hearings. These staffs would serve the function of independent researchers. In examining the expertise of a hearings board, then, the role of technical support may be crucial.

The Public Utilities Committee. The P.U.C. hired two consultants from the University of Washington Department of Economics: Professor Douglass C. North and Professor Yoram Barzel. Both sat on the hearings board to ask questions and supplement the gaps in background and expertise of the Committee. Their purpose was to give professional support to the Committee. There was some doubt as to the usefulness of the consultants,[28] and the influence of their report.[29] Another source of research support was the City Light staff who were called upon to give information and to advise on the damming proposal. While it is clear that the City Light had a vested interest in the outcome, the Committee had no independent technical board from which to get the same information.

The Washington State Ecological Commission. The Ecological Commission had access to the staff and services of the Washington State

Department of Ecology. The Commission has authority to review the policies of the Department and call upon the Department, in the name of citizens, for information concerning matters the Commission deems relevant.[30] Hence, in the matter of the High Ross Dam, the Commission had access to a large professional staff of environmental experts who could be called upon for technical assistance.

The International Joint Commission. The Commission had at its assistance a special ad hoc technical board which was charged with the responsibility of conducting whatever studies were desired by the Commission. The technical board drew on the expertise of other government bodies to form a group fully capable of researching the issues presented to it. A listing of the members of the technical board of the I.J.C. chosen to study the High Ross issue is found in Appendix C.

The Seattle City Council. The City Council, as a legislative arm of government, could appropriate money for research or call upon the Mayor's office for information. The policy for the 1972 hearing was not ascertained. The hearing, however, was not envisioned as adding new knowledge since "briefing" implies a passive function. The purpose of a technical board in such a context would be necessarily limited.

In the pages above, a description of the Intake Element was given. This description points out significant differences in the organization of hearings under different authorities. Before analysis and discussion of some of these differences, it will be helpful to

complete the picture of the hearings by consideration of the other two elements studied here: the Screening Element and the Input Source.

THE SCREENING ELEMENT

The screening element was defined in Chapter Iv. In the following pages the operation of the screening element in reference to the public hearings studied will be examined. Again, the purpose here is to assemble data which will be of assistance in the assessment of openness and efficiency in these hearings. The necessary information is specified by the target items developed in Chapter Iv as follows:

(1) an identification of the authorities setting the terms of reference (scope of allowed intake) for the hearings,
(2) a listing of relevant rules for determing this scope,
(3) the rationale for particular limitations upon what is acceptable for intake,
(4) a determination of the scope of coverage these rules permit, and
(5) an assessment of the organization of the intake necessitated by this scope.

These will be considered below.

(1) An identification of the authorities setting the terms of reference (scope of allowed intake) for the hearings.

The Public Utilities Committee Hearings. The authority for setting the terms of reference (scope of allowed intake) for the P.U.C. hearings was the Public Utilities Committee, subject of course to the implied consent of the Seattle City Council.[31] The Committee has the authority to review policies involving the City

of Seattle's utilities programme. This includes specifically the operations of Seattle City Light.

The Washington State Ecological Commission. The issue of the High Ross Dam was referred to the Commission by the Director of the Washington State Department of Ecology. The purpose was said to be providing citizen input toward deciding the position of the State of Washington on the issue. The Commission, however, is empowered to make certain decisions regarding the scope of its inquiry. "In considering a matter submitted to it by the director, the commission shall conduct such public hearings and make such investigations as it deems necessary."[32] (emphasis added) In addition, the Commission may investigate "any matter pertinent to the purposes of this act by consent of a majority of the members."[33] The Commission thus has wide powers to determine the scope of what it will hear.[34]

The International Joint Commission Hearings. The issue of the High Ross Dam was referred to the Commission by a joint reference of the two national governments. The reference specified what could be considered and what could not. This reference was binding and the Commission had very limited powers to modify the scope of its inquiry.

The Seattle City Council. The city council had wide powers to set the scope of its inquiry. It can consider anything within the authority of the City of Seattle. This includes any matter concerning the policies of Seattle City Light.

(2) A listing of relevant rules for determining this scope.
(3) The rationale for particular limitations upon what is acceptable for intake.

(4) A determination of the scope of coverage these rules permit.

The three target items above are considered together in this description.

Generally speaking, respondents felt there should be some focus to the hearings.[35] But the rules concerning content of testimony to be allowed should not be unduly confining as they were in the I.J.C. hearings. In any case, the rules should be known to everyone and enforced impartially.[36]

The Public Utilities Committee Hearings. The P.U.C. hearings generally had wide scope. They were oriented toward a general review of the total range of policies of Seattle City Light.

Geographic Scope. The hearings accepted testimony from Canadians in the matter of the High Ross Dam. On the other hand, the hearings as a collection dealt widely with the entire grid of City Light from its relationships with the Bonneville Power Administration to its Hanford and Kiket Island nuclear plants to the underground wiring system within the City of Seattle. High Ross Dam was one issue among many. The dam was the principal issue in two hearings--the fifth and the seventh (see Appendix A).

Jurisdictional Scope. The P.U.C. hearings were unspecific as to the content of the messages which were acceptable. The issues raised ranged widely from environmental damage in Canada from the High Ross Dam to economic and political arguments for and against many issues including the dam. The hearings did not focus on any one issue at a time. The High Ross was brought up in eight of the nine

hearings held by the Committee to look at City Light policies.

Decisional Scope. The hearings were directed at a review of policy with a view toward making any changes which might appear advisable in light of information learned from the hearings and other sources. In reference to the High Ross Dam, hearings could have taken testimony bearing on a recommendation to the Seattle City Council to drop the project or to proceed with applications and planning. The hearings also considered altering other policies which could have indirectly affected the project, including, for example, the issue of rate or tariff structure. A rise in the rate structure (i.e., the price of electricity) would result in a change in the demand for electricity and, hence, for the dam. Consideration of alternatives could have led to dropping the dam in favour of some other option. This is not to imply that these issues were adequately considered, or that decisions would be based on testimony,[37] but rather that the opportunity for making testimony to these issues was potentially available.

Generally speaking, the P.U.C. hearings had wide scope for allowable intake. There were no serious restrictions on what could be heard.

The Washington State Ecological Commission Hearings. The W.S.E.C. hearings generally had a wide scope, but focussed principally on the High Ross Dam.

Geographic Scope. The authority of the Department of Ecology, and hence of its Commission, tends to limit consideration to issues within Washington and significant to Washington residents. However,

the Commission did listen to Canadians and heard testimony on impacts within British Columbia. It was stated that Canadians could testify even though State authority stopped at the International Boundary.[38] In considering its position, however, the Department of Ecology would have to stay within its authority and base its decision on its assessment of impacts within the state.[39] Environmental damage in neighbouring jurisdictions could not be considered.

Jurisdictional Scope. The Ecological Commission has a major responsibility for consideration of environmental impacts of proposed developments within the state. In this consideration the Commission looked at economic issues such as economic growth, unemployment, and so on, in addition to the environment.[40] By law the Commission is to look at trade-offs between economics and the environment and alternatives between different projects.[41] This broad focus led the Commission to admit testimony on a wide spectrum of issues related to the High Ross Dam. However, in contrast to the P.U.C. hearings, the focus did limit testimony to the High Ross Dam and associated issues.

Decisional Scope. The hearings were directed at two types of decisions. The first was to consider a City Light application for renewal of permits to create a reservoir and to appropriate water. These permits were required by Washington State Law and were issued by the Department of Ecology. The second type of decision was to consider what should be the position of the Department of Ecology and the State of Washington regarding the High Ross Dam. This position would be taken before the U.S. Federal Power Commission.

The Ecological Commission itself had powers to advise the Director of Ecology in this matter. The Commission could not determine Department policy, but could have great influence.[42]

Generally speaking, then, the Washington State Ecological Commission hearings had wide scope for allowable intake with respect to the High Ross Dam.

The International Joint Commission Hearings. The I.J.C. hearings generally had a narrow scope for allowable intake. This scope was dictated by the terms of reference for the hearings, which came from the national governments. The rationale for this limitation might be termed "national interest." The respective nations had carefully discussed with each other what they would allow the Commission to consider. The exact reasons for these restrictions on the hearings were not announced. It might be inferred, however, that the national governments wanted to defuse a very volatile regional issue by hearing the parties to the conflict and looking for a compromise short of a reversal of policy. A look at the scope of these hearings is instructive.

Geographic Scope. The Commission could and did hear both Canadian and American witnesses. It could only consider issues concerning impacts within Canada, however. The Commission's terms of references thus barred consideration of issues within the United States. Since the lake would flood a few thousand acres in the United States and have downstream effects, this restriction was protested by environmentalists. The Commission was powerless to respond.

Jurisdictional Scope. The Commission was limited to consideration of environmental effects. Thus, it was discouraged from considering economic, political, and social issues among others. The Commission in practice viewed these restrictions with some latitude, and did not interrupt or rule out of order witnesses who strayed temporarily from the environmental focus.

Decisional Scope. The Commission was specifically barred from recommending a reversal of the 1942 I.J.C. Order of Approval for the dam and its 1967 enabling agreement between the City of Seattle and the Province of British Columbia. Thus, the Commission was limited to recommending ways of mitigating environmental impacts. The Commission liberally interpreted this restriction and recommended further study with the possible implication that this further study would bode poorly for the damming plan. Thus while the decisional scope was narrow, it was widened slightly by the Commission.

The Seattle City Council Hearing. The scope for the hearing by the Seattle City Council was generally wide, and focussed on the High Ross Dam.

Geographic Scope. While transcripts of this hearing were unavailable, it is known that Canadians were allowed to testify.[43] Testimony was accepted on matters relating to the Canadian side of the border, as well as the American side. There were no obvious restrictions placed on the geographic scope of the hearings.

Jurisdictional Scope. The hearings were designed to review the decision on the dam. Presumably this implied a wide interpretation

of the relevancy of testimony on environmental, economic, engineering and other matters. There were no obvious restrictions placed on the jurisdictional scope of the hearings.

Decisional Scope. The Council had powers to continue the policy of building the dam, or to reverse this policy and drop the plan. In the former case, Council plans would be subject to approval of other agencies, e.g., the U.S. Federal Power Commission, the Washington State Department of Ecology, and various other authorities. In dropping the dam, the Council's powers would be final and decisive. Thus, the scope of policy upon which this hearing could have a bearing was definitive. A third position was available, however, and was followed. This was the position of continuing with plans until the plans were stopped and hopefully compensation gained.[44]

The Council's hearing thus had wide scope with reference to the High Ross Dam.

(5) An assessment of the organization of intake necessitated by this scope.

In Chapter IV we discussed how the scope of input which is taken by a communication system can necessitate some form of labour aimed at synthesis and testing. In all of these hearings, a great deal of information and other input was received. Some of this may have been erroneous or repetitious or heuristic. Part of screening is the process of sifting the testimony to determine what is useful to decision-makers. This includes judging what has been

heard in terms of its veracity, pertinence, and significance. In the following paragraphs we will look at the attempts made to organize the input received into a meaningful form.

The Public Utilities Committee Hearings. After the P.U.C. hearings, a report was made by the staff consultants on the High Ross Dam, based on issues raised in the hearings. This report was a somewhat limited investigation based mainly on the hearings themselves and on discussions with some of the participants, including City Light.

The Washington State Ecological Commission Hearings. The W.S.E.C. hearings uncovered a number of issues which had a bearing on the Department of Ecology's position. The Department looked at these issues, as well as at others, and framed an "in-house" report entitled Environmental Assessment--High Ross Dam.[45] The report, not widely available to the public as of this writing, contains a piercing and lucid consideration of the issue. The report is in point form and contains a candid definition of the Department's evaluation of each issue raised in the hearings and elsewhere.

The International Joint Commission Hearings. The I.J.C. hearings uncovered a variety of issues many of which had arisen in earlier hearings of other authorities. The issues raised were investigated by the Commission and its technical board. The conclusions were reported in a 191-page document entitled Environmental and Ecological Consequences in Canada of Raising Ross Lake in the Skagit Valley to Elevation 1725.[46] This report takes each of the issues within the scope of the Commission's reference and makes an analysis of it. The analysis is followed by

specific recommendations. The analyses are professional and sophisticated in nature, but easily followed by the layman. The report was published for public release.

The Seattle City Council Hearings. The S.C.C. hearings in 1972 were not followed by a report or post facto analysis. Analysis was left to the Councilmen who may or may not have been present for the hearing.

In the pages above, we have considered the Intake Element and the Screening Element. Below we will look at the work of citizens who developed a position and appeared on behalf of that position at the hearings. We will consider this part of the process--the Input Source.

THE INPUT SOURCE

The input source was defined in Chapter IV. In the following pages we will examine the input sources operating in reference to the public hearings being studied. The purpose here is to continue to develop data necessary to the assessment of openness and efficiency in these hearings. The necessary information is specified by the target items developed in Chapter IV as follows:

(1) the identity in broad terms of the input sources and their visible organizations and leading spokesmen.
(2) an examination of the strategies open to input sources in the hearings and which were used.
(3) an examination of the cost to citizens in making testimony in terms of expertise, time, or money.

(4) an examination of special impediments and difficulties encountered by citizens and input groups in using these hearings.

These will be considered below.

(1) The identity in broad terms of the input sources and their visible organizations and leading spokesmen.

Input sources giving testimony at the hearings were of two very broad classifications. There was one side favouring the dam and one side opposing it. These will be described below.

A. Those Favouring the Dam. The input sources favouring the dam included three general classifications. These were: 1. the City of Seattle and Seattle City Light, 2. commercial and industrial organizations, and 3. certain private individuals.

1. The City of Seattle and Seattle City Light. The principle proponent of the dam was Seattle City Light. Seattle City Light is the publicly-owned utility providing electricity to the City of Seattle. City Light was the applicant under the various authorities for permission to raise Ross Dam. City Light's costs were paid out of city and company revenue. These costs, according to Superintendent Gordon Vickery, were "substantial." Mr. Vickery declined to release the exact amount, but indicated that these costs would include retaining three law firms and several consultants.[47] In addition, City Light utilized its own staff for various reports and testimony. These individuals represented and defended City Light's position at the hearings. They were supported by a substantial research

staff all of whom were payrolled employees or consultants. (See Appendix E)

2. Commercial and industrial organizations. The High Ross Dam was expected to have economic benefits for industry and commerce within the State of Washington. This was seen by Washington business interests which responded through industry associations. These groups include at least ly organizations of the following classifications: 7 groups of a chamber of commerce nature or representing general business interests (one of which was from Hope, B.C.), 6 groups representing energy using industries or trades, 2 corporations, and 2 groups representing agricultural interests. These groups are listed in Appendix F. A number of industry witnesses also appeared privately or on behalf of their companies.

3. Certain private citizens. A number of persons appeared on behalf of themselves to support the dam. These individuals included two former Seattle Mayors, as well as other private citizens. In addition, there was testimony from persons representing other citizens such as the Mayor of Sedro Woolley, Washington, Mr. William Pearson, who appeared on behalf of his City government.[48] Certain labour representatives also appeared.

B. Those Opposing the Dam. The citizens opposing the dam included three classifications: 1. large ad hoc coalitions organized

specifically to oppose the dam, 2. other environmental and sporting groups, and 3. other citizens and groups.

1. Large ad hoc coalitions organized specifically to oppose the dam (see Appendix E). The issue of the High Ross Dam was a central issue for a number of organizations concerned with environmental and sporting issues. In order to oppose the dam, these groups joined in two loosely organized coalitions. One of these coalitions was the Seattle-based coalition led by the 2,000-member North Cascades Conservation Council (the N.C.C.C.). This group had been extensively involved in studied and in lobbying with reference to the North Cascades National Park in northern Washington. Its familiarity with the area and its size gave it special claim to leadership of a coalition, including 11 other environmental groups. The N.C.C.C. coalition had several official "expert witnesses" who represented its position and the group had an attorney. These witnesses appeared at the hearings to discuss specialized aspects of the damming plan. All were well-informed in their speciality. (See Appendix E)

A second coalition was based in British Columbia and called "the R.O.S.S. Committee." R.O.S.S. was an acronym standing for "Run Out Skagit Spoilers." This group was a collection of 9 groups who claimed to represent 45,000 citizens of Canada. The group had several spokesmen who appeared to give expert testimony on the issues before

the hearings. While the R.O.S.S. Committee did insure co-ordination between the testimony of various witnesses, it did not have the same level of organization as the N.C.C.C. coalition (see Appendix E).

These coalitions financed some though not all of the studies and reports made at the hearings. A vast amount of professional expertise and time was volunteered by experts who appeared at the hearings or helped with study. The two coalitions had substantial professional talent at their disposal.

The advantages of forming coalitions such as these were clear. No one rejected their importance or validity. Coalitions served to organize testimony into less repetitious and more intensive order.[49] They were well received by hearings boards.[50] There was an attempt at liaison across the border between the N.C.C.C. group and the R.O.S.S. Committee.[51] This sort of coalition was seen as an important development for the protection of the environment.[52]

2. Environmental and sporting groups. In addition to the large coalitions, individual groups with the same concerns about the environment and sporting issues also made input at the hearings. Some of the spokesmen for the coalitions were also among the representatives of smaller groups. There were at least 47 environmental groups and sporting groups from both sides of the border offering testimony either directly or through a coalition in opposition to

the dam. There were 24 groups independent of coalitions giving testimony. There were many witnesses appearing at some of the hearings from these groups. These groups are listed in Appendix H.

3. Other citizens and groups. In addition to the coalitions and the other environmental and sporting groups, there was a sizeable number of citizens who appeared in an individual capacity. Among the most active in Seattle were Richard J. Brooks and Theodore Beck, both of whom are engineers. A prominent Canadian who frequently spoke at the hearings was David Brousson, a British Columbia M.L.A. from the Liberal Party and an engineer. Other witnesses appearing included several students and student groups from junior high through the university level. These witnesses brought wide ranging challenges to City Light testimony.

(2) An examination of the strategies open to input sources in the hearings and which were used.

The object of any strategy used by input sources in a hearing is to make a position clear and to influence the hearings board to adopt that position in subsequent recommendations and a-tion. To do this there are several strategies of varying efficacy. One strategy is to have no strategy--to just appear and argue a case extemporaneously. This strategy could be strengthened by some forethought and a written set of notes to argue from. A more sophisticated strategy would be to

research the issue and draft a carefully worded document to be read or summarized orally and then submitted to the hearings board.

If it is a group which desires to make a statement, some way of legitimizing a position for the group may be necessary. This would include a vote of the membership with exact details to be worked out by the executive officers, or simply a position taken by the executive officers committing the group to a position. However, dissenting members may challenge the statement and embarrass the spokesman. Frequently a simple statement of a position may be considered adequate representation of the group, or perhaps some statement of position along with research and a carefully worded statement--either written or oral.

If there are several groups with common positions, these groups might be joined in a coalition. A coalition has the advantage of visibility because of its size and greater strength due to agreements to pool resources. In any case, either a group or a coalition may allow for specialization with specialists taking component sub-issues and applying their time and work toward developing a well-researched statement.[53]

In the case of the hearings of the High Ross Dam, all of these approaches were used. The wide range of strategies employed in making input was very evident. The most sophisticated presentations came from Seattle City Light which had a cadre of professional witnesses each with a specific assignment to cover certain aspects of the issue. The Seattle (N.C.C.C.) coalition was also well organized with a planned programme of presentations. The R.O.S.S. Committee was

loosely organized but testimony was well-coordinated. After these groups, groups and individuals appeared with decreasingly well organized strategies. Certain individuals, however, evidenced well planned testimony despite their mostly unilateral strategies, e.g., David Brousson, R. J. Brooks and Theodore Beck.

(3) An examination of the cost to citizens in making testimony at hearings in terms of expertise, time, or money.

The strategies above have varying costs associated with them. In some cases, a witness walked a few blocks and delivered a statement and left without staying for the balance of the hearing. This might take only a couple of hours in all, including preparation.[54] On the other hand, certain witnesses attended several hearings with well-researched statements based on their own research. In this case, the cost in time may have been substantial, both in preparing statements and sitting through hearings to hear responses.[55] In each of these cases out of pocket cost of participation was insignificant. The real cost was in the application of professional talent which the witness may possess by virtue of previous training. If this talent has a monetary value when applied to an occupation, then there is a sacrifice when this time is applied to testifying. The cost of the opportunities which the witness foregoes in order to testify. If an engineer has to take time from his consulting work to volunteer testimony, this time can not be also applied to making a living. In terms of this type of cost, referred to by economists as opportunity cost, the costs of citizen input varied substantially.

Collectively, the Seattle coalition, for example, engaged in extensive studies to support their testimony. In fairness, it should be said that some of this work was also applied to other ends, such as proposals for planning or parklands[56] or writing of books (Harvey Manning). But extensive organizational work and special research work was necessary to implement the strategy that the coalition members felt was absolutely essential.[57] It is safe to say that the coalition members volunteered substantially in excess of a thousand hours of time collectively toward opposition of the dam.[58] Valued at ten to twenty dollars an hour professionally, this time could be work tens of thousands of dollars. When the testimony of the R.O.S.S. Committee is computed, as well as the time of independent citizens and groups for and against the dam, it is easy to see that the hearings involved a very substantial investment of public political capital. Direct out-of-pocket costs, though substantial, are a small share of the total costs.

There are some questions, however, about how the costs were distributed. Some anti-dam respondents indicated they felt they were at a disadvantage in opposing the well-organized and financed campaign of City Light.[59] R. J. Brooks, an opponent of the dam, estimated that City Light had spent between $1,000,000 and $1,250,000 on promotion of the dam.[60] Meanwhile, the N.C.C.C. coalition had to go to Vancouver to hire some special witnesses because those in Seattle were already retained.[61] The bill was paid by one group, the N.C.C.C.

The costs of the hearings in terms of expertise are also worth

noting. Reviewing the professional backgrounds of witnesses appearing at the hearings quickly indicates that the level of expertise was very high. Figuring prominently in the roster of witnesses on both side are very well respected experts. There were lawyers, engineers, professors, economists, biologists, and planners at many of the hearings. It is equally clear that professional expertise was not required of witnesses and testimony was heard without regard to qualifications or background. Thus testimony was heard from housewives, junior high school students, and ordinary citizens of all types. On this issue, however, there was some agreement from hearings officers that informed testimony was much more effective, thus giving substantial weight to professional testimony.

The representatives and impartiality of paid witnesses and consultants, however, was strongly questioned. It was said that paid witnesses would say whatever the employer wanted.[62] Professionals can easily become "prostitutes" in such a situation.[63] On the other hand, both sides felt that the issue was complex enough to warrant paid consultants.[64]

(4) An examination of special impediments and difficulties encountered by citizens and input groups in using these hearings.

The principal difficulties experienced by input sources in using the hearings were occasioned by the competition in presenting the most persuasive argument before the various hearings boards. For those who opposed the dam, the principal obstacle to "winning the debate" was in the superior resources which the chief proponent

of the dam, City Light, had.[65] City Light had immense resources to apply to studies and consultants' fees. The resources of the dam opponents were highly restricted.[66] This weakness was overcome in part by the large numbers of persons who were willing to volunteer services to the fight against the dam.

There were some complaints as to the location of hearings. This was due mainly to fear of the influence of groups located near the locations of some hearings. Some of the pro-dam groups feared hearings in northern Washington because of the ease with which Canadians could make testimony.[67] On the other hand, some people in northern Washington resented hearings in Seattle indicating that people in the Skagit valley should determine what happens there.[68] To them, citizens in Seattle were outsiders. Both of these arguments seemed to be based on frustration since the "outside" groups make more work for those on the other side of the issue. One type of outsider which received little sympathy was the person from completely outside of the area. Witnesses from Portland, Oregon, for example, were perceived to have little valid concern over the issue. Canadians, northern Washington residents, and Seattle residents were all seen to have affected interests in the valley, but not persons from outside the region.[69]

There was one more source of special frustration in trying to have influence on the decision-makers. The role of the media in influencing decision-makers and in leading public opinion was seen as a force to be reckoned with in making a case. It was believed that two newspapers took a side in the issue. The Vancouver Sun

in British Columbia tended to oppose the dam giving much publicity to the issue. On the other hand, the Seattle Times took a stand which seemed to favour the dam.[70] This led to efforts to neutralize the effect of the press. It cannot be said just how significant this factor was in the issue,[71] but certainly it is significant enough to merit some study. No analysis was made in this inquiry, however.

DISCUSSION

The hearings were the subject of concern to a good many people. Each of the people interviewed expressed a unique picture of the role and proper operation of the hearings process. Part of the purpose of interviewing participants was to capture some of this diverse perspective. Below we shall look at some of these insights.

The Hearings Process. The hearings on the High Ross Dam were regarded by the participants (witnesses or hearings boards) as necessary. Respondents did indicate that some hearings, not necessarily on the High Ross Dam, were a waste of time.[72] Public officials who attend numerous hearings as a part of their duties may get tired of them.[73] In the case of the High Ross, one respondent said that the issue was "heard to death."[74] But the necessity of the hearings process itself was unchallenged. The hearings process means to citizens that whether or not they agree with the ultimate decisions, they know how these decisions were arrived at. The citizen feels that things are not going on behind his back.[75] This is important in a system where often both sides are unsatisfied with the ultimate

decision.[76] In many cases, the decision is hard to reach,[77] and the public hearing is an important aid to decision-making.

Hearings are a costly process. Dr. Patrick Goldsworthy, leader of the N.C.C.C. coalition, said that the High Ross issue was "the most expensive issue" his group was involved in. But, even considering the expense, the issue was essential to the group, which was interested in the future of the North Cascades, and costs were accepted as part of the ongoing activities of his group.[78] In any case, Goldsworthy seemed to echo the sentiment of many of the respondents when he said, "In a democratic society efficiency is not one of the goals--one of the prices is a certain amount of slippage in efficiency."[79]

The Canadians were not so sure, however. R.O.S.S. Committee spokesman Ken Farquharson indicated much concern about the costs of the hearings. He said that the issue had cost him several thousand dollars in personal income as professional time was devoted to an increasingly costly venture in protecting the valley. Costs came close to preventing R.O.S.S. participation in the Federal Power Commission hearings until the Canadian federal government gave the committee financial aid.[80]

Definition of Affected Interests. One consistent theme in the interviews was the difficulty in defining the "affected interests" to which the hearings boards should listen. No one seemed to feel that Canadians should not be heard at the hearings in the United States.[81] On the other hand, groups from well outside the region were not seen as "affected."[82] Witnesses from "Portland" were

singled out as intruders.[83] One northern Washington respondent indicated that Seattle residents should not "run the hearings" on a northern Washington matter.[84] Generally speaking, it was proposed that hearings boards should listen to persons who are directly involved.[85] Hearings should be held in the areas affected.[86] On the input side, local groups should be used in pursuing local issues.[87]

Representativeness. There were varying opinions on how representative hearings were. John Biggs, the Director of Ecology, felt that the testimony depended a great deal on the day and place where hearings were held. The opinions given at the hearings must be weighed and the testimony should not be taken as necessarily representative.[88] Others felt that interest groups do have a following and do represent a segment of society.[89]

Oral Testimony. There was some disagreement about the role of oral testimony. In some cases hearings board members may be absent or not listening to the testimony.[90] Many suggested that oral statements should be short and written statements filed. But, while some hearings offers indicated that everything which was received was read,[91] others expressed doubts about how much time certain hearings board members had for reading written statements.[92] On the other hand, oral testimony may reach important persons present at the hearings[94] unofficially, or may be quoted in the newspapers.[93] The hearings officials may take summaries of the hearings from the newspapers.[94]

Organized Testimony. The importance of organized testimony at the hearings was widely recognized. Particularly important is the avoidance of repetition.[95] This may involve coordination with other groups or foregoing testimony which duplicates earlier testimony.[96] Testimony should be presented as a clear, logical argument based on the facts and knowledge.[97] Emotional testimony is frequently discounted,[98] but there should be some place for public expression of feelings.[99]

Sworn Testimony. The idea of swearing witnesses to tell the truth was suggested as a means of keeping testimony to the facts.[100] But other respondents disagreed, indicating that such a procedure would frighten witnesses and limit their free expression.[101] In any case, it is possible that whether testimony is sworn or not would have little effect on the decision makers.[102] Ann Widditsch of the Ecological Commission indicated that in evaluating honesty she would "see which guy she would buy a used car from."[103]

SUMMARY

Sifting through this material, one cannot but be impressed with the positive seriousness with which the hearings process is seen. In some cases they are scoffed at and in other cases idealized, but in no case are they rejected as insignificant. The political influence of hearings is widely supported.

Openness is a significant concern of people involved in the hearings. Hearings are closely watched by hearings boards and citizens for signs of restricted openness. The watchdog effect of

public censure encourages openness. On the other hand, public scrutiny can encourage excessive openness where too much non-germaine testimony is admitted because of a desire for fairness.

Efficiency is also a clear concern of people involved in the hearings. Suggestions of time limits and organizing testimony are numerous. The citizens and hearings officers alike seemed to be fully willing to expedite efficiency wherever this can be done without compromising openness.

The Public Utilities Committee Hearings

Openness. The scope of the Public Utilities Committee hearings was too wide to screen out extraneous issues and focus on any single issue adequately. On the other hand, the hearings board had limited technical understanding of the issues it faced. Since perception is an important part of openness, the hearings were less able to receive input. The hearings also allowed blocks of time to City Light which allowed the City special access to the rostrum, but adequate access was also allowed the opponents to the dam. The opponents availed themselves of this opportunity. Opponents, however, had not yet formed coalitions and thus were still a bit random and disorganized in making input. All things considered, however, the hearings were open and with the above reservations did allow adequate access to decision-makers.

Efficiency. The costs of participating in the P.U.C. hearings were minimal. The citizens had not yet organized and simply appeared and made statements. In some cases these statements did involve sub-

stantial preparation, but costs had not yet risen to prohibitive levels.

The Washington State Ecological Commission Hearings

Openness. The W.S.E.C. hearings were characterized by wide scope for allowable intake and technical proficiency for comprehending this input. The hearings simply limited scope to the High Ross Dam and pertinent issues. The professional and vocational background of the hearings board insured a sound understanding of the issues. In addition, the hearings were well announced, well located and had a minimum of restrictions of participation. As in the case of the P.U.C. hearings, however, City Light had a special block of time, but citizens managed to obtain adequate access to the rostrum. Coalitions aided these citizens in making a coherent and effective presentation at the hearings.

Efficiency. The hearings of the W.S.E.C. were simple to use, but the cost of testimony began to rise with the development of sophisticated statements by the citizens. The ease of using the hearings was notable, however, and a large number of witnesses made statements. The two large coalitions made a great impact by pooling their resources to make more organized and sophisticated presentations, thus making a substantial contribution toward representing "the party of the second part." This also simplified the requirements of the ordinary citizen who needed only to state his position and whether he agreed with either City Light or the coalitions.

This citizen's input of new testimony might be limited to coverage of issues which he felt City Light or the coalitions did not adequately cover.

The International Joint Commission Hearings

Openness. The hearings of the International Joint Commission were characterized by limited scope of allowed intake with respect to all categories: geographic, jurisdictional, and decisional. However, the I.J.C. did not rigidly adhere to its terms of reference. In addition, the I.J.C. had wide technical proficiency at interpreting the issues and substantial technical support. The latter may have partly ameliorated the impact on openness of the restricted scope of reference. However, it must be noted that the restricted scope of reference of the only international authority holding hearings and the only authority even partly under the auspices of Canadian authorities, must certainly be regretted.

As in previous hearings, the I.J.C. hearings allowed a special block of time to City Light while limiting opponents and other proponents to short statements. Again, as in the case of previous hearings, this did not mean opponents were not allowed access to the rostrum. Their greater numbers insured a significant volume of testimony.

Efficiency. The effort involved in using the hearings was not great if the citizen only wanted to make a simple statement. However, citizens had determined that a major effort was required and their expenditures had risen accordingly. The use of legal

assistance and the conducting of sophisticated studies cost substantial sums. In fairness, much of this cost had been incurred in preparation for earlier hearings and the incremental cost of preparing for the I.J.C. hearings was thus not as great as it would have been in the situation where these were the first hearings on the subject.

In terms of efficiency, the I.J.C. hearings point to another issue. The authority of the I.J.C. as the international body associated with the issue highlighted the crucial nature of these hearings, encouraging citizens to engage in extensive preparation. However, if efficiency is the process of gaining the most output for the least input, it must be concluded that the limited scope of allowable intake frustrated efficiency in these hearings.

In this chapter the results of research on the High Ross hearings were presented. In Chapter VI a series of conclusions based on these results is presented.

FOOTNOTES

[1]See Appendix I for biographical description of interviewees.

[2]William Pearson, interview, Sedro Wooley, Washington, April 9, 1974, 8:30.
Biggs, interview, Longview, Washington, April 11, 1974, 10:30.

[3]Goldsworthy, interview.
John Nelson, memorandum to Gordon F. Vickery, Seattle, 1972.

[4]Timothy Hill, interview.
Clay Leming, conversation, April 4, 1974, 2:30 P.M.

[5]Leming, conversation.

[6]Public Utilities Commission, Hearings, March 25, 1970 through May 25, 1970, Seattle.
Cooley, interview.

[7]Goldsworthy, interview.

[8]Interviews: Masley, Brooks, Goldsworthy.

[9]Interviews: Masley, Widditsch.

[10]Masley, interview.

[11]Leming, conversation.

[12]Masley, Cooley, interviews.

[13]Masley, Widditsch, interviews.

[14]John C. Hill, interview, Mt. Vernon, Washington, April 9, 1974, 2:00 P.M.

[15]Masley, interview.

[16]J. Hill, interview.

[17]Goldsworthy, Brooks, J. Hill, other, interviews.

[18]Gordon Vickery, interview, April 1, 1974, 1:30 P.M.

[19]Biggs, interview.

[20]Brooks, interview.

[21]T. Hill, interview.

[22]J. Hill, interview.

[23]Brooks, interview.

[24]Goldsworthy, interview.

[25]T. Hill, interview.

[26]Brooks, Cooley, T. Hill, interviews.

[27]T. Hill, interview.

[28]Brooks, Cooley, interviews.

[29]T. Hill, interview.

[30]Masley, interview.

[31]Cooley, interview.

[32]R.C.W. 43. 21A.200.

[33]R.C.W. 43. 21A.210.

[34]Widditsch, Masley, Biggs, interviews.

[35]Cooley, others, interviews.

[36]Widditsch, interview.

[37]T. Hill, interview.

[38]Masley, interview.

[39]Biggs, Masley, interviews.

[40]N.R.R.A. Annual Report, 1972, op. cit.

[41]Ibid.

[42]Masley, Widditsch, interviews.

[43]The Vancouver Sun, April 11, 1972.
Seattle Post-Intelligencer, April 1, 1972.
Seattle Times, April 2, 1972.

[44]Cooley, T. Hill, interviews.

[45]Environmental Evaluation Team, Washington State Department of Ecology, Steve Mitchell (ed.), Environmental Assessment: High Ross Dam (Olympia, 1974).

[46]International Joint Commission, Environmental and Ecological Consequences in Canada of Raising Ross Lake in the Skagit Valley to Elevation 1725 (Ottawa-Washington, D.C., 1971).

[47]Gordon Vickery, interview.

[48]Pearson, interview.

[49]Goldsworthy, interview.

[50]Goldsworthy, others, interviews.

[51]Goldsworthy, Farquharson, interviews.

[52]Goldsworthy, interview.

[53]Ibid.

[54]J. Hill, interview.

[55]Brooks, interview.

[56]Goldsworthy, interview.

[57]Goldsworthy, Brooks, interviews.

[58]Brooks, interview.

[59]Goldsworthy, Brooks, Widditsch interviews.

[60]Brooks, interview.

[61]Ibid.

[62]Masley, Goldsworthy, Brooks, interviews.

[63]Masley, interview.

[64]Brooks, Vickery, interviews.

[65]Goldsworthy, interview.

[66]Brooks, Farquharson, interviews.

[67]Biggs, interview.

[68]Pearson, interview.

[69]Goldsworthy, J. Hill, Pearson, others, interviews.

[70]Goldsworthy, T. Hill, interviews.

[71]Widditsch, interview. Mrs. Widditsch was sceptical.

[72]J. Hill, interview.

[73]J. Hill, Goldsworthy, Pearson, interviews.

[74]Brooks, interview.

[75]Goldsworthy, interview.

[76]Ibid.

[77]Masley, interview.

[78]Goldsworthy, interview.

[79]Ibid.

[80]Farquharson, interview.

[81]J. Hill, Pearson, Cooley, Widditsch, others, interviews.

[82]Masley, Goldsworthy, Pearson, interviews.

[83]Pearson, J. Hill, interviews.

[84]Pearson, interview.

[85]J. Hill, others, interviews.

[86]Pearson, interview.

[87]Goldsworthy, interview.

[88]Biggs, interview.

[89]Goldsworthy, interview.

[90]Ibid.

[91]Masley, Widditsch, Cooley, interviews.

[92]T. Hill, interview.

[93]Goldsworthy, interview.

[94]T. Hill, interview.

[95]J. Hill, Brooks, Goldsworthy, interviews.

[96]J. Hill, Brooks, Goldsworthy, Masley, interviews.

[97]Goldsworthy, J. Hill, interviews.

[98]J. Hill, Masley, Cooley, interviews.

[99]Brooks, interview.

[100]Vickery, interview.

[101]Goldsworthy, Brooks, others, interviews.

[102]T. Hill, interview.

[103]Widditsch, interview.

CHAPTER VI

CONCLUSIONS AND IMPLICATIONS

In Chapter V, the results of the research on certain public hearings held with reference to the High Ross Dam were discussed. This research supports several conclusions with regard to openness and efficiency. In this chapter, these conclusions will be discussed. Finally, some of the implications these conclusions hold for the management of international rivers will be explored.

CONCLUSIONS

The conclusions below are based on the research of Chapter V. They indicated that the hearings as a collection were democratic in terms of the criteria established. Nevertheless, the hearings process has exhibited certain weaknesses which merit our attention as we design more responsive and democratic institutional arrangements for international rivers management. The conclusions below are limited in reference, however, to the Skagit and should not be assumed to apply in all cases of international rivers management. It should be said that the context of many international river conflicts differs greatly from that of the Skagit. In this light the conclusions below are offered.

Conclusions Respecting Openness

Conclusion I. *The hearings as a collective were open.* Based on the model of multiple channels leading to the decision-

makers, it can be concluded that there was adequate access to channels where citizens may freely make input. This is substantiated by the wide scope of information accepted collectively at the various hearings as seen in the transcripts and by the interviews of participants.

Conclusion II. *The openness of individual hearings varied considerably: the 1971 I.J.C. hearings were not fully open and the 1970 P.U.C. hearings were too open.*

The differences between various hearings were striking. The I.J.C. hearings were characterized by limited geographic, jurisdictional, and decisional scope. The concern of these hearings was too narrowly delimited to consideration of mitigating measures for the protection of the environment in Canada from the Ross D
of the environment in Canada from the Ross Dam. In fairness, it should be said that these restrictions were not rigidly adhered to. On the other hand, the P.U.C. hearings did not focus attention on one issue at a time, but allowed testimony freely on a variety of subjects at each of its several hearings in 1970.

Conclusion III. *There is reason to believe that the hearings were influential in affecting the position of decision-makers.*

Discussions with decision-makers and review of events subsequent to the public hearings lead to a conclusion that these hearings did translate to action. While it can not be argued that the hearings represented a cross section of the population, it can be said that those citizens who testified at the hearings represented a potent political force. In one case, public expression may have led to a

change in the decision-makers through voter action at the polls.[1] In another, the neutral response of the hearings commission validated the position of the decision-maker.[2] Strong public pressure thus directly or indirectly affected political positions of decision-makers.

Conclusion IV. *Openness of a public hearing may be affected by the technical proficiency of the hearings board or supporting staff.*

The level of perceptiveness which the hearings board or its staff may have is strongly affected by the level of knowledge and expertise evidenced by the background of its personnel. Thus, the International Joint Commission and the Washington State Ecological Commission evidenced a strong background on their boards and supporting staff, while the Public Utilities Committee suffered from its more limited expertise. The P.U.C. board members expressed an awareness of these limitations and hired consultants which did not fully resolve the problem.

Conclusion V. *The goal of encouraging free expression by citizens means that an open public hearing must admit some testimony of varying quality and veracity.*

As any jurist knows, it is possible to build two surprisingly cogent cases from the same set of facts. Frequently the total range of facts surrounding an issue are unknown or disputable. Much factual and specialized information was presented at the

hearings. In the above sets of hearings, concern was expressed for means of testing the accuracy of this testimony within a system which would not discourage or intimidate witnesses.

Conclusion VI. *Openness of a hearing can be affected by the volume of input which is expected by the hearings officers.*

A consensus exists that some limit on the volume of testimony is necessary to allow a fair allocation of time to all affected interests. The widely used system of a short oral statement coupled with written statements seemed acceptable. Some doubt was expressed as to whether everything written was read,[3] but equally of doubt is that everything said is listened to.[4] Ultimately, this would depend upon the decision-makers and the amount of input. Broadly speaking, it was found that both citizens and hearings officers respected conciseness and brevity as most effective.

Conclusion VII. *Openness of a hearing can be and was affected by rules granting special time privileges to some parties and not to others.*

In most of the hearings on the issue, the applicant for the dam, City Light, was offered a special and lengthy block of time to make a case for the dam. Following this, limited time was allowed for organizations and, finally, for citizens. This procedure gives the protagonists greater opportunity to make their position clear, if the time is well used. Without a free and equal opportu-

nity for the party of the second part, the opponents, to make a position, this special opportunity means the hearings are more open to some than to others.

Conclusion VIII. *Notification procedures were very important in determining the openness of these public hearings.*

In all cases, hearings officers had a procedure for attempting to notify citizens. In all cases, this process of notification was conceived to be a difficult and sensitive task. A primary tactic for strengthening the hearings process was seen as improvement in notification procedures. There is no way of knowing if all affected interests knew of the hearings, but it may be concluded that there was an attempt made to reach as many as possible. None of the interviewees indicated doubts about the fairness of the notification procedures.

Conclusion IX. *The identity of witnesses and their affected interest in the proposals considered were not always determined.*

In reviewing transcripts and through interviews, confusion was found as to who was testifying and why. While no one challenged the relevance of the concern of Canadian witnesses, there was some concern about witnesses appearing from "Portland."[5] Others expressed the greater credibility and effectiveness of local groups.[6] The representativeness of a group position with respect to its members has been challenged (U.B.C. student government, Mountaineers,

Hope Board of Trade). Numerous groups largely unknown to the hearings board presented testimony. On the other hand, consultants paid by the various groups offered testimony without disclosing financial support. Concern was expressed in interviews that hearings boards should know who they are listening to and what direct concern the witness has with the issue. If hearings boards are to listen to "all affected persons," they must know what the special interests of each witness are.

Conclusion X. *With the exception of the International Joint Commission hearings, the hearings authorities investigated were not required to consider the affected interests of Canadians.*

The City Council of Seattle is a municipal legislature with a requirement to be responsible to the Seattle electorate. The Department of Ecology, to which the Ecological Commission reports, is a Washington State agency responsible only to the citizens of the State of Washington. The Federal Power Commission is responsible only to citizens of the United States. In each of these cases, it could not be held legally responsible for Canadian affected interests, though perhaps moral responsibility was felt. Perhaps, that the U.S. boards did listen is a unique event not found elsewhere in the world: the authorities of one nation accepted testimony from the citizens of another. Nevertheless, it is clear that there were no hearings held exclusively under the authority of Canadian authorities. Thus, Canadian authorities have not sought public

[illegible] hearings pro[illegible]

input through the hearings process from their citizens. In a context of transboundary political involvement, this also indicates that Americans have not had access to Canadian authorities via hearings.

Conclusions Respecting Efficiency

Conclusion XI. *The cost involved in presenting testimony to these hearings was very heavy.*

Those who attempted to make testimony at these hearings as a group spent very large blocks of money and time on this issue. City Light, the applicant, had expenses involved which would have been incurred in any case, but its special costs in these hearings were substantial.[7] Substantial may be taken to mean several hundreds of thousands of dollars. On the other side, one group, the N.C.C.C. Seattle Coalition, had direct expenses of at least $10 to $15 thousand. In addition, it "invested" the time of its members, which had an opportunity cost associated with it. Based on review of the results of this labour and on interviews, this expense is undoubtedly worth tens of thousands of dollars.

Conclusion XII. *For the citizens who participated in these hearings, the costs were not too heavy.*

No one interviewed suggested that there should not have been hearings on this issue. This issue was considered very important by both sides and opportunity to present input was accepted or

welcomed. One extremely important qualification is that in every case those interviewed were in a socio-economic and educational position which gave them the resources with which to do the necessary preparation and cover the expenses they incurred. This study did not deal with the political capabilities of low income persons.

Conclusion XIII. *There were substantial advantages to City Light in terms of its ability to absorb effort costs.*

The revenue base of a large bureaucracy which attempts to make a position at a hearing is clearly a significant advantage. Testimony presented by City Light was presented by paid officers and consultants. Testimony of other witnesses for and against was not necessarily paid. Researching issues to make intelligent testimony is an expensive proposition. In fairness, it should be said that the burden of proving the feasibility of a dam is clearly on the applicant. On the other hand, an incumbent position such as the High Ross Dam plan has already been legitimized and the burden of proof for reversal of the decision may well be on the opponents. These proscriptions aside, it is still clear that there is advantage to the bureaucracy.

Conclusion XIV. *Substantial efficiency and effectiveness in presentation of testimony can be achieved by organization of testimony by ad hoc coalitions of citizens.*

A forum which hears copious testimony from many citizens has a great

amount of overlap and duplication, as well as gaps in coverage of some issues. A coalition may allow witnesses to specialize without concern about other points of interest being neglected. Specialization allows more intensive concentration on certain issues while still covering the same range of topics. As well, it presents the consensual position of its member groups. It allows for pooling of expertise and financial resources toward a common position.

Conclusion XV. *The demand for sophisticated testimony and expensive preparation in hearings of this nature may potentially limit the role of persons of limited socio-economic and educational background.*

These hearings accepted testimony of varying sophistication. However, the most sophisticated testimony required financial resources to enable preparation and appearance. Many of the presentations required substantial preparation including field work, materials, and leisure time. This preparation necessitated spending considerable sums of money and time. On the other hand, special biological and technical testimony required some specialized and sophisticated educational achievement. The widely documented existence of classes with little discretionary income and low educational achievement leads to concern for the capacity of these persons to make tangible impact upon decision-makers through the hearings process. This study merely indicates a conclusion that the cost may be too high for these persons.

Conclusion XVI. *The location of a hearing substantially affects the effort involved in using it and who can testify.*

A check of the roster of witnesses for each of the hearings indicates a substantial tendency for witnesses to favour attendance at hearings close to home. It might be stated as a proposition that the witness has a propensity for attending a hearing which is inversely proportional to the distance to that hearing. Clearly, holding the hearings close to the affected citizens supports an open and efficient hearings process.

Conclusion XVII. *The public media have a large influence on decision-makers which affects the level of effort required for citizens to obtain the attention of these decision-makers.*

The position of an ostensibly representative and neutral press corps can have a great influence on decision-makers. It can manufacture issues and have great impact on the political fortunes of decision-makers. It is convenient to discharge complaints against the press as attacks upon someone else's opinion. It is fashionable to stand on the doctrine of freedom of the press. It was clear in the case of the High Ross Dam that the various newspapers took strong stands and supported these stands with news selectivity. These positions affected the level of effort necessary by citizens to affect the decisions through hearings. The press, in creating

an aura of severe criticism of a project, can necessitate great effort toward neutraliziation by the project proponents. This study makes no assessment of the press's role except to indicate that this role is large and perhaps largely unrecognized.

Conclusion XVIII. *Openness and efficiency are synergistic factors which operate in an interrelated pattern in which changes in the level of efficiency cause changes in the level of openness and vice versa.*

It became evident during this research that the level of openness affects the level of efficiency. If hearings are not sufficiently open, the access to the decision-makers is limited. This means that the efforts of citizens have less reward in relation to effort. The hearings in this case would not be efficient. On the other hand, if hearings are not focussed, the channels may become overloaded and the citizen's message on a particular subject is lost in the masses of input. Again, his effort is wasted.

It is easy to see that the level of efficiency also affects openness. If hearings processes are difficult to use, citizens may be discouraged from participating. While openness was defined as the receptiveness of the system to input without regard to the costs to the citizen (efficiency), it is clear that one possible and effective screen is the level of effort required to make a statement. Thus openness in the wider sense is sacrificed.

Conclusion XIX. *The efficiency and openness of the public hearing relative to other forms of input requires analysis of other forms of input in comparison.*

This thesis has sought to determine if the system of public hearings was open and efficient. To measure adequately how open and efficient the hearings were, some form of measure or index of openness or efficiency is necessary. In this thesis, time constraints inhibited research of alternative channels of communication as standards of comparison. This would involve the assessment of the comparative openness and efficiency of the different methods based on some index of comparison. The approach used in this thesis was not to assess the hearings based on comparison with alternatives, but rather on the performance given a set of criteria. The question then was "were the hearings open and efficient?" The question of how efficient and open the hearings were, in terms of the "second best" alternative, was left to further study in other research. This further study is very important should merit immediate attention.

IMPLICATIONS FOR INTERNATIONAL RIVERS MANAGEMENT

The conclusions above have certain implications for the management of international rivers. The hearings process was found to be an open process feeding useful information on citizen preferences to decision-makers. In terms of the management of international rivers, this would imply that a democratic arrangement would utilize the public hearings channel wherever its decisions affected a sizeable segment of the citizens for whom it is responsible.

Of course, the limitations of the International Joint Commission should be kept in mind. The I.J.C. is not an elected body, but an administrative arrangement between the two national governments. As such it has the responsibility to represent the national interests of the respective nations. Local interests may be sacrificed in the national interest. However, the governments must have a means of weighing what these interests are. If politics is a process of bargaining, then the bargainers should know what the stakes of the game are. They should listen to local input.

In the case of the Canadians, local input went international. There were no hearings under exclusively Canadian control. And, the only institution with international responsibilities, the I.J.C., had limited openness. So Canadian authorities did not receive Canadian or, for that matter, American input via the hearings process. There was no dialogue between Canadian and American authorities on a local level. American hearings were not required to take Canadian affected interests into account. Perhaps the hearings were open and democratic, but, if so, then perhaps it is all the more important that they should be sponsored by all authorities with a role in the issue. A relevant suggestion would thus be that in issues such as the High Ross Dam, Canadians could hold hearings with respect to the position respective governments should take and why.

The mechanics of this suggestion are not simple. Canadians may have a different view of the hearings process than Americans. The Canadian governments, provincial and federal, operate on a

parliamentary system where the decision to hold hearings may be at the initiative of the government and thus highly political. The government could decide to hold hearings when it would serve the interests of the government, and not necessarily the interests of the citizens. Thus certain automatic provisions would be necessary to insure openness. An example of an automatic process is the Washington State Ecological Commission. The Commission has the independent authority to decide to hold hearings on any issue under the authority of the Department of Ecology. The Commission also contains representatives of several segments of society. Thus, it acts as a watchdog on the actions of the Department. This procedure insures that the hearings will be held when citizen interests dictate and not when hearings are politically expedient.

Another implication of this study is that the costs of certain types of participation are very high. This may lead to great advantage to the input source with the greatest financial and technical resources. To quote Dr. Ian Efford, a Canadian opponent to the dam:

> It is generally accepted that every accused should be defended at his trial and that, if he is poor, the state should pay for his defense. Unfortunately, it is not yet accepted practice for the state to pay for the defense of our environment when it is on trial. A proposal to develop or use an environmental resource is accompanied usually by a powerful argument supported by expert testimony which is both funded and edited by the developer. Arguments that the natural resource might be better used in other ways or just left untouched--as an investment in the future--are usually presented by amateurs and rarely funded by more than a few dollars.8

Somehow, to have a fair hearing of a problem, some form of balance is necessary. There is some merit in financial or technical support of the "party of the second part" where necessary.

The mechanics of how to deliver this support are not at all clear. To leave it to political government authorities would mean political choices would be involved in the allocation of monies and technical support. Rather, support would have to be carefully justified. In the last analysis, any support alters the existing distribution of resources and is thus highly political.

In this vein, the Canadian federal government is giving aid to the R.O.S.S. Committee in support of its presentation at the Federal Power Commission hearings.[9] The Federal Power Commission is hiring certain spokesmen of the U.S. opposition to the dam to testify as expert witnesses. Any means of support has strong political overtones, but some way of overcoming the organizational or financial advantages of the strong side should be explored.

Meanwhile, citizens should be encouraged to form coalitions where this makes for more efficient use of their resources. The simplification and sophistication of their work greatly aids in the process of accepting input. It provides aatangible party of the second part. It abbreviates testimony and leaves more time to other witnesses.

Finally, in light of this research, certain principles of a democratic hearing may be inferred. Hearings should have balanced time rules, adequate notification, and so forth. It would seem a

positive step for hearings authorities to adopt a clear procedure. This procedure should be flexible, but the reasons for discretionary action should be thought about and made explicit. In this way, we use a very important vehicle of political communication in a thoughtful way.

The hearings process is an ostensibly simple vehicle for communicating with de
municating with decision-makers. It has become an important part of North American political communication. Beneath the simple exterior, however, are suble variables which may fluctuate from hearing to hearing. Hearings may be open in terms of their scope of allowed intake and yet closed in terms of the ability of the hearings board to understand what is presented. Hearings may be meant as therapy sessions to relieve political frustrations, or meaningful vehicles of citizen communication and control. These and many other variables can determine how open and easy the hearing is to use. In the end, with a political system increasingly dependent upon the hearings process for information, knowledge concerning these variables may have a tremendous influence on the character of North American democracy.

FOOTNOTES

[1]T. Hill, Cooley, interviews.

[2]Biggs, interview.

[3]T. Hill, interview.

[4]Goldsworthy, interview.

[5]J. Hill, Pearson, interviews.

[6]Goldsworthy, interview.

[7]Vickery, interview.

[8]Ian Efford, Ph.D., "Preface," The Future of the Skagit Valley, op. cit.

[9]Farquharson, interview.

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[illegible]

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GOLDSWORTHY, PATRICK. Personal interview. 11:30 P.M., April 2, 1974. Seattle, Washington.

BROOKS, RICHARD J. Personal interview. 3:00 P.M., April 2, 1974. Seattle, Washington.

LEMING, CLAY. Conversation. 2:30 P.M., April 4, 1974. Seattle, Washington.

WIDDITSCH, ANN. Personal interview. 3:30 P.M., April 4, 1974. Seattle, Washington.

HILL, TIMOTHY. Personal interview. 11:30 A.M., April 5, 1974. Seattle, Washington.

MASLEY, ARPAD, M.D. Personal interview. 1:30 P.M., April 5, 1974. Bremerton, Washington.

PEARSON, WILLIAM R. Personal interview. 8:30 A.M., April 9, 1974. Sedro Woolley, Washington.

HILL, JOHN C. Personal interview. 2:00 P.M., April 9, 1974. Mount Vernon, Washington.

WASHINGTON STATE ECOLOGICAL COMMISSION. Observation of Meeting. April 11, 1974. Longview, Washington.

BIGGS, JOHN. Personal interview. 10:30 A.M., April 11, 1974. Longview, Washington.

LEMARQUAND, DAVID. Personal interview. 2:00 P.M., April 15, 1974. Vancouver, B.C.

FARQUHARSON, KENNETH. Personal interview. 8:00 A.M., April 17, 1974. Vancouver, B.C.

APPENDICES

APPENDIX A

A SURVEY OF THE CONTENT OF PUBLIC UTILITIES COMMITTEE HEARINGS, SEATTLE CITY COUNCIL, MARCH 20, 1970 TO MAY 25, 1970

The Public Utilities Committee of the Seattle City Council held a set of nine hearings from March 20, 1970 to May 25, 1970. These hearings were initiated because of a recognized interest of Seattle citizens in reviewing a wide range of policies of the city's utility, Seattle City Light. Concern had been expressed that the utility's policies were out of step with the wishes of the city and its residents. The following is a survey of these hearings meant as background to analyses found in the text.

This review will consist of two parts: the description of hearings with minimal testimony on the High Ross Dam, and then a description of the hearings with extensive testimony on the dam.

Hearings with Minimal High Ross Testimony

1. Hearing Number One, March 20, 1970. The topic announced for the hearing was the "Goals of City Light." The Dam was mentioned in scattered places as part of more general testimony. One citizen, Mr. R. J. Brooks of Seattle, delivered testimony indicating opposition to City Light's High Ross policy as part of a more general criticism of City Light.

2. Hearing Number Two, March 26, 1970. The topic announced for this hearing was also the "Goals of City Light." There were scattered references to the Dam by City Light officials, but no intensive

treatment of the issue. There was a group of citizens testifying. Four of these citizens spoke against the Dam. There were no speakers in favour. These witnesses were R. J. Brooks (Seattle), Ken Farquharson and F. J. Bartholomew (British Columbia, representing several environmental/outdoor groups), and Theodore Beck (Seattle). Testimony of these witnesses represents about a quarter of the time of the hearing.

3. Hearing Number Three, March 31, 1970. The topic of this hearing was "The Role of City Government." Very little testimony was directed toward the High Ross, with no witnesses speaking directly to the issue of the Dam. References were occasionally made to the Dam in relation to some other issue.

4. Hearing Number Four, April 8, 1970. The announced subject of this hearing was the "Environment." Five environmentalists appeared on the Dam, including Dr. Patrick Goldsworthy, Margaret Miller and Brock Evans of the North Cascades Conservation Council, and Charles Dolan of the Sierra Club of Western Washington. Another witness mentioning the Dam was Polly Dyer. These witnesses accounted for about a quarter of the testimony at the hearing. They all spoke in opposition to the Dam. City Light did not present testimony at the beginning of the hearing as was the usual practice.

5. Hearing Number Six, May 1, 1970. The topic of this hearing was "Finances." Testimony on the Dam was minimal, with Patrick Goldsworthy, R. J. Brooks, and Theodore Beck making short statements and requesting certain information at the hearing.

6. Hearing Number Eight, May 15, 1970. This hearing was on "Underground Wiring" and contained no testimony on the Dam.

7. Hearing Number Nine, May 25, 1970. This hearing was the last of the series and was on the "Financial Obligations of Public Utility to Municipal Government." The High Ross was mentioned by four speakers including Theodore Beck, R. J. Brooks, David Hill, and Katie Madsen. All spoke in opposition to the Dam.

Hearings with Extensive High Ross Testimony

The above hearings were more general hearings and dealt with subjects in addition to the High Ross Dam. They were mentioned to give some assessment of their role in the presentation of the Skagit issue. The above hearings represent a minor amount of testimony presented on the Dam. Two hearings of the total nine did deal mainly with the Dam. These will be surveyed briefly here.

1. Hearing Number Five, April 16, 1970. The purpose of this hearing was to discuss the "Environment." The focus quickly became the High Ross Dam. About 97 per cent of the hearing dealt with the Dam. There were twenty-eight witnesses present to testify and Canadians were included among the speakers. Twenty-one witnesses were against the Dam. The hearing was longer than the other hearings and many of the speakers presented written briefs along with testimony. There were 19 written submissions totalling 89 pages.

2. Hearing Number Seven, May 7, 1970. The purpose of this hearing was to discuss "Finances," but it was announced at an earlier hearing

that the High Ross Dam would also be considered. About 68 per cent of the hearing dealt with the Dam. The main witness was Cas Bradeen, the Power Manager of City Light, speaking for the Dam. In addition to Mr. Bradeen, City Light Superintendent John Nelson and Norm Jacox spoke for the Dam. Three witnesses spoke in opposition, including Patrick Goldsworthy, Theodore Beck, and R. J. Brooks.

Summary

The High Ross Dam was the primary subject of two hearings, Hearings Number Five and Seven. Statements on the Dam were made at four other hearings including Hearings Number One, Two, Four, and Six. There was discussion but no formal statements in reference to the Dam in Hearing Three. Hearing Eight did not consider the issue. Thus hearings contained amounts of testimony on the Dam varying from zero to 97 per cent. Hearings Five and Seven are analyzed in more detail elsewhere in this inquiry.

APPENDIX B

COMPOSITION OF THE HEARINGS BOARDS

The Public Utilities Committee, Seattle City Council.

Members:

Chairman George Cooley
Councilman Liem Tuai
Councilwoman Jeanette Williams
Councilman Wayne Larkin
Councilman Timothy Hill

Special Consultants:

Professor Douglass C. North, University of Washington
Professor Yoram Barzel, University of Washington

The Washington State Ecological Commission.

Chairman Arpad Masley, M.D.
Vice Chairman Harold Heacock
Ann Widditsch
John McGregor
Charles Stewart Sargent
Professor Gordon Orians
Sam Kinville

The International Joint Commission.

Canadian Section:

Chairman Louis Robichaud
Professor Anthony Scott
Mr. Beaupré
American Section:

Chairman Christian Herter, Jr.
Charles Ross
Eugene Weber

The Seattle City Council.

Hearings Chairman Wayne Larkin
The Council

APPENDIX C

LISTING OF TECHNICAL BOARD PERSONNEL OF THE INTERNATIONAL JOINT COMMISSION

The International Joint Commission is supported by ad hoc technical boards in the investigation of issues before the Commission. Boards are normally assembled to investigate an issue with personnel coming from various local and national agencies and private life, and returning to their normal pursuits at the conclusion of their investigations. Below is a list of the individuals who assisted the International Joint Commission in its 1970 investigation of the environmental consequences in Canada of raising Ross Dam to elevation 1725.

Gary Bowden (Leader of the technical group)
with Pearce, Bowden Economic Consultants
Vancouver, B.C.

Dickson MacKinnon
Fisheries Biologist
Department of Fisheries and Forestry
Province of British Columbia
Vancouver, B.C.

R. B. Smith
Research Scientist
Department of Fisheries and Forestry
Province of British Columbia
Victoria, B.C.

Dennis Lundblad
Hydrographics Engineer
Geologist
Environmental Review and Evaluation Section
Department of Ecology
Olympia, Washington

Henderson McIntyre
Chief, Branch of Power Resources
Bonneville Power Administration
Portland, Oregon

Robert McNeil
Plans Coordinator
Pacific Northwest River Basins Commission

APPENDIX D

LINES OF TESTIMONY BY POSITION AND NATIONALITY

TESTIMONY BY POSITION

HEARING	LINES PRO-DAM	CON-DAM	NEUTRAL	TOTAL FOR HEARING
PUC # 5 Seattle	516	1394	0	1910
PUC # 7 Seattle	713	563	0	1276
WSEC Seattle	2334	2439	70	4843
WSEC Mr. Vernon	2141	2369	54	4564
IJC Bellingham	1426	1961	226	3613
IJC Vancouver	1291	4652	222	6165
TOTAL	8421	13,378	572	22,371

LINES OF CANADIAN TESTIMONY BY POSITION

HEARING	LINES PRO-DAM	CON-DAM	NEUTRAL	TOTAL FOR HEARING
PUC # 5 Seattle	0	851	0	851
PUC # 7 Seattle	0	0	0	0
WSEC Seattle	0	321	0	321
WSEC Mt. Vernon	535	1360	0	1895
IJC Bellingham	189	37	44	270
IJC Vancouver	938	4652	222	5812
TOTAL	1662	7221	266	9149

Seattle City Light hired Canadian consultants to testify at the various hearings. Their testimony accounted for 670 lines of Canadian testimony.

LINES OF AMERICAN TESTIMONY BY POSITION

HEARING	LINES PRO-DAM	CON-DAM	NEUTRAL	TOTAL FOR HEARING
PUC # 5 Seattle	516	543	0	1059
PUC # 7 Seattle	713	563	0	1276
WSEC Seattle	2334	2118	70	4522
WSEC Mt. Vernon	1601	1009	54	2664
IJC Bellingham	1237	1924	182	3343
IJC Vancouver	357	0	0	357
TOTAL	6759	6157	306	13,222

Seattle City Light testimony given by Americans at the various hearings accounted for 4,666 lines, all of which was in favour of the dam.

DISCUSSION

Testimony in opposition to the dam accounted for 60% of all testimony at the hearings. Of this testimony, 62% was Canadian. About 60% of the American testimony was in opposition to the dam. About 79% of the Canadian testimony was in opposition to the dam.

Testimony in favour of the dam accounted for about 40% of the testimony at all the hearings. City Light witnesses presented about 63% of this testimony. City Light witnesses accounted for about 30% of Canadian testimony in favour of the dam.

Testimony by Canadians accounted for 41% of all testimony, with 59% presented by Americans.

APPENDIX E

THE SEATTLE CITY LIGHT HEARINGS ORGANIZATION

Seattle City Light had a number of witnesses appearing at the hearings to represent the company's position on the dam. City Light as the applicant had to prove that the dam would benefit society and not cause the damages claimed by opponents. To do this, Seattle used staff and consultants to present its case. Some of these are:

Arthur Lane
Corporate Counsel for City Light

Cas Bradeen
City Light Power Manager

John Nelson
then Superintendent of City Light

Richard White
Corporate Counsel

F. F. Slaney
F. F. Slaney and Company
Resource Planning Consultants
Vancouver, B.C.

Professor Grant Sharpe
Special Consultant
Professor, University of Washington

Professor Herschel Jones
Special Consultant
Professor, University of Washington

In addition, the company hired three law firms, one each in Vancouver, B.C., Seattle, and Washington, D.C. The company also hired a public relations firm in Vancouver, B.C., Torresan and Associates.

City Light spent several hundred thousand dollars on its presentation. It should be noted that much of this would have been necessary in any case to plan for the dam. But the total expenditures are likely to be well over a million, especially if City Light regular staff time is included.

CITY LIGHT TESTIMONY

City Light testimony represented 24% of all testimony and 63% of all testimony in favour of the dam. Below is a list of the testimony of City Light, all of which, of course, is in favour of the dam.

LINES OF TESTIMONY

HEARING	HEARING	TOTAL	CITY LIGHT	BALANCE
	PUC # 5	1910	309	1601
	PUC # 7	1276	713	563
	WSEC (Seattle)	4843	1232	3611
	WSEC (Mt. Vernon)	4564	1363	3201
	IJC (Bellingham)	3613	716	2897
	IJC (Vancouver)	6165	1023	5142
	TOTAL	22,371	5356	17,015

APPENDIX F

BUSINESS, COMMERCIAL AND AGRICULTURAL ORGANIZATIONS IN FAVOUR OF THE DAM

Seattle City Light and Power Authority

Association of Washington Business
Bendix Skagit Corporation
Electrical Women's Round Table
Electric League of the Pacific Northwest
Hope (B.C.) Board of Trade
Industrial Energy Users Committee
Mount Vernon Chamber of Commerce
Mount Vernon Junior Chamber of Commerce
National Electrical Contractors Association
Northwest Public Power Association
RugetLSound Power and Light
Ross Lake Resorts
Seattle Area Industrial Council
Seattle Chamber of Commerce
Skagit Building Trades Council
Skagit County Agricultural Coordinating Council
Washington P.U.D. Association
Washington State Grande

APPENDIX G

ORGANIZATION OF ANTI-DAM COALITIONS

There were two main coalitions who appeared at hearings in opposition to the proposal to raise Ross Dam. These coalitions have been called the N.C.C. Coalition and the R.O.S.S. Committee.

The N.C.C.C. Coalition

The N.C.C.C. Coalition is a Seattle-based coalition appearing mainly to argue against the dam because of environmental impacts which would occur in the United States' section of the reservoir. In particular, they opposed flooding of a particular tributary valley--the Big Beaver Valley. The N.C.C. Coalition has no formal name, but is usually called "the N three C" because the leading group in the coalition is the two thousand-member North Cascades Conservation Council. The twelve groups composing the coalition are:

the North Cascades Conservation Council (2000 members)
Friends of the Earth (600 members)
Areo Club
National Parks Conservation Association
the Wilderness Society
the National Audubon Society
the Federation of Western Outdoor Clubs of Mountaineers (25,000 members)
the Elk Park Association
the Seattle Audubon Society (2000 members)
the Skagit Environmental Council
the Washington Environmental Council

The N.C.C.C. Coalition had several spokesmen. The member groups pooled their resources and time at hearings to allow expert witness(*) to appear on various subjects. Below is a list of the coalition's witnesses and the volume of testimony they delivered at the various sets of hearings:

LINES OF TESTIMONY BY N.C.C.C. COALITION

WITNESS (HEARING)	PUC	WSEC	IJC	TOTAL
Dr. Patrick Goldsworthy Chairman of the Coalition, leader of the N.C.C.C. and a biochemistry professor, University of Washington	134	147	225	506
Brock Evans* the Northwest Representative of the Federation of Western Outdoor Clubs	0	222	563	785
Joseph Miller*	42	141	172	355
Margaret Miller* the Millers are two biologists who were conducting a two-year study of Big Beaver Valley near the Skagit	0	82	328	410
Dr. Jerry Franklin* U.S. Forest Service	0	94	0	94
Dr. Dale Cole* a forestry professor at the University of Washington	0	82	244	326
Harvey Manning* author of several books on the North Cascades	0	115	0	115
John Knowles* a civil engineer with a Vancouver, B.C. consulting firm	0	73	104	177
Dr. Mary Eysenbach* an assistant professor of economics at the University of Washington	0	96	161	257
Tom Brucker lawyer for the Coalition	0	36	83	119
Others	31	282	37	487
TOTAL	207	1370	1917	3631

The R.O.S.S. Committee

The R.O.S.S. Committee is a Vancouver, B.C.-based coalition appearing mainly to argue against the dam because of environmental impacts which would occur in Canada due to the flooding. The reservoir would cover over 5,000 acres of the Skagit Valley in Canada. This would flood a prime recreational area which the Canadians claimed was of growing importance to a fast developing urban complex in British Columbia and Washington. "R.O.S.S." stands for "Run Out Skagit Spoilers" and is a special group set up for this issue. The coalition has thirteen member groups including:

the B.C. Wildlife Federation (40,000 members)
the B.C. Federation of Naturalists (6,000 members)
the Alpine Club of Canada (500 members)
the B.C. Sierra Club (500 members)
the Lower Mainland Wildlife Federation (6,000 members)
the Totem Fly Fishing Club (100 members)
the Society for Pollution and Environmental Control (S.P.E.C., 3,000 members)
Simon Fraser University Outdoor Club (200 members)
the Alma Mater Society (Student government of the University of British Columbia)
the B.C. Mountaineering Club (500 members)
the B.C. Natural History Society
Community Organization in the Environment
Environmental Systems Association

Membership figures must be taken as approximations and are not additive since persons may belong to more than one group. Spokesmen for the R.O.S.S. Committee listed their membership as 45,000 members at the hearings.

The R.O.S.S. Committee had several spokesmen. Spokesmen appeared to represent the Committee, member groups, or both. While spokesmen agreed on the strategies for the hearings, they were not as formally organized at the hearings as the N.C.C.C. Coalition. Below is a list of the committee's witnesses and the volume of testimony they presented:

LINES OF TESTIMONY BY R.O.S.S. COMMITTEE

WITNESS (HEARING)	PUC(5&7)	WSEC	IJC	TOTAL
John Massey Chairman of R.O.S.S. & member of Totem Fly Fishing Club	276	72	212	560
Ken Farquharson a hydro engineer & Chairman of the B.C. Sierra Club; R.O.S.S. Secretary	(0) appeared at other PUC hearings	74	302	376
Geoff Warden biologist with B.C. Fish and Wildlife Branch	28	132	79	239
Bryan Gates biologist with B.C. Fish and Wildlife Branch	0	26	0	26
Charles Dunham professor of forestry	64	34	0	98
Howard Paish president of Howard Paish and Associates, a well respected resource planning consultants' firm in Vancouver, B.C.	134	118	0	252
John Fraser environmental lawyer & now Member of Parliament for the Progressive Conservative Party	0	0	325	325
Dr. Ian Efford professor of Animal Resource Ecology at the University of British Columbia	0	0	574	574
F. J. Bartholomew engineer	0	0	80	80
G. I. Culhane	0	103	669	772
Dr. Robin Harger	0	78	124	202
Mickey Rockwell	0	85	91	176
Others	14	165	381	560
TOTAL	516	887	2837	4240

The Coalitions Collectively

The Coalitions did have knowledge of the existence of one another and met on occasion to discuss the issue and how to pursue it. They retained their separate identities, however, and appeared separately as two distinct groups. However, their testimony collectively did represent a substantial segment of input at the hearings.

VOLUME OF TESTIMONY BY COALITION

COALITION	(Hearing)	PUC(5&7)	WSEC	IJC	TOTAL COALITIONS
N.C.C.C. Coalition		207	1507	1917	3631
R.O.S.S. Committee		516	887	2837	4240
TOTAL COALITION TESTIMONY		723	2394	4754	7871

This volume of testimony represents a sizeable percentage of the testimony at the hearings. Below is a table showing percentages:

PERCENTAGES OF TESTIMONY BY COALITION

	COALITION		
Type of Testimony	R.O.S.S. Committee	N.C.C.C. Coalition	BOTH
Canadian testimony	46%	0%	46%
Canadian Testimony without City Light portion	50%	0%	50%
American Testimony	0%	27%	27%
American Testimony without City Light testimony	0%	42%	42%
Total Testimony	19%	16%	35%
Total Testimony without City Light portion	25%	21%	46%

APPENDIX H

LIST OF ENVIRONMENTAL AND SPORTING GROUPS OPPOSED TO THE DAM

Alpine Club of Canada (R.O.S.S.)
Areo Club (N.C.C.C.)
Audubon Society of Bellingham (N.C.C.C.)
B. C. Environmental Council
B.C. Federation of Naturalists (R.O.S.S.)
B. C. Natural History Society (R.O.S.S.)
B. C. Sierra Club (R.O.S.S.)
B. C. Wildlife Federation (R.O.S.S.)
Burlington Edison Environmental Club
Chilliwack Fish and Game Protective Association
Community Organization in Environment (R.O.S.S.)
Council of Trout Unlimited, Northwest Steelheaders Association
Dogwood Canoe Club (Burnaby, B.C.)
Elk Park Association (N.C.C.C.)
Environmentally Concerned Students (Sedro Wooleey High School)
Environmental Systems Association (R.O.S.S.)
Federation of Western Outdoor Clubs of Mountaineers (N.C.C.C.)
Fraser Valley Trail Hound Association
Friends of the Earth (N.C.C.C.)
Kamloops Pollution Programme
Lower Mainland Wildlife Association (R.O.S.S.)
The Mountaineers (Officers)
M.S.A. Fish, Game, and Forest Protective Association
National and Provincial Parks Association of Canada
National Audubon Society (N.C.C.C.)
National Parks Conservation Association (N.C.C.C.)
North Cascades Audubon Society
North Cascades Conservation Council (N.C.C.C.)
Olympic Parks Association
O.M.A. Committee
Richmond Rod and Gun Club
Seattle Audubon Society (N.C.C.C.)
Sierra Club (International)
Sierra Club--Pacific Northwest Chapter
Skagit Alpine Club
Skagit Environmental Council (N.C.C.C.)
Society for Pollution and Environmental Control (R.O.S.S.)
Totem Fly Fishing Club (R.O.S.S.)
Unit 26 Army, Navy, and Air Force Veterans, Rod and Gun Club
Washington Alpine Club
Washington Environmental Council
Washington State Big Game Council
Washington Youth for Environment
the Wilderness Society (N.C.C.C.)

Represented by R.O.S.S.:
Alma Mater Society (Student government, University of British Columbia)
B.C. Mountaineering Club
Simon Fraser University Outdoor Club

APPENDIX I

BIOGRAPHICAL LISTING OF INTERVIEWEES

JOHN BIGGS

Mr. Biggs is the Director of the Department of Ecology of the State of Washington. He sat with Washington State Ecological Commission in this capacity as Director. He delivered a statement to Public Utilities Committee hearings when head of the State Game Department. Mr. Biggs opposed the dam and when the Ecological Commission became deadlocked and unable to make a decision, he committed the Department of Ecology to opposing the dam.

R. J. BROOKS

Mr. Brooks is an engineer with the Chemithon Corporation of Seattle. He has appeared at several hearings to oppose the dam, including several of the P.U.C. hearings and the Seattle W.S.E.C. hearing.

GEORGE COOLEY

Mr. Cooley was a City Councilman for the City of Seattle at the time of the hearings. He sat as Chairman of the Public Utilities Committee during its hearings. He delivered a statement to the W.S.E.C. hearings favouring the dam on behalf of a majority of the City Council. Mr. Cooley is a drug salesman by occupation but is currently employed with the City Treasurer's office. He left the City Council in 1974.

KEN FARQUHARSON

Mr. Farquharson is an eningeer with wide experience in hydro-electric project planning. He is chairman of the B.C. Sierra Club and secretary of the R.O.S.S. Committee. He spoke at several hearings in opposition to the dam, including P.U.C. hearings, the W.S.E.C. Mt. Vernon hearing, and the I.J.C. Vancouver hearing. Mr. Farquharson is one of the strategists of the Canadian opposition to the dam.

PATRICK GOLDSWORTHY

Dr. Goldsworthy is a biochemistry professor at the University of Washington. He is Chairman of the North Cascades Conservation Council and leader of the N.C.C.C. Coalition. He has been active for a number of years in support of the North Cascades National Park proposals and other proposals for conservation in northern Washington. He has been on a study team and a consultant to the National Parks Service and has appeared in numerous hearings of all descriptions. With reference to the Ross Dam, Dr. Goldsworthy has appeared at the P.U.C. hearings, the W.S.E.C. hearings, and the I.J.C. hearings.

JOHN C. HILL

Mr. Hill is the manager of the Mount Vernon Chamber of Commerce. As such, Mr. Hill represents the Chamber at hearings. He has a Master's degree in social psychology. Mr. Hill presented a brief for the Chamber in favour of the dam at the W.S.E.C. hearing held in Mount Vernon.

TIMOTHY HILL

Mr. Hill is a City Councilman for the City of Seattle and a member of the Public Utilities Committee at the time of its hearings. He is a lawyer. Mr. Hill presented a brief on behalf of a minority of the City Council in opposition to the dam at the W.S.E.C. Seattle hearing.

DAVID LEMARQUAND

Mr. Lemarquand was one of eight co-authors of the book The Future of the Skagit Valley, which was written on a grant from the Opportunities for Youth programme. The book was submitted to the International Joint Commission. Mr. Lemarquand was present at the I.J.C. hearings, but did not testify. After finishing a Master's degree at the University of British Columbia School of Community and Regional Planning, he was employed in the Bilateral Affairs section of the Canadian Department of the Environment. His assignment was the Skagit. He is currently with the Westwater Research Centre, University of British Columbia.

CLAY LEMING

Mr. Leming is the person responsible for recording of hearings and meetings of the Seattle City Council.

ARPAD MASLEY

Dr. Masley is the Chairman of the Washington State Ecological Commission and was Chairman at the time of the hearings. He is one of the opponents of the dam on the Commission. Dr. Masley is a physician from Bremerton, Washington.

WILLIAM PEARSON

Mr. Pearson is the Mayor of Sedro Woolley, Washington, and delivered a statement favouring the dam at the W.S.E.C. hearings in Mount Vernon. Mr. Pearson is the former owner of W.R.P. Lumber Company in Sedro Woolley, and now is employed as a consultant to the company. He is a long time resident of the city.

ANN WIDDITSCH

Mrs. Widditsch is a member of the Washington State Ecological Commission and was so at the time of the W.S.E.C. hearings. She was opposed to the dam. Mrs. Widditsch was an activist with the American Civil Liberties Union and the Washington Environmental Council. She works as a consultant on environmental and other matters.

GORDON VICKERY

Mr. Vickery is the Superintendent of Seattle City Light. He has been at that post for almost two years, but was not with the company at the time of the hearings. He was formerly the chief of the Seattle Fire Department and was appointed to his present position as a recruit from outside the company.