PUBLIC WATERFRONT ACCESS:
A Comparison of Integrated Coastal Management in Canada and the United States

by

Néstor G. Navarro

B.Sc. Universidad de Concepción, 1986
M.Sc. Université du Québec à Rimouski, 1991

RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF NATURAL RESOURCE MANAGEMENT

in the

School of Resource and Environmental Management

Report No. 264

SIMON FRASER UNIVERSITY

June 2000

APPROVAL

Name: Néstor G. Navarro

Degree: Master of Natural Resources Management

Title of Research project: Public Waterfront Access: A Comparison of Integrated Coastal Management in Canada and the United States

Report No.: 264

Examining Committee:

_____

Peter Williams, Professor

School of Resource and Environmental Management
Senior Supervisor

_____

J. Chadwick Day, Professor

School of Resource and Environmental Management

Date of Approval: June 9, 2000.

Abstract

Public access to and along the ocean waterfront is a social value secured and granted by many countries of the world. This is provided under recreation-related policies or by particular legislation inspired in ancient Roman laws. Since integrated management has become an accepted approach to managing natural resources, some nations such as the United States have developed legislation and protected public waterfront access in the context of integrated coastal management. Canada, possessing a magnificent marine waterfront that stretches along three oceans, has not developed a national nor provincial strategy to protect public waterfront access or manage the coast in an integrated manner.

This study comparatively examines the United States and Canadian legal and institutional frameworks to provide for public waterfront access in the context of integrated coastal management. It is based on the use of case studies in both countries focusing on the State of California and the Province of British Columbia. Nine criteria of evaluation are utilized: legislation/policy, institutions, funding, staff, public involvement, comprehensive planning, education, assessment, and enforcement.

The final recommendations focus on the need for integrated coastal management as a legal and institutional framework to secure public waterfront access in British Columbia, and in the larger context, in Canada. They are directed to the Canadian and provincial governments. The last recommendation is directed to non-governmental organizations. These refer to the creation of laws, policies, institutional changes, and a concerned citizens' strategy.

Acknowledgments

This research project would not be possible without the valuable information provided by all interviewees and informants that generously volunteered their time and provided me with abundant related material. I am deeply thankful to all of you for this, as well as for all the additional knowledge that I acquired from your experience as coastal managers, planners, public servants, and concerned citizens that does not appear in this document.

I am grateful to both of my supervisors Dr. Peter Williams and Dr. Chad Day for respecting my choice of subject for this research, for their valuable comments and for seeing me through to the end. Special thanks to Chad for directing me into coastal management, a fascinating area of planning, policy, and management.

Thanks to every one of the teachers I had in this program for teaching me to think in an integrative manner.

I would also like to thank the support staff of the School of Resource and Environmental Management. Thanks Rhonda, Bev, Mary Ann, Laurence, and Julie for everything, but principally for your friendship and warmness.

Finally, I am indebted to Dr. Pamela Wright, former assistant professor of the School of Resource and Environmental Management, for accepting me in this program. Wherever you are now Pam, thanks.

Table of contents

List of tables

List of figures

List of acronyms

BCAL	British Columbia Assets and Lands Corporation
BCDC	San Francisco Bay Conservation and Development Commission
CCC	California Coastal Commission
CCREM	Canadian Council of Resource and Environmental Ministers
CMA	Canada Marine Act
CORE	Canadian Commission on Resources and Environment
CPCA	Canada Ports Corporation Act
CZMA	US Coastal Zone Management Act
CZMP	US Coastal Zone Management Program
DFO	Fisheries and Ocean Canada
DOE	Environment Canada
ERC	Environmental Review Committee
FREMP	Fraser River Estuary Management Program
FRPA	Fraser River Port Authority
GVRD	Greater Vancouver Regional District
ICM	Integrated Coastal Management
LCP	Local Coastal Plan
LUCO	BC Land Use Coordination Office
MELP	BC Ministry of Environment, Lands and Parks
NFPA	North Fraser Port Authority
NOAA	US National Oceanographic and Atmospheric Agency
OCRM	US Office of Ocean and Coastal Resource Management
WLUC	Water Land Use Committee
WOAG	Vancouver Water Opportunities Advisory Group

Chapter 1
Introduction

1.1 Study rationale

On March 4, 2000, *The Vancouver Sun* published an article stating that Richard Marshall, a researcher from the Harvard University Design School, identified the city of Vancouver as one of the eight cities in the world with good waterfront development. In Mr. Marshall's opinion, Vancouver has been able to maintain a high level of urban amenities along the water such as access to the waterfront and public space. In addition, the newspaper referenced an article in *San Francisco Magazine* by Aaron Betsky, curator of architecture at San Francisco Museum of Modern Art. Mr. Betsky said: *"In Vancouver, people use the waterfront. Many thousands of the city's citizens live in the very close proximity to beaches, parks, and open spaces the municipality was able to fund with the fees it assessed on the towers' developers*."

While Vancouver has become a world-class city in terms of access to its waterfront, a different scenario is developing in the neighboring District of North Vancouver (figure 1). In November 1999, proponents of a long-term plan to improve waterfront access along residential areas of the district were defeated in a referendum. The referendum results had two major consequences. First, the present status quo was maintained, in which a few property owners living along the shoreline enjoy the waterfront while the majority of residents are deprived of access to and along the shoreline. Second, because the referendum was held simultaneously with the district's council elections, the access issue became the main political issue during the election campaign with major political implications. An unprecedented turnover of council members occurred; those who opposed the plan to increase shoreline access won six of the seven seats. In addition, three of the newly elected members had no previous municipal experience (Masterton, 2000).

The contrasting experiences in Vancouver and North Vancouver District raise a number of important questions: What could explain such a dramatic differences between two neighboring local governments? How can Vancouver be a world example of progressive public waterfront access for recreational purposes while North Vancouver elected a council that opposes improved waterfront access? Is it equitable that citizens of Vancouver are provided free access to the shoreline while their neighbors in North Vancouver are not? Is public waterfront access for recreational purposes not a citizen's cross-jurisdictional right in Canada as in many other countries of the world, for instance in the United States? Clearly, the answer to this last question is no. In Canada, even though the foreshore is Crown land under provincial jurisdiction, shoreline access from the upland is not a legally protected citizens' right by neither the federal nor provincial governments[1] (British Columbia, 1995). Facilitating waterfront access for recreational purposes is the exclusive responsibility of local governments, resulting in dramatically different approaches exemplified by the experiences in Vancouver and the District of North Vancouver.[2]

On the international front, many countries have developed some type of legislation to regulate public access to coastal and marine areas. Most have done so in the context of integrated coastal management. Such regulations vary from general policies to a statutory protected citizen right (Cicin-Sain and Knecht, 1998). This is the case for the United States, where important progress has been made to protect the public recreation rights on the coast during the past 25 years. There, public waterfront access is a legally protected right and part of a federal and state integrated legal and institutional coastal management framework. Coastal states must secure access to and along the shoreline for recreational purposes regardless of local jurisdictional wishes. The dramatic differences in waterfront access between the City of Vancouver and the District of North Vancouver could never

[1] The foreshore is the area between the mean ordinary high tide mark and the mean ordinary low tide mark.
[2] To avoid excessive repetition in this paper the concept 'public access to the foreshore' can be expressed as 'public access', 'access', or 'accessibility.' Also, although they do not have the same meaning, the words 'shoreline', 'waterfront', 'foreshore', and 'coast' are used interchangeably when they are associated with the term 'public access' to express the idea of physically accessing the foreshore from land above the mean ordinary high tide, such as 'public access to the shoreline', 'to the foreshore', or 'to the coast'.

happen under the present American coastal management framework, where waterfront access is the law.

1.2 Research goal and objectives

The primary goal of this study is to understand why dramatic differences exist in waterfront access between Canada, and specifically in British Columbia, in comparison with conditions in the United States. This has led to the following research questions:

1. Are the existing Canadian legal and institutional frameworks the cause of the differences in public waterfront access between the two countries?
2. What laws, policies and institutional changes would be required to ensure Canadian citizens access to the shore in British Columbia?

These questions are investigated using a comparative analysis of jurisdictional institutions in both countries – from the federal to municipal levels. The primary objective of this research is to provide:

- A comprehensive overview of the existing legal and institutional Canadian and American frameworks on the issue;
- Examples of regional and municipal programs that are successfully promoting and implementing public waterfront access guidelines and policies in British Columbia; and
- Options and strategies to increase and improve waterfront access in British Columbia.

1.3 Report organization

Through a literature review, chapter 2 briefly provides the historical legal origins of the concept of public access, the value and potential negative impacts of providing public access to the foreshore, and the advantages of including public access in the context of

integrated coastal management. Chapter 3 describes the methods used to answer the research question, including the assessment frameworks adopted to compare both countries and the rationale for the selection of case studies. Chapter 4 contains the bulk of the findings from this research. It includes and compares the legal and institutional frameworks associated with public waterfront access in both countries. Finally, chapter 5 presents a comprehensive discussion followed by recommendations to the present Canadian and provincial legal and institutional framework to secure waterfront access to British Columbia citizen in the context of integrated coastal management.

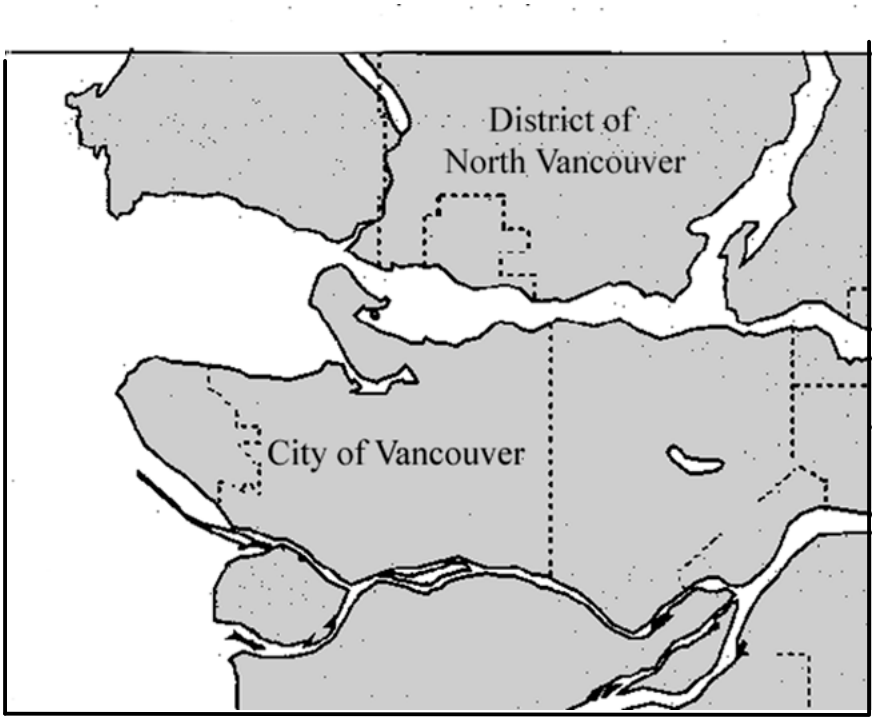

Figure 1. Vancouver area

Chapter 2
Literature review

This chapter reviews the origins of the concept of public access to the foreshore from an historical perspective. It is followed by a review of the recreational value of public access and its potential impacts on the surrounding environment. It also provides a working definition of the coastal zone and the relationship between public access and integrated coastal management. Finally, a framework needed to provide for public access is introduced.

2.1 The origins of the concept of public access to the waterfront: *The Public Trust Doctrine*

The concept of public access to the coastal zone in western societies has its roots in Roman law through what was called the *Public Trust Doctrine.*

> . . . no one, therefore, is forbidden to approach the seashore, provided that he respects habitations, monuments and the buildings, which are not, like the sea, subject only to the law of the nations.
> (Roman law: Institute of Justinian, *in* Maguire, 1996).

Under this doctrine, the seashore was considered a logical extension of the sea, and consequently public:

> By the law of nature, these things are common to mankind – the air, running water, the sea, and consequently the shore of the sea.
> (Roman law: The Institute of Justinian, *in* Smallwood, 1993).

The doctrine secured what were considered basic public rights in Roman times to support people's livelihoods and commerce. These included the right to navigation, fishing, accessing ports, using any riverbank for the purpose of tethering vessels and offloading

cargo, using highways, and accessing and using the seashore to the highest tide (Smallwood, 1993; Maguire, 1996; Tigerstrom, 1998).

Through the centuries, the doctrine became part of the common law of European nations, with several different interpretations. However, it is surprising that it has remained practically unmodified for more than two thousand years. Derived from Roman law, the British interpretation of the doctrine, which later became part of the common law of both the United States and Canada, held that the Crown had title to public trust resources such as waterways and the foreshore. However, this property right of the Crown was subject to the people's common right to use these public trust lands and their resources (Maguire, 1996; Tigerstrom, 1993).

In North America the doctrine was not ignored but it lost representation in common law over time. In the United States and Canada, fishing, navigation and commerce remained public rights under federal responsibility. However, the foreshore could be privatized in many American states. Over the past forty years, there has been an important revival of the doctrine in the United States, creating the basis for legal support related to waterfront access (Archer et al., 1994; Canning, 1994):

> In essence, the Public Trust Doctrine is a judicial expression of the state's duty to manage public resources in the coastal zone in the public interest.
> (Johnson et al., 1991, 1992 in Canning, 1994)

Moreover, American courts have considerably expanded the scope of the doctrine, adapting to changing perception of the public interest. Increasingly it is being used to protect recreational, aesthetic, and educational values as well as wildlife and habitat, not only on the coast but also on the ocean and inland.

In Canada, even though the public trust doctrine underlies the public right to fish, navigate, and engage in maritime commerce, its use in other areas has been ignored. As a consequence, the doctrine does not enjoy judicial acceptance in Canadian common law. Tigerstrom (1998) summarized this situation as follows: "*The doctrine has been notable in Canada only in its absence*." This is also reflected in the lack of Canadian scholarly study of the subject in comparison to the United States. There, a considerable amount of

literature exists related to the doctrine and its implications for public waterfront access can be found. Only three Canadian studies that focus on the doctrine were found in this literature review. Smallwood (1993), Maguire (1996) and Tigerstrom (1998) presented excellent reviews of the historical coastal implications of the doctrine. They referenced the few Canadian cases where the doctrine was introduced in judicial proceedings. They also reviewed its present use as a powerful legal tool in the United States. However, while all three focused on the potential applications of the doctrine to non-coastal resources, none mentioned its potential use in situations related to Canadian public waterfront access. Nevertheless, inspired by the success of the doctrine in American courts in the interest of public uses of natural resources, the Canadian authors believed that it is possible "to revive" the concept in Canada:

> The *Public Trust Doctrine* does form part of Canadian common law . . .[and] the time has now come for a re-awaking of the *Public Trust Doctrine* with respect to natural resources. (Smallwood, 1993 103)

2.2 The recreational value of public access

The *Public Trust Doctrine* is based on a utilitarian objective when securing right of entry to the shore. Historically, the objective was to access marine resources and ensure ways of transportation for subsistence and commerce. However, for the majority of people in western societies today, right of entry to the shoreline has become a recreational value (Fabbri, 1990; Goodhead and Jhonson, 1996). Under multiple forms, recreation fosters social, cultural, intellectual, or creative developments for individuals and groups in society. It offers people physical, emotional, and psychological rewards, by being a tool for relaxation, education, and entertainment (Williams, 1995; Fabbri, 1990).

The waterfront represents a venue for leisure pursuits all along the coast but it becomes an especially precious recreational resource in urban settings. It is accessible, inexpensive and it is a multiple-use environment. Urban waterfronts and beaches can be places of gathering, excitement, and entertainment, where multiple activities happen. They can also be places for "wilderness" experiences framed by seascapes, enhanced by the sound of

the waves and a rich surrounding biodiversity. The coastal zone's importance as an urban recreational resource becomes fundamental in many geographical regions where the numerical dominance of urban over rural populations occurs (United Nations, 1995; Williams, 1995). Studies concluded in England show that most recreation is conducted within urban areas where the population resides. Walking, which is typically the most accessible recreational opportunity that the seashore can offer, is specially linked to seashore locations (Kay, 1991 in Williams, 1995). For instance, in Nova Scotia, about 89% of visitors and up to 99% of locals enjoy walking along the seashore (The Economic Planning Group of Canada, 1997). Consequently, having the opportunity of accessing the waterfront for recreational purposes is undoubtedly valued highly by the public. In most instances, this serves to increase their quality of life.

2.3 Potential negative impacts of increasing public access

> There appears then, to be some truth in the conservative dictum that everybody's property is nobody's property. Wealth that is free for all is valued by no one because he who is foolhardy enough to wait for its proper time of use will only find that it has been taken by another . . . (Gordon, 1954 *in* Ostrom, 1990).

The negative consequences of irresponsible use of the foreshore by the general public can be far-reaching. Degradation can take many forms and be the source of many conflicts. Examples cited in the literature are litter and waste accumulation, shore erosion, pollution, noise, and ecological damaged (Carter, 1990; Bird and Cullen, 1990; Wong, 1990; Travis, 1987). The nature of conflicts associated with public access issues are generally tied to waterfront landowners versus the public. However, it may also involve disputes among the users themselves and among public institutions at all levels of governance.

The vast majority of the negative effects of public waterfront access are the result of inadequate management of access zones as a consequence of poor planning (Travis, 1987). In order to be effective, accessibility must be complemented by adequate zoning,

suitable parking facilities, clear signs, garbage disposal, and sanitary facilities to accommodate the number of users (Artukhin, 1990; Travis, 1987).

2.4 Integrated coastal management and public waterfront access

The coastal zone is a rich environment of high biological and physical diversity from an ecological perspective. Its ecosystem is defined by the interaction of terrestrial and marine habitats, such as estuaries, coral reefs, sea grass beds, beaches and dunes systems. From a human perspective, the coastal zone is a fundamental component of the national economy of many coastal regions. It is used for resource extraction as well as for shipping and tourism activities. Human activity in this zone is characterized by competition for land and sea resources in addition to competition for space and land uses by various stakeholders (Scura, et al., 1992 *in* Cicin-Sain and Knecht, 1998).

There is no universally accepted definition of the coastal zone. However, there is widespread acceptance of it being a natural geographical area engaging a dynamic set of human activities. This comprehends all human activities related to the marine and terrestrial environment on the coastal lands, the foreshore, and the adjacent sea, including salt marshes and wetlands. (Cicin-Sain and Knecht, 1998; British House of the Commons, 1992; Clark, 1996; United States, 1999).

Integrated Coastal Management (ICM) is a process designed to manage human uses of coastal resources following the principles of sustainable development. Consequently, ICM should address and manage the social, economical, and ecological implications of such uses for present and future generations. The role of ICM is not to replace single-sector resource management institutional work. Rather, it is to reduce conflicts and coordinate all coastal aspects of their mandates by addressing their inherent legal, institutional, and land-water interface issues on the coastal zone (Clark, 1996; Cicin-Sain and Knecht, 1998).

The integration of public waterfront access policies with all other coastal management directives can be a useful activity. In a survey by Cicin-Sain and Knecht (1998), over 70% of the 49 developed and middle developing nations examined and 55% of the developing nations reviewed included public access to coastal and marine areas in their planning regulations. Furthermore, Pogue and Lee (1999) concluded that in many coastal states and territories, coastal management programs in the United States, have been the prime catalyst in achieving public access agreements among states and federal agencies, public organizations, and the private sector.

Whether public waterfront access is provided in the context of ICM or in any other circumstance, a number of components common to the sustainable management of natural resources can help considerably to regulate and secure its provision at all levels of jurisdiction. For instance, appropriate legislation and policy create structure and set the terms of reference on how the resource should be managed. An executive body, with regulatory and planning powers as well as adequate financial and human resources, should be responsible for the implementation and planning of public waterfront access initiatives. Public involvement at all levels of the institutional management and decision-making process must be secured. Assessment mechanisms at the institutional level must ensure that programs conform with, and support, the objectives of legislative mandates and policies. Finally, educational initiatives must disseminate under many forms the objectives of the program and enforcement measures that avoid misuse of the resource (Georgison and Day, 1993; Cicin-Sain and Knecht, 1998; Morgan, 1999, Robinson, 2000).

Chapter 3
Methods

This chapter describes the research approach and evaluation framework used in the investigation. In addition, it also details the rationale for the selection of each case study and includes figures showing their geographical location.

3.1 Research approach

This study combines two research methods: a cross-nation comparative analysis and the use of case studies. The first method allows the identification of the strengths and weaknesses of alternative policies practiced by different nations. It provides insights into the implementation of institutional and political reforms based on other countries' experiences (Jones and Olson, 1996; Dogan and Pelassy, 1990; Bahry, 1995). This method is useful in this study because it allows for the identification of elements in the legal and institutional frameworks of both countries that may have caused the differences observed with respect to waterfront access. This approach also created opportunities to inform future decisions concerning public access options in Canada based on the many years of Americans' experience dealing with the issue.

The case study method used is appropriate when the research involves "how" and "why" questions, when it concerns contemporary events, and when control over participant behavior is not required (Yin, 1996). In this research, the use of case studies is appropriate to understand *how* both countries' legal and institutional frameworks are organized at each of the four levels of jurisdiction – federal, state/provincial, regional, and municipal. Furthermore, this study refers to a contemporary issue involving many stakeholders over which the investigator has no control.

3.2 Research framework

To address the study's research question an evaluative research framework was developed. This framework was designed to be implemented in case studies at various levels of federal, state/provincial, regional, and municipal responsibility. The framework was based on a model developed by Day (1993). This was specifically designated to assess natural resource management institutions (figure 2). The criteria identified in the model address issues associated with the efficacy of legislation/policy, institutions, funding, staff, public involvement, comprehensive planning, education, assessment, and enforcement. In this study, these criteria were used in case studies to assess the capability of both countries to provide for public waterfront access.

3.2.1 Criteria of evaluation

The nine criteria used are not all necessarily independent or essential to providing for public waterfront access. However, they do constitute a comprehensive framework to effectively manage the access to and use of publicly owned natural resources (Day, 1999; Morgan, 1999).

Legislation/policy*:* clear, well-defined and consistent legislation and policies that explicitly guarantee and promote waterfront access have to be in place. Depending on the level of governance, this criterion refers to the necessary statutory laws and regulations as well as related policies and by-laws needed to guide actions.

Institutions*:* a clearly identified agency/department/division has to be given the legal and administrative power to regulate and carry on management plans that promote access to and uses of the waterfront for recreational purposes. Coordination efforts between responsible institutions and accountability to the general public are expected.

***Funding**:* responsible institutions have to be assigned adequate funding to hire the necessary staff and implement programs to carry on at least the mandatory aspects of legislation and policy associated with public access.

***Staff**:* the necessary staff with the appropriate background must be assigned to deal effectively with all the issues related to managing public waterfront access. A multidisciplinary education on natural resource management, planning, policy, and related fields is in general the most desirable.

***Public involvement**:* participation of the public in the planning and decision-making process has to be legally secured and effectively encouraged by those institutions assuring public access. This should happen throughout all stages of the management process.

***Comprehensive planning**:* dispositions and mechanisms to access and use the waterfront for recreational purposes must be part of a comprehensive planning process which takes in consideration the social, economic, and environmental context in which public access is promoted.

***Education**:* educational strategies are fundamental to a better understanding of rights, obligations and possibilities associated with the potential uses of the waterfront.
Educational programs should be adapted to different audiences, for instance, the general public, waterfront owners, developers and agencies' staff.

***Assessment**:* responsible institutions have to periodically review the effectiveness of their policies on waterfront access and the validity of their management plans based on new legislation, findings, and stakeholders' feedback.

Enforcement: responsible institutions have to implement enforcement strategies insuring that none of the stakeholders exceed their rights and/or fail to fulfill their responsibilities as established by regulations and planning policies.

3.2.2 Case studies

Public administration structures are vertically different in regulatory and administrative powers but horizontally repetitive at specific levels of jurisdiction. Therefore, the use of one case study per jurisdictional level is needed to truly exemplify the existing legal and institutional frameworks both countries use for managing public waterfront access.

United States

***NOAA Office of Ocean and Coastal Resource Management* (OCRM)**

Through OCRM, the National Oceanographic and Atmospheric Agency (NOAA) is the federal agency in charge of administering the United States *Coastal Zone Management Act* of 1972 (CZMA) and the national Coastal Zone Management Program (CZMP). Under the act, and as specified in the CZMP, one of OCRM mandates is to foster public waterfront access across the nation (NOAA, 1999a).

***The California Coastal Commission* (CCC)**

The state of California is a pioneer in the promotion and protection of public access to the shore for the public's enjoyment. It has become an important model by which other coastal states have addressed this public access issue (Pogue and Lee, 1998).[3] CCC is the agency authorized under the federal CZMA to carry out the statewide coastal plan, manage federal funds and authorize local coastal plans (LCPs). CCC jurisdiction includes

[3] Following the BCDC experience, others states started coastal management programs fostering a federal coastal management initiative that ended with the approval of the federal *Coastal Zone Management Act of 1972*.

the entire state's Pacific coast except for the San Francisco Bay area (figure 3; California Coastal Commission, 1999).

***The San Francisco Bay Development and Conservation Commission* (BCDC)**

BCDC is a state agency with a regional focus. One of its two main mandates is to increase public access to the San Francisco Bay waterfront. The California coastal management program is comprised of two segments administered by two independent agencies: CCC and BCDC. CCC is responsible for the state's Pacific coast and BCDC oversees the San Francisco Bay area (figure 4; BCDC, 1999).

City of San Francisco

San Francisco is an example of an urban setting where many initiatives to increase public access have been taken. In addition, given the city's geographical position, San Francisco has to interact with both of the previously mentioned state agencies in public access matters: the CCC for the shoreline west of the Golden Gate bridge and the BCDC for the shoreline east of the bridge (figure 4). Furthermore, within the San Francisco Bay area, the city possesses a large port that has developed and integrated waterfront access policies into its planning process (Port of San Francisco, 1999).

Canada

In the Canadian context, there is no identifiable institution either at the federal level or in British Columbia responsible for fostering public waterfront access for recreational purposes. Identifying each one of the nine criteria used in this study with regard to access is thus not possible at these levels. Consequently, in both cases a general review of their related policies is undertaken. The regional and the municipal levels are represented in this study by the Fraser River Environmental Management Program (FREMP) and by the City of Vancouver. These two case examples do not represent the overall situation in British Columbia. While they are the exception to the rule in British Columbia, they illustrate particularly innovative waterfront access initiatives conducted at the local level in the Canadian context.

The Fraser River Estuary Management Program (FREMP)

The program was created to coordinate efforts among federal, provincial, and local governments related to planning and decision making with respect to human activities in the estuarine section of the Fraser River. FREMP developed a regional management plan that pulled together ideas and initiatives proposed by six partners, who constitute the program's management committee. They are: Environment Canada (DOE), Fisheries and Oceans Canada (DFO), B.C. Ministry of Environment, Lands and Parks (MELP), North Fraser Port Authority (NFPA), Fraser River Port Authority (FRPA), and Great Vancouver Regional District (GVRD) (FREMP, 1994). The plan proposed by FREMP considers waterfront access as a priority issue, in coordination with five other themes: water quality management, fish and wildlife habitat, navigation and dredging, log management, and industrial and urban development. FREMP is not an agency but a secretariat based on a cooperative agreement. As a secretariat, FREMP does not posses jurisdictional powers on its region of interest. However, it can coordinate the jurisdictional power of its partners.

The geographical region covered by FREMP is restricted to the estuarine section of the Fraser River, the adjacent waters on the Strait of Georgia from Point Grey to Roberts Bank, and all of Boundary Bay to the border with the United States (figure 5; FREMP, 1994).[4] Within this region, FREMP's interests are on the waters and the foreshore up to the high tide watermark and on the coordination with all interested parties when planning for coastal land uses (FREMP, 1994).

The City of Vancouver

Vancouver offers to locals and visitors one of the most spectacular waterfronts in North America. Access is possible practically all along the 50 kilometers of the city shoreline through an interconnected network of parks, walkways, and bikeways. Furthermore, its shoreline provides opportunities to industrial, commercial, recreational, environmental

[4] The area includes twelve municipalities, three First Nations Reserves, two port authorities, and one international airport. Municipalities of: Burnaby, Coquitlam, Delta, Langley, Maple Ridge, New Westminster, Pitt Meadows, Port Coquitlam, Richmond, Surrey, Vancouver, and White Rock. Reserves:

and cultural activities in a wide range of environments. The shoreline is subdivided into four major geographical areas: Burrard Inlet, English Bay, False Creek, and the Fraser River (figure 6; Vancouver, 1997).

3.2.3 Data collection

Three methods were used to collect data used to inform this study: focused interviews, documentation reviews, and direct observations.

Except for the Canadian federal and provincial levels of jurisdiction, where information was basically obtained from documentation, key informants were contacted for each case study area based on their involvement in waterfront access issues (Appendix I). A total of ten interviews where done during October and December 1999. These were conducted in person, except for the United States federal level, which was done electronically. In each case, interviewees were asked the same set of questions under the same format, but the queries were adapted to the jurisdictional context of the respondents. The questions probed the presence or absence of each of the nine criteria mentioned earlier. For instance, *Do you have legislation/policies/regulations that foster public waterfront access for recreational purposes? What are their characteristics?* Without exception, interviewees provided direct answers and abundant related documentation. Each interview was between one to two hours in duration. Respondent answers were recorded and later transcribed. Interviews were the primary source of data used to inform this study. These were complemented with the review of related documentation. This included printed material and electronic sources. In addition, the opinion of other informants related to the case studies or knowledgeable in the purpose of this study was used for further clarifications (Appendix I). After each case study was written, it was sent to the respective interviewees for corroboration on the completeness and accuracy of the ideas expressed. Finally, field visits to all of the selected case study locations were made in order to observe waterfront access policy impacts.

Katzie Nation, Musqueam Nation, and Tsawwassen Nation. Ports: North Fraser Port Authority and Fraser River Port Authority. Airport: Vancouver International Airport Authority.

Figure 3. State of California coastline and coastal counties.

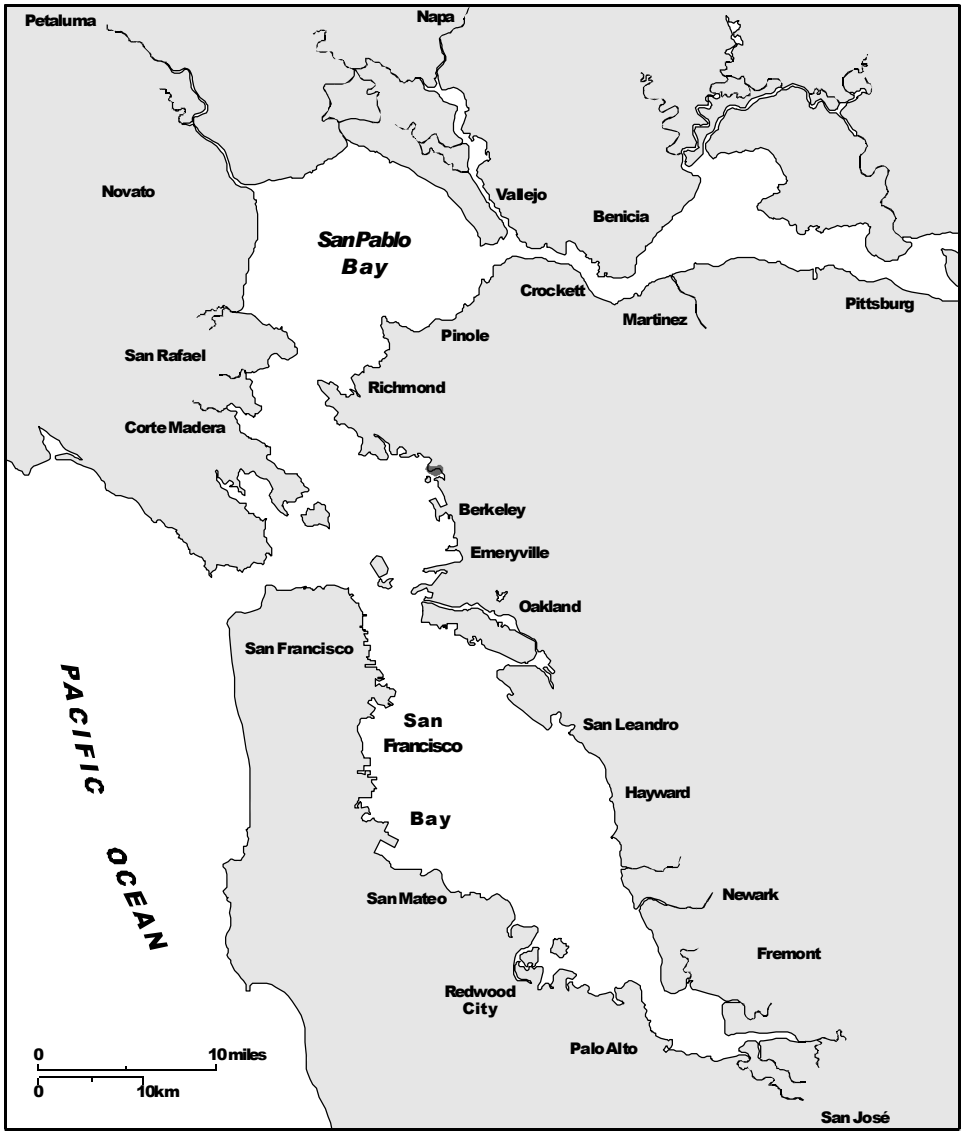

Figure 4. San Francisco Bay area.

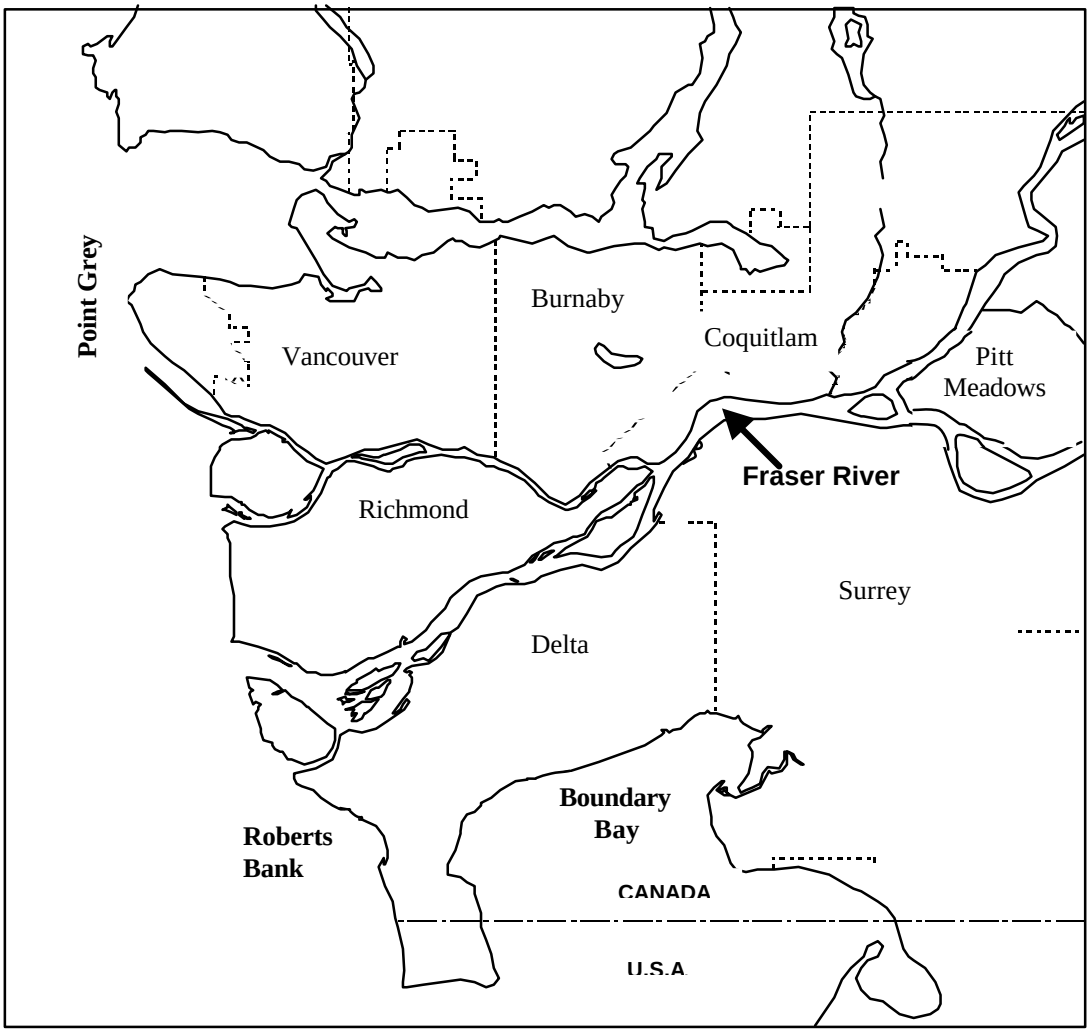

Figure 5. Estuary section of the Fraser River and surrounding municipalities.

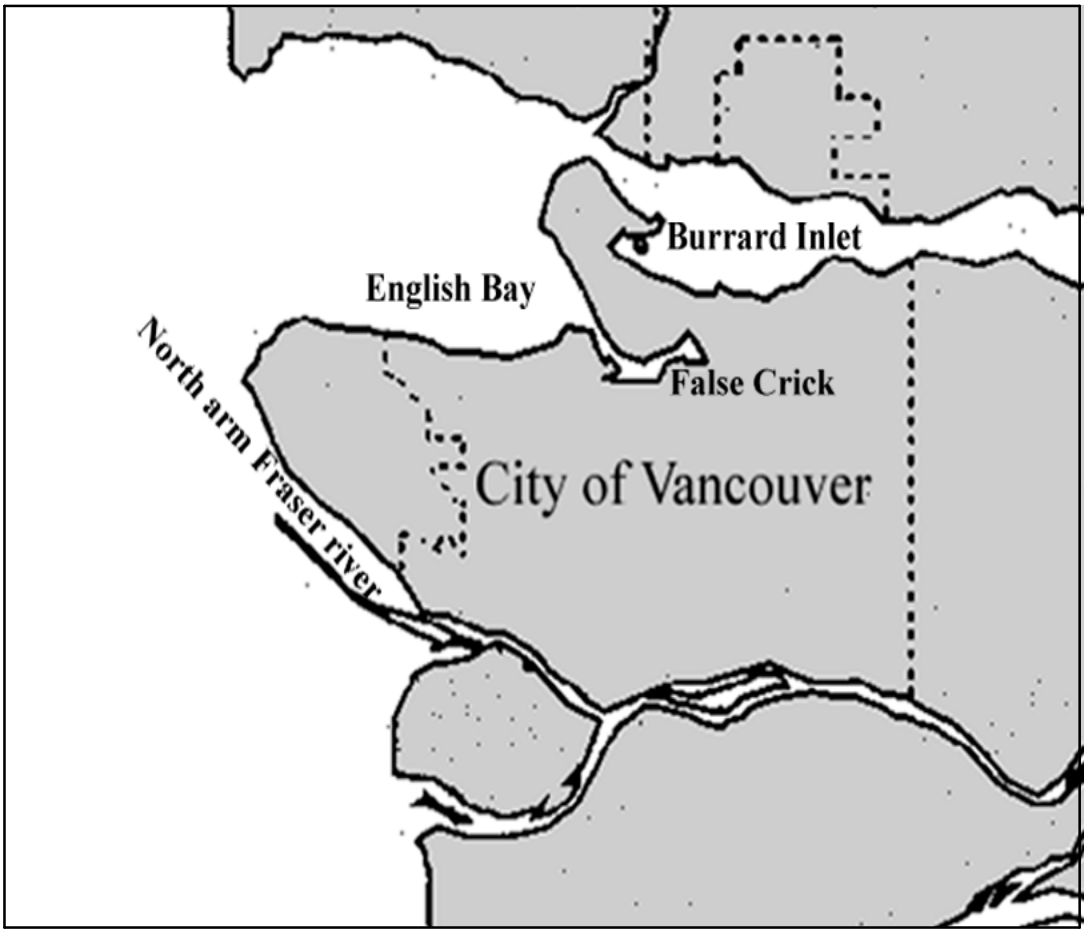

Figure 6. The Vancouver shoreline.

Chapter 4
Legal and institutional frameworks

The United States and Canadian approaches to managing public waterfront access to the coast for recreational purposes are outlined next and compared at four levels of political jurisdiction: federal, state/provincial, regional, and municipal.[5] The comparison is made by assessing the information related to the nine criteria listed in section 3.2.1: legislation/policy, institutions, funding, staff, comprehensive planning, public involvement, education, assessment, and enforcement.

4.1 Federal

4.1.1 United States

Legislation/policy

The main federal legislation concerning the coast is the *Coastal Zone Management Act of 1972* (CZMA; NOAA, 1999a).[6] The rationale supporting the act is based on a national interest in the effective management, beneficial use, protection, and development of the coastal zone. In comparison to the traditional sectoral management approach, this act is based on, and promotes, comprehensive resource management where extractive and industrial activities should be compatible with minimum environmental standards, public access, tourism, and recreation, among others things (NOAA, 1999a). The federal document identifies many coastal issues of importance, as well as goals and objectives

[5] For the sake of simplicity, the use of the term 'state' includes U.S. Territories and U.S. Commonwealth islands. They are: Puerto Rico, U.S. Virgin Islands, Northern Mariana Islands, American Samoa, and Guam.

[6] Others related coastal legislation includes: the *1969 National Environmental Policy Act* (NEPA); the *1972 Federal Water Pollution Control Act* or also called the *Clean Water Act* (CWA); the *1972 Marine Mammal Protection Act* (MMPA); the *1972 Marine Protection, Research, and Sanctuaries Act* (MPRSA); the *1973 Endangered Species Act* (ESA); the *1976 Fishery Conservation and Management Act* (FCMA); and the *1978 Outer Continental Shelf Lands Act Amendments* (OCSLAA).

for a coastal national program. Public waterfront access for recreational purposes is one of them:

> The congress finds and declares that it is the national policy . . . to encourage and assist the states to exercise effectively their responsibility in the coastal zone through the development and implementation of management programs . . . which programs should at least provide for . . . public access to the coasts for recreational purposes (NOAA, 1999a: s.1452(2)(E)).

Institutions

Within the Department of Commerce, the National Oceanic and Atmospheric Administration (NOAA) is the federal agency in charge of administrating *the Coastal Zone Management Act* and the national *Coastal Zone Management Program* (CZMP). NOAA's mandate is channeled through its Office of Ocean and Coastal Resource Management (OCRM). To implement the CZMP, OCRM establishes a voluntary partnership with coastal states to manage their section of the coast. States are invited to summit a coastal management plan to the federal office. If the plan includes all federal requirements under the CZMA, OCRM provides scientific, technological, management and economic assistance for the development, implementation and administration of state coastal programs (NOAA, 1999b).

Funding

Every year the American Congress assigns funds to run the federal Office (OCRM) and to support state programs. OCRM normally receives about $6.7 million a year.[7] This amount mainly covers the staffing and operating costs of three main divisions: the Coastal Program, Marine Sanctuary, and Estuary Research Reserve. Each of these divisions incorporates elements of public access in their planning processes.

The federal assistance to states, about $69.6 million for the 1999 fiscal year, is distributed by OCRM based on the state coastal length, population, and the stage of development of their coastal management plan. In 1999, allocations ranged between $1.0 million for

[7] All money values are expressed in Canadian dollars at the exchange rate of 1.4806 as at May 29, 2000.

small states to $3.8 million for the largest ones.[8] This federal contribution is regulated under the *Coastal Management Act*. It can take the form of grants for program development (s.305), administration (s.306), resource management improvement (s.306A), and enhancement projects (s.309). It can also take the form of loans (s.308) or awards to promote excellence in coastal zone management (s.314). Although all these sources of funding can have an indirect impact on providing public access, sections 306, 306A, and 309, among other things, specifically allows states to apply for funding access works.

Staff

Within OCRM, the Coastal Program Division is responsible for managing the federal CZMP. The division has a staff of approximately 20 coastal specialists. No one of them is full-time occupied to deal with waterfront access issues. Each specialist is assigned to work with one or more state coastal programs in four main teams covering the following regions: Great Lakes, Pacific, Northeast, and Southern/Caribbean. Is the specialists responsibility to insure that their assigned programs are adhering to the federally approved coastal management plans for each state and that projects carried out each year address specific coastal issues unique to the states. Additionally, coastal specialists may be assigned to work in issue teams with a national coverage. For instance, non-point pollution, coastal communities, coastal hazards, and public access.

Comprehensive planning

The national *Coastal Zone Management Program* (CZMP) is the implementation arm of the CZMA of 1972. As part of a comprehensive approach to manage the coasts, the act requires states to harmonize public waterfront access with other coastal issues and activities defined of national importance. For instance, the protection of natural resources, the management of coastal development, the priority consideration to coastal-dependent uses, the consultation and coordination among agencies, public participation, and hazard management (s.1452 (2) (A-K)). Implementing the act, the CZMP is inclusive of all

[8] For a detailed review of federal amounts assigned to each coastal state see the following web page: http://wave.nos.noaa.gov/OCRM/czm/99finals.html

levels of governments and takes a comprehensive approach to problem solving. Balancing the competing and conflicting demands of coastal resources use, economic development, and conservation (NOAA, 1999d; OCRM, 1999).

Public involvement

There is no formal public involvement at the federal level on coastal issues. This is expected to happen at the state and local level. The federal government mandates states to provide for public involvement in coastal issues. States and local governments have to encourage the participation and cooperation of the public in carrying out the purpose of the *Coastal Management Act* (s.303). For instance, the legislation requires states as part of their coastal zone management programs to provide for public participation in decisions related to the permitting process and consistency determinations (s.306 (d)(14)/s.1455(d)(14)). Moreover, section 312 of the act demands a full opportunity for public participation in evaluating coastal states' performance.

Education

At the federal level, education focuses primarily on national coastal and ocean-related initiatives in which OCRM can get involved and in the promotion of nation-wide coastal policies. It can take the form of publications, fact sheets, web pages, school material, videos and multimedia educational CD-ROMs designed for museums, high schools and the general public. Examples of these are *Turning the Tide: America's Coasts at a Crossroads* and *Our Crowded Shores: Balancing Growth and Resource Protection*. OCRM educational material do not particularly emphasized public waterfront access. Its value is communicated along with several other issues as one of the important coastal national policies to be promoted.

Assessment

At present, there is no formal review of federal policy or performance with respect to access. Nevertheless, amendments to the *Coastal Zone Management Act of 1972* with implications on public access have been passed as a product of OCRM staff reviews and states programs feedback. Two of the most relevant amendment to the issue are the

creation in 1980 of a program under section 306A and the *Coastal Zone Enhancement Program* under section 309 in 1990. The first amendment, among other things, allows states to purchase lands or easements for public access. The second, was intended to provide incentive to states to make improvements to their coastal programs in several coastal areas, including public access (Pogue and Lee, 1998).

OCRM indirectly evaluates the effectiveness of the national *Coastal Zone Management Program* through assessing all coastal states' performance on managing their coastal programs. This is a three years mandatory comprehensive review under section 312 of the CZMA.[9] Periodocally, there are also independent evaluations of the national CZMP or specific aspects of it. The most recent assessment was a 1997 study conducted by the *Sea Grant Program.* The study focused on the results of the *Coastal Zone Enhancement Program* of 1990. It assessed how well the national CZMP, as developed and implemented by individuals states, addresses the fundamental objectives of the CZMA. Regarding access, the study found that it has been given significant attention by all coastal states (Pogue and Lee, 1998).

Enforcement

The federal government does not get involved in enforcement issues in the field. This is a state responsibility. States' coastal acts are required to include enforcement provisions that support their coastal management plans. Yet, the federal government can exert some economic penalties upon state programs if they believe that a given state actions or inaction related to waterfront access are inadequate.

[9] The assessment is done by a special team of reviewers from OCRM, which consists of an OCRM evaluator, the coastal specialist assigned to the state, and a representative from a different state or territory coastal program.

4.1.2 Canada: federal government

Legislation/policy

Having its origins in the *Constitutional Act* of 1867 (Canada, 1999) and lately ratified by the *Constitutional Act* of 1982 (Canada, 1999) the administration of the Canadian coastal zone is divided in two main political jurisdictions along the mean low-tide mark. The offshore section was placed under federal jurisdiction and the inland section was designated to be under provincial control (Gamble, 1989).[10] As a result of this division, federal and provincial natural resources agencies have historically developed legislation and programs along both sides of the ordinary low-tide mark with little or no cooperation (Day and Gamble, 1990). This situation has undoubtedly delayed the development of integrated coastal zone management policies in Canada.

In 1978, the Canadian Council of Resource and Environmental Ministers (CCREM) made policy and planning recommendations to the federal government on the needs for integrated coastal management. These included the creation of new institutions, and the consideration to impact analyses, habitat protection, information system, citizen involvement, and public access. Unfortunately, the recommendations have never been implemented in the integrative manner suggested by the council (Day and Gamble, 1990).

Two federal coastal related acts that had the potential of fostering integrated coastal management were lately adopted by the Canadian government. They are the *Ocean Act* in 1996 (Canada, 1996) and the *Canada Marine Act* in 1998 (Canada, 2000). Even though both legal documents set basis for sustainable management in their application, they do not make reference to integrated coastal management as internationally perceived: made up of marine and land environments.

[10] As an exemption to the rule, the federal government will maintain jurisdiction over specific coastal lands such as federal parks bordering the shoreline or lands under port authorities such as the Vancouver Port Authority, which has jurisdiction over the waters and coastal lands of Burrard Inlet.

The *Ocean Act* is a powerful legal tool in terms of promoting integrated management. Even more, the act designated the Department of Fisheries and Oceans (DFO) as the lead agency to develop and pursue, in cooperation with provincial and local governments and all other interested parties, a national strategy for the management of estuary, coastal and marine ecosystems (ss.29-31). However, following the constitutional division of jurisdiction that characterizes Canada, the *Ocean Act* was carefully written so that it does not interfere with provincial powers to manage land up the low-tide water-mark:

> The *Ocean Acts* outlines Canada's duties and responsibilities in its ocean territory and introduces a new oceans management model, one that mandates the Minister of Fisheries and Oceans to promote the sustainable management of our oceans and their resources. . . . (DFO, 1996: 1, emphasis added).

Moreover, this exclusively ocean management approach was clearly underlined by Mr. Mifflin, the Minister of Fisheries and Oceans Canada at that time, welcoming the new act:

> I look forward to working closely with ocean stakeholders in the formulation of an Oceans Management Strategy, as well as in the implementation of important ocean programs. (DFO, 1996: 1, emphasis added).

It follows that the strategy promoted by the act is not an attempt to manage the coastal zone in a manner that parallels current international norms, but only to administrate a section of it, the marine waters. In such a context, clearly there is no possibility of addressing the public access issue under the federal act.

The second federal document, the *Canada Marine Act* (CMA), is the legislation that rules the 18 Canadian port in the national system. The CMA recalled the *Canada Ports Corporation Act* (CPCA) and dissolved the Canada Ports Corporation, replacing them by the Port Authorities. The main purposes of the CMA remains the same as the CPCA, to make the system of Canadian ports competitive, efficient, and commercially oriented (Yarnell, 1999). This new act may eventually offer some indirect opportunities to increase public access to the waterfront through port lands. The act requires port authorities to develop a detailed land-use plan that contains objectives and policies for the area they manage, taking in account relevant social, economic, and environmental matters

and zoning by-laws that apply to neighboring lands (s.48(1)). Under section 48(5) the public is invited to comment on the proposition of the port land-use plan. This creates the opportunity for requiring the inclusion of public waterfront access policies in the plan. In addition, the act also requires the directors of a port authority to call for a public annual meeting. In the meeting, questions should be answers by the chief executive officer and the board of directors concerning the port administration and its financial status (ss.34-36). However, despite all the above mention sections, there is no guarantee that waterfront access demands through port land by the public will be taken into consideration. The final decision remains discretion of the port authorities:

> After the port authority considers any representation made by interested persons with respect to a proposed plan, it may adopt the plan.
> (Canada, 2000: s.48(6)).

Finally, two "myths" should be clarified about waterfront access promoted by the federal government. First, public access to the foreshore for recreational purposes should not be confused with the public statutory right to safe and unobstructed navigation within federal waters. This federal public right protected under the *Navigable Waters Protection Act* (Canada, 2000), and the *Canada Marine Act* (Canada, 2000), applies only to people who use the water but does not guarantee access to and along the waterfront from upland. Second, it can be argued that the federal government secures public access to the shoreline for the public enjoyment through national coastal parks. This is not incorrect. However, promoting public access to the shore is not a specific Park's Canada policy. In addition, national parks are highly restricted areas, often distant from populated areas, and protective of ecologically sensitive environments (Canada, 1994). Therefore, public waterfront access through national parks remains an exception rather than a possible substitute to the need for federal engagement on the issue.

4.1.3 Discussion

While United States possesses a solid legal and institutional system supporting public waterfront access for recreational purposes at the federal level, in Canada such a national framework is completely absent (table 1).

The American *Coastal Zone Management Act* (CZMA), the Coastal Zone Management Program (CZMP), and the administration of both by the Office of Coastal Resource Management (OCRM), define the federal legal and institutional framework to promote waterfront access in the context of integrated coastal management.

Fundamental to the present United States situation is the recognition by Congress on the need for a national approach to manage American's coastal zone (United States, 1999:s.302). This led to a congressional declaration that, among other coastal issues, providing for public access to the coast for recreational purposes is a national policy that would benefit all citizens (United States, 1999:s.303). As a result, the CZMA was written and approved. Under the act, waterfront access became a national citizen's right legally protected and a mandatory requirement to the approval of states coastal management plans.

In Canada, despite the recommendations made by the Canadian Council of Resource and Environmental Management more than twenty years ago (1978), Canada has not developed a federal framework to legally protect public waterfront access for recreational purposes nor a national program to promote integrated coastal management. The most basic element required to secure nation-wide waterfront access is missing - pertinent federal legislation. Without this, public waterfront access can not be secure as a standard public right for all citizens.

It is a common believe among federal officials that there is no reason the federal government get involved in land issues, such as public waterfront access due to the administration of land is under provincial jurisdiction. This is appropriate in terms of land use planning, but it is not in terms of protecting a public right for the benefit of all

Canadians throughout the country. People approaching the shoreline for recreational purposes seek more than open space to recreate. They look also for the unique atmosphere created by the endless view and sounds of the ocean. An ocean that is a public resource under federal jurisdiction. Consequently, there is a federal responsibility to promote waterfront access for all Canadians.

Table 1. United States and Canadian federal legal and institutional framework to provide for public waterfront access.

Criterion	**United States** Federal	**Canada** Federal
Legislation/policy	Mandatory under the CZMA	None
Institutions	NOAA Office of Ocean and Coastal Resource Management (OCRM)	None
Funding	Assigned annually by Congress to run OCRM operating costs and support states programs	None
Staff	Qualified 20 coastal specialist within OCRMs Coastal Program Division No one assigned full-time to work on public access Everyone responsible for all aspects of the CZMP in designated regional areas Can be assigned to issue teams: public access	None
Comprehensive Planning	The CZMP	None
Public involvement	Non at the federal level Mandatory to all states under the CZMA	None
Education	Several initiatives that promote all aspects of the CZMP	None
Assessment	Non formal review of access policies Sporadic review of the CZMA with implications to access Indirect through evaluation of states performance every 3 years Independent evaluations	None
Enforcement	Non involved in the field Economic penalties to states coastal programs that do not reach minimum national requirements	None

4.2 State / provincial

4.2.1 United States: State of California

Legislation/policy

States are mandated under the federal *Coastal Zone Management Act* (CZMA) and the national *Coastal Zone Management Program* (CZMP) to develop and implement their own legislation and a coastal management programs in cooperation with the federal and local governments (Knecht, 1979; and Kitsos, 1981 *in* Cicin-Sain and Knecht, 1998). To avoid jurisdictional problems and institutional overlapping, special attention is paid in this association to legislative and institutional consistency between levels of governments. Therefore, the coastal act produced by each state must include specific state laws and policies consistent with federal requirements and locals needs. Following this logic, the *California Coastal Act* (California, 2000) intends to harmonize public and private waterfront rights, resource conservation, and federal and state legal requirements included in the CZMA and in section 4, article X of the *California Constitution*:[11]

> In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety, and the need to protect public rights, right of private owners, and natural resource areas from over use.
> (California, 2000: s.30210, emphasis added)

Narrowing the above disposition to implementation conditions, the *California Coastal Act* sets four basic requirements (California, 2000: ss.30211 to 30213):

> Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, . . .
>
> Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects . . .

[11] No individual, partnership, or corporation claiming or possessing the frontage or tidal lands of a harbor, bay, inlet, estuary, or other navigable water in this state shall be permitted to exclude the right of way to such water whenever it is required for any public purpose and the Legislature shall enact such law as will give the most liberal construction to this provision so that access to the navigable waters of this state shall always be attainable for the people and thereof. (California, 1999a: s.4, art. X, emphasis added).

> Wherever appropriate and feasible, public facilities, including parking or facilities, shall be distributed throughout an area so as to mitigate against the impact, social and otherwise, of overcrowding or overuse by the public of any single area.
>
> Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Furthermore, section 30530 of the *California Coastal Act* calls for the creation of a waterfront access program in coordination with upper and lower levels of government:

> It is the intent of the Legislature, . . . that a program to maximize public access to and along the coastline be prepared and implemented in a manner that ensures coordination among and the most efficient use of limited fiscal resources by federal, state, and local agencies responsible for acquisition, development, and maintenance of public coastal accessways . . .The Legislature recognizes that different public agencies are currently implementing public access programs and encourages such agencies to strengthen those programs in order to provide yet greater public benefits.
> (California, 2000: s.30530, emphasis added)

Institutions

States designate a single new or existing regulatory and planning agency as responsible for managing the state coastal act and the coastal program. In California this responsibility falls to the California Coastal Commission (CCC). The coastal commission was established in 1972 and made permanent under the *California Coastal Act* in 1976. CCC is the lead agency responsible for carrying out the California's coastal management program. This involves to plan for and regulate development in the coastal zone consistent with the policies of the *California Coastal Act*. CCC is also one of the two federally designated agency to administer the federal *Coastal Management Act* in California.[12] This gives to the coastal commission authority over federal activities and federally licensed or assisted activities on California coasts. Many of those activities are not otherwise subject to state control (California Coastal Commission, 1999a). Carrying

[12] The other one is the San Francisco Bay Conservation and Development Commission (BCDC).

out its mandate, CCC plays a fundamental coordination role between the federal and the state governments, as well as between this and coastal cities and counties.

Funding

Since CCC is a regulatory and planning agency, most of the funding goes to cover state coastal programs operational expenditures rather than particular project. Funding comes from the state legislature and the federal agency NOAA. Depending on fund availability, the assigned amounts may vary from one year to another. For instance, the federal contribution to all coastal states has increased in the last year by $7.4 million. To run the entire coastal program, CCC was assigned about $11.8 million in 1999 by the state and $4.4 million by the federal government.

Staff

The commission, composed by 16 members, appoints an executive director who is responsible for hiring and managing a staff of about 115 under the State's civil service system (California Coastal Commission, 1999a).[13] At the time of the interviews, 65 member of the staff were coastal program analysts working in different areas. Until recently, one of those analysts specialized full-time in public access issues. A second person was added in 1999. These employees have two principle roles. First, they oversee and develop plans and policies regulating access to the entire state coastline based on federal and state legislation. Second, they act as a source of advice to other CCC coastal analysts and local government planners dealing with public access issues as they arise in individual projects.

Comprehensive planning

The *California Coastal Commission Strategic Plan* (California Coastal Commission, 1997a) is based on a comprehensive approach to manage the state's coastal and ocean resources as defined by the state coastal act. The plan goals and objectives cut across

[13] The commission members are: The state Governor, the Senate Rules Committee, and the speaker of the assembly with confirmation of the Assembly Rules Committee each appoints two public members and two locally elected officials. Four are nonvoting members: the Secretary for Resources, the Secretary for

agency functions and programs. Its vision is to harmonize cultural and environmental resources, coastal economy, ports and industry, coastal access and recreation, hazards, community character, public participation, public education, scientific research, and partnerships with other local, state, and federal agencies to carry out the coastal management program. In addition, CCC has produced a *Public Access Action Plan* (California Coastal Commission, 1999b). The plan includes a comprehensive overview on the issue, as well as the commission's roles and responsibility in the context of the federal and state coastal management programs.

Public involvement

The public was involved in the proposition and acceptance of the *California Coastal Act* in 1976. Since then, it has also actively supported and been involved in carrying out the California's coastal management program. Under the act, consideration of public participation in coastal issues is mandatory:

> The Legislature further finds and declares that the public has a right to fully participate in decisions affecting coastal planning, conservation, and development; that achievement of sound coastal conservation and development is dependent upon public understanding and support; and that the continuing planning and implementation of programs for coastal conservation and development should include the widest opportunity for public participation. (California, 2000: s.30006, emphasis added).

Public hearings are organized when new policies are proposed, as well as before and after a local government submits a coastal plan to the state agency. The public has an opportunity to participate first in policy formulation, and then in the interpretation of those policies on each individual project at the local level. Moreover, under section 312 of the federal *Coastal Zone Management Act,* the public is also invited to participate in the assessment process of the state's performance by the federal government:

> In evaluating a coastal state's performance, the Secretary shall conduct the evaluation in an open and public manner, and provide full opportunity for public participation, including holding public meetings in the State being evaluated and providing opportunities for the submission of written and oral comments by the public . . .(United States, 1999: s.312).

Business, Transportation and Housing, the Secretary for Trade and Commerce, and the Chairperson of the State Lands Commission.

Education

The California Coastal Commission (CCC) is required under the *California Coastal Act* to implement public education programs:

> The Commission [CCC] shall, to the extent that its resources permit, carry out a public education program that includes outreach efforts to schools, youth organizations, and the general public for the purpose of promoting understanding of, fostering a sense of individual responsibility for, and encouraging public initiatives and participation in programs for, the conservation and wise use of coastal and ocean resources. Emphasis shall be given to volunteer efforts such as the Adopt-A-Beach program.
> (California, 2000: s.30012 (b)(1))

CCC has concentrated its educational efforts on the general public. One of its most important successes has been the publication of *The California Coastal Access Guide* (California Coastal Commission, 1997b), which came to complement a previously published *California Coastal Resource Guide* (California Coastal Commission, 1987). The access guide basically shows where access is possible all along the coast and what kind of features are found there. In addition, the commission promotes public stewardship of the coast through the Adopt-A-Beach program, the Save Our Seas school curriculum, coastal clean-up days, and a web page.

Developers and landowners are informed on public access regulations case-by-case when they contact the commission for a permit. For this purpose, interpretative guidelines are available for different policy issues under the *California Coastal Act*. The same material also assists local governments in developing their local coastal plans and it is a resource for government officials in other agencies as well.

Assessment

States' coastal management performance is evaluated every three years by the federal government. Section 312 of the CZMA requires states to submit a written evaluation with an assessment and detailed findings concerning the extent to which they have mplemented and enforced the program approved by the Office of Ocean and Coastal Resource Management (OCRM). The federal office evaluates whether or not states are

addressing the coastal management needs identified by Congress as national coastal policy. For instance, public access to the coasts for recreation purposes.

Similarly, CCC is required to evaluate all approved local coastal plans (LCPs) at least every five years (California, 2000: s.30519.5). The objective of these reviews is to report to the state legislature whether or not the plans have been effectively implemented in conformity with state policies. Due to a lack of funding and staff, such reviews are not completed as regularly as required. During 1988, the commission undertook its first focused review of the majority of the state's certified LCP. The plans were evaluated: on the strengths and weaknesses of the land use plan policies and implementation ordinances, on their conformity with the *California Coastal Act* policies and regulatory requirements on public access, and on operational effectiveness in terms of their overall content, structure, and results in the field. The evaluation revealed that while the LCPs' access components were consistent with the *California Coastal Act* policies at the time of certification, many of the plans subsequently underwent significant changes through amendments, modifying such consistency (California Coastal Commission, 1999b).

Enforcement

CCC has an enforcement program managed by several coastal analysts who deal with reported violations. These normally come from the general public, city or county local building inspectors, or from one of the CCC coastal analysts when working in the field. After a violation is verified, a staff member attempts to resolve the problem with the landowner. If the violator persists, legal action is taken by the commission lawyers.

An innovative CCC approach to deal with specific areas with a large number of violations has been the creation of multi-agency enforcement task forces. These include state and municipal agencies with jurisdiction in the areas of conflict (California Coastal Commission, 1997a).

4.2.2 Canada: Province of British Columbia

Legislation/policy

Public access has not been a priority issue throughout the province. British Columbia does not have laws that secure public access to the foreshore for recreational purposes. Nor does it have specific legislation to manage its coastal zone as a unit. Presently, at least 24 different provincial acts, under the administration of seven different ministries, have some jurisdiction on the coastal area (DFO, 1997).[14] None of these documents addresses the public access issue to the waterfront for recreational purposes.

Some provincial policies and guidelines related to the administration of shorelines do exist. They are included in a publication by the Minister of Environment, Lands and Parks (MELP) titled *Riparian Rights and Public Foreshore Use in the Administration of Aquatic Crown Land* (British Columbia, 1995). The document focuses principally on riparian and coastal private waterfront owners' rights rather than on public use and access to the foreshore. It mentions that the provincial government recognizes the importance for its citizens to access the foreshore for recreational purposes. However, at the same time the document clearly specifies that access to and along the foreshore is not a citizen's *right*, as many people probably believe, but a *privilege* that cannot be always guaranteed:

> The Crown [British Columbia] recognizes the importance of providing for public use of aquatic Crown lands and public access to and along the foreshore, <u>but these are not public rights</u>, <u>and they cannot be guaranteed in all cases</u>.
> (British Columbia, 1995: 3, emphasis added).

Legal *rights* are advantages or benefits conferred on a person by rules of a particular legal system. They are <u>recognized and protected</u> by the particular legal system in question. A *privilege*, in legal terms means being <u>entitled or authorized</u> to do or not to do something,

[14] Ministry of Aboriginal Affairs: *Treaty Commission Act*. Ministry of Agriculture, Fisheries and Food: *Provincial Fisheries Act, Fish Inspection Act, Farm Practices Protection Act*. Ministry of Employment and Investment: *Science and Technology Fund Act, Ferry Corporation Act*. Ministry of Energy, Mines and Petroleum Resources: *Natural Gas Price Act, Mineral Tenure Act, Mines Act, Mineral Tax Act, Petroleum and Natural Gas Act, Pipeline Act*. Ministry of Environment, Lands and Parks: *Waste Management Act, Wildlife Act, Emergency Program Act, Environmental Assessment Act, Park Act, Ecological Reserve Act,*

as one pleases, free from legal restrictions from another (Walker, 1980). In other words, rights are legally protected by law, privileges are not. They are products of an entitlement or authorization, which is normally protected under common law. However, they can be taken away by those who gave such a permission. Concerning the foreshore, this entitlement relies on the Crown, through provincial representation.

Furthermore, the following clarification is done by MELPs' document:

> The public does enjoy a privilege or bare licence to use the foreshore and other aquatic lands held by the Crown [British Columbia]. The only rights that exist, however, are the right to land boats and to embark from the foreshore in cases of emergency, and the rights of navigation, anchoring, mooring, and fishing over those lands covered by water. (British Columbia, 1995: 3, emphasis added).

Since the rights of navigation, anchoring, mooring, and fishing can only be exercised on the water, accessing the foreshore by the general public at any point of the shoreline in British Columbia can only be a right if in an emergency.

Clearly, waterfront property owners are the only persons who have a guaranteed right to access the foreshore in the province. Unimpeded access to the water from waterfront property has been historically protected for the purposes of transportation and commerce. Today, this is obviously not a need for most waterfront owners, but the law still considers it a right to have free access to the water from any point of a waterfront property through a foreshore free of obstacles:

> This right of access [unimpeded access] to and from the water applies to every point along the water frontage, including every part of the foreshore in front of the upland property . . . . This right exists separate and apart from the public right of navigation, and the right of access applies to non-navigable bodies of water as well.
> (British Columbia, 1995: 6).

The only provincial legislation that can indirectly provide for public waterfront access is found in section 75 (b) of the *Land Title Act* (British Columbia, 1996):

> If the land subdivided borders on

Land Act. Ministry of Municipal Affairs and Housing: *Municipal Act, Growth Strategies Act*. Ministry of Small Business, Tourism and Culture: *Tourism Act, Heritage Conservation Act, Museum Act.*

(i) a body of water, the bed of which is owned by the Crown,
(ii) the boundary of a strip of land established as the boundary of a water reservoir, where the strip of land and reservoir are owned by the Crown, or
(iii) a strip of Crown land 20 m or less in width contiguous to a natural boundary as defined in the *Land Act*,

Access must be given by highways 20m wide to the body of water and to the strips at distances not greater than 200m between center lines, or, in a rural area where the parcels into which the land is subdivided all exceed 0.5 ha, at distances not greater than 400m between centre lines.

This section of the act is in conformity with the federal and provincial statutory right of accessing the water for commerce, navigation, and fishing. It was not written with the intention of providing waterfront access for recreational purposes. Yet, this is the only mandatory legal disposition in the province that can indirectly be used for that purpose. Unfortunately, it secures access at street-ends, but not necessary along the foreshore. In addition, it applies only when subdivision occurs. Its application would be difficult on residential coastal areas where land lots are too small to be further subdivided.

Finally, it would be also expected that The *Municipal Act* (British Columbia, 1996) include dispositions for waterfront access. This is an important statute in instructing local governments in planning, land use and zoning, including the creation of parks and open spaces. However, nowhere in the document is it specified that coastal municipalities should provide waterfront access.

Institutions

Until October 1998, the foreshore in British Columbia was under the administration of the *Minister of Environment, Lands and Parks* (MELP). Following this date, the responsibility was transferred to the *British Columbia Assets and Land Corporation* (BCAL). Above the upper limit of the foreshore, the administration of lands in urban areas is, in general, under the control of local governments and in rural areas under the Ministry of Forestry.[15]

[15] Slightly over 95% of British Columbia is public or Crown land. Approximately 83% of the province has been classified as forest land and is under the administration of the Minister of Forest (Clogg, 1999). Considering that some land is also under the jurisdiction of other agencies such as the Ministry of Energy and Mining, or Parks Canada, BCAL manage less than 12% of the provincial lands.

BCAL is a Crown corporation that provides lands and assets marketing and land management services for the government of British Columbia (BCAL, 1999). They administer the use of the foreshore and extend tenure and building licences to interested party based on the policies previously established by MELP (Higham, 2000).

BCAL does not have a planning initiative concerning public access to the foreshore for recreational purposes. It does not require local governments to facilitate access to the foreshore, nor does it have specific regulations to protect public access to, or along, the foreshore when extending licences. For instance, if a private waterfront owner asks for a permit to build a dock from his/her property to the water, BCAL, among other things, requires the owner to have certification from the Department of Fisheries and Oceans that there is no danger to marine habitat, certification from the local government that local zoning is respected, and certification from the Coastal Guard that the dock will not interfere with navigation. However, BCAL does not have a requirement to ensure that the dock will not interfere with public access along the foreshore. Such a requirement, even though it should be under provincial responsibility, may or may not be required by local governments depending on coastal municipal building regulations (Higham, 2000).

Provincial efforts to develop a coastal zone strategy

> While we have made significant progress on major environmental, social and economic issues related to the land, it is now time to turn our attention to the coastal zone, in acknowledgment of our jurisdiction, renewed support and our responsibility for leadership. (British Columbia, 1998: 1).

In reaction to the federal initiative in ocean management started in 1997 under the *Ocean Act*, British Columbia formed its *Inter-agency Coastal Working Group* composed of seven provincial ministries and two agencies.[16] The group, lead by the *Land Use Coordination Office* (LUCO) produced the provincial *Coastal Zone Position Paper* (British Columbia, 1998). The document represents the long-term vision, interests, and

[16] Land Use Coordination Office; Ministry of Environment, Lands and Parks; Ministry of Fisheries; Ministry of Small Business, Tourism and Culture; Ministry of Energy and Mines; Ministry of Forests;

objectives of the province on coastal zone management. Seven goals are cited in the document: sustainable economic development, coastal resource management, marine environmental protection, coastal zone planning, growth management in the coastal zone, coastal land and resource information, and applied science and technology development. Increasing public access to the foreshore for recreational purposes is not one of them.

4.2.3 Discussion

Similar to the federal level, dramatic differences exist in the approach to managing public waterfront access to the coastal at the state-provincial levels in the United States and Canada (table 2).

American coastal states have developed statewide laws, designated institutions, and created comprehensive coastal programs and plans to provide access to the waterfront.[17] This legal and institutional framework is consistent with federal requirements and supportive of local government management. Furthermore, the responsible institution is supported economically by both the state and the federal government. It has staff trained in coastal management as well as specialized analysts in public access. A similar framework is absent under both the Canadian federal and provincial legal and institutional structure.

In California, waterfront access to and along the shoreline is a state priority legally protected under the *California Constitution* and the *California Coastal Act*. In contrast, several aspects indicate that access is clearly not a priority of the British Columbia provincial government. The concept is not mentioned in provincial statutes and is virtually ignored in MELPs' guidelines for shoreline administration. The present and former institutions in charge of foreshore management, BCAL and MELP, do not

---

Ministry of Aboriginal Affairs; Ministry of Municipal Affairs; and the Information, Science and Technology Agency.

actively promote waterfront access. Increasing public coastal access has not been included as one of the priority goals in recent provincial efforts to develop a coastal zone strategy (British Columbia, 1998).

As a consequence of the lack of a pertinent legislation, as well as a regulatory and planning provincial institution responsible of developing policy and programs that promote waterfront access, the institutional framework defined by the other criteria of comparison become absent. However, they can be pull together and be applied to integrated coastal zone management if political will to fund such a process exist. For instance, British Columbia has been already engaged in comprehensive planning, including extensive public participation, such as the processes leaded by the Commission on Resources and Environment (CORE) on extensive areas of the province (Owen, 1998). Moreover, the professional capacity is available. Provincial universities have been producing for several year professionals trained in planning, policy and natural resource management.

[17] All coastal states but Indiana and Illinois have a federally approved coastal management plan, which includes public access as a priority issue. The coastal management plan of the two remaining states is presently being written (Morgan, 2000).

Table 2. United States and Canadian state/provincial legal and institutional framework to provide for public waterfront access.

Criterion	**United States** California	**Canada** British Columbia
Legislation/policy	Mandatory under the CZMA and the California Coastal Act	MELP guidelines on riparian rights and public foreshore uses Indirectly through the *Land Title Act*: s.75(b)
Institutions	The California Coastal Commission (CCC)	Non designated agency Indirectly under responsibility of BCAL
Funding	Assigned by the federal and by the California administration; it covers mainly staffing and operating costs of the entire CCC	None
Staff	Qualified 65 coastal program analysts within CCC with shared responsibility on waterfront access Two specialized in waterfront access issues	None
Comprehensive Planning	The California Coastal Commission Strategic Plan The Public Access Coastal Plan	None
Public involvement	Mandatory under the CZMA and the California coastal Act	None
Education	Mandatory under the California Coastal Act Several initiatives Interpretative guidelines	None
Assessment	Federal evaluation of states programs every 3 years State evaluation of LCPs every 5 years Funding and staff availability limitations	None
Enforcement	Reactive Enforcement program and multi-agency task forces Funding and staff availability limitations	None

4.3 Regional

4.3.1 United States: San Francisco Bay Conservation and Development Commission (BCDC)

Legislation/policy

BCDC public waterfront access policies are legally supported by the *McAteer-Petris Act* of 1965 (California, 1999b). Balancing development, conservation and public uses, the act is a state document specifically tailored for the management of San Francisco Bay waters and its adjacent lands. Its two primary goals are to prevent the unnecessary filling of the Bay and to increase public access to and along the Bay shoreline.[18] On this last issue, the act calls for the provision of maximum feasible waterfront access as "*essential to the public welfare*":

> The Legislature further finds and declares that certain water-oriented land uses along the bay shoreline are essential to the public welfare of the bay area, and that these uses include . . . water-oriented recreation and public assembly . . . that the San Francisco Bay Plan should make provision for adequate and suitable locations for all these uses, . . . that existing public access to the shoreline and waters of the San Francisco Bay is inadequate and that maximum feasible public access, consistent with a proposed project, should be provided. (California, 1999b: s.66602; emphasis added).

Within this legal framework, BCDC developed waterfront access implementation polices. The following are some examples:

> In addition to the public access to the Bay provided by waterfront parks, beaches, marinas, and fishing piers, maximum feasible access to and along the waterfront and on any permitted fills should be provided in and through every new development in the Bay or on the shoreline, whether it be for housing, industry, port, airport, public facility, or other use, except in cases where public access is clearly inconsistent with the project because of public safety considerations or significant use conflicts. In this cases, access at other locations preferably near the project, should be provided whenever feasible. (BCDC, 1998: 36).

[18] Before 1965, about 2,300 acres of the San Francisco Bay were filled each year. After the creation of BCDC, the filling was stopped. Today, it can occur only under extremely well-founded conditions. With respect to access, less than four miles of the Bay shoreline were open to public access in 1965, while today, over one hundred miles of the shore are open and improved with pathways, landscaping, and other public facilities (Travis, 1987).

> Public access to some natural areas should be provided to permit study and enjoyment of these areas (e.g. by boardwalks or piers in or adjacent to some sloughs or marshes). . . . (BCDC, 1998: 36).
>
> Whenever public access to the Bay is provided as a condition of development, on fill or on the shoreline, the access should be permanently guaranteed. . . . (BCDC, 1998: 36).
>
> Access to the waterfront should be provided by walkways, trails, or other appropriate means and connect to the nearest public thoroughfare where convenient parking or public transportation may be available. (BCDC, 1998: 37).
>
> Federal, state, regional, and local jurisdictions, special districts, and the Commission [BCDC] should cooperate to provide new public access, especially to link the entire series of shoreline parks and existing public access areas to the extend feasible . . . (BCDC, 1998: 37).

Institutions

A single regulatory and planning agency is designated by the federal and the state governments to manage the bay. This is the San Francisco Bay Conservation and Development Commission (BCDC). The commission was created by the California Legislature in 1965 in response to broad public concern over the future of the bay (BCDC, 2000). Its jurisdiction includes the entire bay area up to 100 feet above the high-tide water-mark (Fig.z.z). Its mandate is to maintain and carry out the provisions of both the *Coastal Zone Management Act* and the *McArteer-Petris Act*, as well as developing and implementing the *San Francisco Bay Plan* (BCDC, 1998).[19]

Funding

BCDC is primarily funded by the California government as specified under the *McArteer-Petris Act*, and to some extent by the federal government (OCRM). As an example of amounts, in 1999 the state contribution accounted for $3.7-4.3 million and the federal support was about $518,000.

[19] Additionally, BCDC has the mandate to implement the *Suisun Marsh Preservation Act*. Its objective is to protect and enhance the wetlands of the Suisun marshes at the northeast side of the bay (BCDC, 2000).

Both the California Coastal Commission (CCC) and the San Francisco Bay Conservation and Development Commission (BCDC) are regulatory and planning state agencies without power to manage specific access projects or to buy lands. Consequently, the federal and state funding assigned to them is basically to cover staff salaries and administration costs. As will be explained in chapter 5, projects, facilities construction, improvements, and maintenance expenses, are largely assumed by those requiring development permits. This refers to private landowners such as developers, or public landowners such as municipalities. State funding for particular projects or land acquisition is channel through the California Coastal Conservancy. As opposed to CCC and BCDC, this is an agency with the legal authority and financial support from the State of California for accomplishing these tasks.[20]

Commission and staff

The Bay Conservation and Development Commission is composed of 27 members appointed by various local, state and federal government bodies. BCDC staff consists of an executive director and about 28 employees, including permit, planning, enforcement and design analysts as well as attorneys. Given the fact that one of the two BCDC mandates is providing for public access around the bay, most staff members work on access-related issues at least part-time.

Comprehensive planning

The *San Francisco Bay Plan* contains policies regarding the use of the Bay and its shoreline in a comprehensive manner following a regional management approach. Other than specific policies in public access, which cut across all bay issues, the plan includes explicit policies on fish and wildlife, water quality, water surface area and volume, marshes and mudflats, smog and weather, shell deposits, fresh water inflow, shoreline protection, water-related industry, ports, airports, transportation, commercial fishing,

[20] The California Coastal Conservancy is a unique state resource agency established in 1976 by the California legislation. The agency uses entrepreneurial techniques to purchase, protect, restore, and enhance coastal resources, and to improve access to the shore. It works in partnership with local governments, other public agencies, NGOs, and private landowners (California Coastal Conservancy, 2000).

recreation, appearance, design, and scenic views, salt ponds and other managed wetlands (BCDC, 1998).

Public involvement

There is historically strong public involvement in bay issues in the San Francisco Bay area. Citizens' concerns are at the origin of the *McArteer-Petris Act* and the existence of BCDC.[21] Furthermore, the public interest has become the driving rational for protection of the bay under the act:

> The Legislature hereby finds and declares that the public interest in the San Francisco Bay is in its beneficial use for a variety of purposes; that the public has an interest in the Bay as the most valuable single natural resource of an entire region, a resource that gives special character to the Bay Area; . . . It is, therefore, declared to be in the public interest to create a politically responsible, democratic process by which the San Francisco Bay and its shoreline can be analyzed, planned, and regulated as a unit. (California, 1999b: s.66600).

Three advisory boards composed by members of the public channel the public participation in BCDCs' decision-making process. They are the Citizens Advisory Board, the Engineering Criteria Review Board, and the Design Review Board. They provide assistance to BCDC in evaluating its policies or specific aspects of projects that require commission permits. All three advisory board meetings are open to the general public in accordance with the state's *Bagley-Keene Open Meeting Act* (California, 1999a). This act requires that actions and deliberations of state agencies be conducted openly. In addition, seven out of 27 commission members are appointed members of the public. All commission meetings are open to the public and allow public testimony on any BCDC action or consideration. All materials relating to a proposed project or policy amendment are public documents. The public can review all documents, write letters, call, or give testimony at commission meetings. All public comment are documented by BCDC. The commission staff often works with the public and interested parties when preparing recommendations.

[21] Alarmed by the increasing degradation of the bay's shoreline, citizens of the bay area formed the Save San Francisco Bay Association in 1961. Due in large part to the efforts of the Association, the *McAteer-*

Concerning specific projects, BCDC cannot consider permit applications until all discretionary local approvals have been received by a permit applicant. Most local approval processes such as zoning changes, variances, excavation or fill permits include a public participation component. After obtaining local approval, the applicant can then apply for a BCDC permit. At BCDC, small projects may go through an administrative approval process handled by the staff and approved by the commission. However, major projects are required to undergo a comprehensive public process similar to the approval of new or revised policies.

Education

BCDC has produced interpretative guidance such as the *Public Access Design Guidelines* (BCDC, 1985) that familiarize the general public, developers, public officials, and municipalities around the bay with BCDC programs and their permit requirements. In addition, conditions on permit approvals may contain educational components such as the installation of interpretive signs in public access areas. An important contribution to public education concerning access around the bay is the *San Francisco Bay Shoreline Guide*, published by the California Coastal Conservancy (1995).

Assessment

As a state agency, BCDC must comply with the comprehensive assessment required every three years under the federal CZMA. In addition, the *McArteer-Petris Act* requires updating the bay plan every five years. Due to the lack of funding, the plan has been amended over the years for particular issues but never reviewed comprehensively since its adoption in 1969. For the latest version of the San Francisco Bay Plan, which is only two years old, BCDC outlined a 10-year strategy to update the plan, contingent on funding.

State agencies such as BCDC can also apply to the Office of Ocean and Coastal Resource Management (OCRM) for funding with the object of conducting an assessment on

---

Petris Act was passed in 1965 and BCDC was created at that time as a temporary state agency charged with providing a regional approach to protecting public interests in the San Francisco Bay area (BCDC, 2000).

probable outcomes of a particular policy. A recent example is the evaluation of public access policies on wildlife. Nevertheless, such studies remain sporadic because of scarce funding.

Enforcement

BCDC is required by the *McArteer-Petris Act* to develop an enforceable plan according to the act's provisions in this respect (California, 1999b: s.66603). There are no agency inspectors at BCDC. Violations are mostly reported by the general public, city and county building inspectors, or by BCDC analysts in the field. For years the agency had only one person in its enforcement division. Three more have recently been added. These analysts have legal backgrounds and two attorneys support them. However, more employees would be necessary.

4.3.2 Canada: The Fraser River Estuary Management Program (FREMP)

> The simple 'concept of public access to and along the waterfront at all possible locations' should be written into all official community plans.
> (Proposed Recreation Plan, FREMP, 1990: 16).

Legislation/Policy

It is a FREMP policy to promote recreational activities and public waterfront access to and along the coastline of the Fraser River and the foreshore in harmony with other uses. This is expressed in the goals and principles of their *Proposed Recreation Plan* (FREMP, 1990: 2-4):

> The central goal for recreation on the Fraser is to maximize the variety, quality, scale, and accessibility of recreation opportunities preserved on water and shoreline areas, in both riverine and tidal frontages.
>
> River and foreshore recreation must be an equal partner with conservation, housing, shipping and water-oriented industrial and transportation functions.
>
> Linear parks and street-end access points should play an important role in preserving and securing recreation values.

> New utility rights-of-way, dykes, industrial and port development should be designed to retain or expand recreation opportunities currently available.
>
> Revitalization and other changes to developed waterfront must accommodate recreation features and waterfront access.

The objective is to create a continuous system of recreational opportunities:

> It is essential that there be enough established parks and recreation sites to form the backbone of a recreation system. Where possible, there should be linear connections between these sites along with industry viewing sites, street-end access and signs identifying the River's other uses. (FREMP, 1990: 9).

These goals and principles were incorporated in the *Estuary Management Plan* (FREMP, 1994) to represent FREMP policy on recreational issues. However, it is important to remember that FREMP is not an agency but a coordination secretariat. FREMP does not have the authority to regulate or acquire lands, nor to direct development. Consequently, these policies should be considered guidelines on recreation and access matters for signatory partners and municipalities. These are expected to develop their own policies within the framework of a broader regional vision proposed by FREMP.[22]

Institution

The FREMP Water Land Use Committee (WLUC) is in charge of implementing the *Estuary Management Plan* (EMP). The committee has the responsibility of incorporating waterfront access policies when developing implementation strategies. WLUC is an advisory committee to the FREMP Management Committee. It is composed of members from each surrounding municipality, regional governments, First Nation's reserves, ports and airport authority, and federal and provincial agencies.[23]

Funding

FREMP partners each contribute equal funding to run the program: $100,000 dollars each for a total FREMP budget of $600,000. As a coordination program, FREMP does not fund specific projects but supports studies within the EMP framework that contribute to

[22] All of the member municipalities but Pitt Meadows have endorsed the Estuary Management Plan.
[23] The area includes twelve municipalities, three First Nations Reserves, two port authorities, and one international airport. Municipalities of: Burnaby, Coquitlam, Delta, Langley, Maple Ridge, New Westminster, Pitt Meadows, Port Coquitlam, Richmond, Surrey, Vancouver, and White Rock. Reserves: Katzie Nation, Musqueam Nation, and Tsawwassen Nation. Ports: North Fraser Port Authority and Fraser River Port Authority. Airport: Vancouver International Airport Authority.

its coordination mandate. Because of limited staff and funding, not all aspects of the EMP get addressed every year. Since the development of the *Guide to Interpretative Themes and Recreation Access* (FREMP, 1996), no direct funding has been assigned to public access issues. However, the issue may be indirectly addressed in other studies associated with other related subjects. For instance the Economic Development Task Group, which reports to WLUC, considers public access issues as part of its investigation of industrial land along the foreshore.

Staff

Within FREMP there is no a specific staff member in charge of promoting public access. Instead two full-time persons and one part-time person perform all of the coordination work and develop final reports. Nevertheless, they will address public access issues, if it is necessary, when developing and coordinating management strategies.

To address specific issues, each partner and WLUC member can designate representatives to sub-committees or "Task Groups." Those sub-committees are not permanent; they are dissolved after the task is accomplished. Presently there is no sub-committee for recreation and access. It was dissolved after the completion of the *Guide to Interpretative Themes and Recreation Access* in 1996.

Comprehensive planning

The *Estuary Management Plan* was written based on a comprehensive vision to manage the lower section of the river:

> Improve environmental quality in the Fraser River Estuary while providing economic development opportunities and sustaining the quality of life in and around the estuary (FREMP, 1994: 14).

Within this framework, public waterfront access is addressed in its relationship to the five other themes of the plan through the recreation section. Those sections address issues related to water quality management, fish and wildlife habitat, navigation and dredging, log management, and industrial and urban development. To encourage the implementation of this comprehensive approach, FREMP published *The River Estuary: A*

Guide to Interpretative Themes and Recreation Access (FREMP, 1996). The report offers to all involved parties a comprehensive program concerning recreation in the estuary. It outlines interpretative opportunities and facilities that could be developed and harmonized with natural assets, along with water- and coastal-based human activities.

Public involvement

Although there is no an established procedure for doing it, public input is welcome at any time by FREMP. It is not mandatory for the program to consult the general public when doing its coordination work. FREMP may invite the public to express their opinion on issues that are considered of major interest to people. In this context, they may integrate such opinions into strategy development and planning actions. This was the case when creating the *Proposed Recreation Plan* (FREMP, 1990) that had important implications for the general public. On the other hand, no public consultation events have been organized when planning for dredging management strategies in the estuary because it is not considered to be relevant to the general public.

FREMP also has an Environmental Review Committee (ERC). ERC coordinates projects review processes among all FREMP partners concerning environmental issues.

During the reviews, non-environmental issues such as public waterfront access can be brought to the attention of ERC by the public. During these processes, information about the project is available to anyone visiting the FREMP office. It is the responsibility of interested publics to obtain the information and express their concerns in writing to ERC.

Education

FREMPs *Proposed Recreation Plan* (FREMP, 1990) recommended the development of a communication plan. This was intended to get agencies and industries involved in educational opportunities that promoted FREMP objectives. Unfortunately, the plan has not been developed. In 1996 FREMP published *The Fraser River Estuary: A Guide to Interpretative Themes and Recreation Access* (FREMP, 1996). The guide is a comprehensive document with the objective of creating awareness of nine ecological, economical, and social themes and their value to recreation and public access. The

themes are: the river, habitat, fish and wildlife, settlements, transportation, fishing, agriculture, recreation and public access. Even though the guide is available to the general public, this is not a document suited to mass distribution. As specified in the document, the intended audience is municipal and regional planers, museum staff, federal and provincial government agencies, non-governmental organizations, industrial groups, developers, and tourism operators. However, the guide can be considered an important educational resource on recreation and access matters and an excellent source of information from which to prepare mass-oriented educational material.

At the time this report was written, a task group within FREMP was engaged in developing guidelines for planners to promote the notion of a "working river" by the creation and protection of water-dependent industries along the coastal lands. The guidelines will include the need for providing public access in conjunction with industrial sites, whenever possible. Other than being a tool to promote access, the guidelines will also have the potential of educating planners and industry owners on FREMPs policies on public waterfront access issues.

Assessment

Every five years, the vision, goals, and guiding principles of the Estuary Management Program must be reviewed. This process implies a reassessment of the *Estuary Management Plan* (EMP) and therefore a review of FREMPs public access policies. For instance, during the first review of the plan in 1998, one of the public workshops recommended an increase in public access opportunities to the waterfront. In addition, the EMP requires an annual review of management strategies and plan implementation tools. This includes reassessment of the feasibility of program targets, the efficacy of programs, the adequacy of the data collected for the evaluation, the institutional and joint funding arrangements, the public consultation process, and the conflict resolution strategy (FREMP, 1994). Furthermore, the Water and Land Use Committee (WLUC) prepares annual work plans for implementation of the EMP which are monitored through quarterly progress summary reports.

Enforcement

FREMP, as a coordination program, does not have the power to enforce the *Estuary Management Plan* dispositions on public access. FREMP cannot force either its partners or members of the Water and Land Use Committee to provide public waterfront access. If an enforcement issue involves for example a person or entity blocking access in designated areas, the enforcement responsibility devolves to the partner or the municipality that has jurisdiction where the problem occurs.

4.3.3 Discussion

BCDC and FREMP possess comparable policies on waterfront access (table 3). However, in contrast to BCDC, FREMP is missing legal support and regulatory and planning powers. This has a major impact on the nature of the organization, on how they operate and on how far reaching their policy on public access can be.

BCDCs policies on public access are legally supported by federal and state laws: the *Coastal Management Act of 1972* and the *McAteer-Petris Act of 1965*. Under both acts BCDC is the designated agency to regulate and plan the mandatory provision for public access to and along the San Francisco Bay waterfront. Thus BCDC's legal existence defines its institutional framework. The legislation secures continuity, financial support from the federal and state administration, as well as qualified staff to develop, implement, and carry on the *San Francisco Bay plan*. As a public agency, BCDC is accountable to the federal and state government, as well as to the people on the San Francisco Bay area. Under the law public participation in the decision making process, preparation of educational initiatives, assessment of policies and enforcement become mandatory. BCDC operates as an independent agency, though, its activities articulate with the role of the California Coastal Commission on managing the state's coasts.

FREMP as a coordination program between federal and provincial agencies, port authorities, and the Greater Vancouver Regional District, has no legal status at any level of government. Its operations and continuity is subordinated to its partner's requirements

and interests in the Fraser River Estuary. FREMP can be dissolved if the partners decide so. Furthermore, FREMP is not only funding dependent on the partners contribution, which is at least seven times less than what BCDC receives, but also it depends on staff availability from the associated institutions to carry on its work. The lack of legal designation and therefore absence of regulatory and planning powers dramatically limits FREMPs capacity to implement its waterfront access policies. Consequently, in terms of regulatory tools, the policies cannot reach farther than being guidelines to waterfront stakeholders on the estuary.

Nevertheless, despite the lack of legal framework supporting FREMPs policies on waterfront access or on any other initiative undertaken by the program, FREMP has the potential of positively impacting public waterfront access in their region of interest. The integrated management approach embodied in the *Estuary Management Plan* (FREMP, 1994); and the views expressed in *The Fraser River Estuary: A guide to Interpretative Themes and Recreation Access* (FREMP, 1996) have been an invitation to estuary stakeholders to become part of a regional strategy.

As a result, a number of local and regional initiatives have been undertaken for the creation of several new parks and trails along the waterfront. Some examples in that direction are the GVRD *Greenway Plan*, the integration of access policies by the port authorities in their planning process, and the inclusion of a similar approach to other regional programs such as the Burrard Inlet Environmental Action Program, which management plan is in preparation.

Table 3. United States and Canadian regional legal and institutional framework to provide for public waterfront access.

Criterion	**United States** BCDC	**Canada** FREMP
Legislation/policy	Mandatory under the CZMA and the McAteer-Petris Act San Francisco Bay Plan policies	Policies and guidelines under the *Estuary Management Plan* (EMP)
Institutions	BCDC	FREMP Water Use Land Use Committee (WLUC) Non regulatory and planning power
Funding	Assigned by the federal and by the California administration Covers mainly staffing and operating costs of the entire BCDC	Contribution by each FREMP partner for the entire program
Staff	Qualified 28 coastal analysts with shared responsibility on waterfront access	Qualified 2 full time and 1 part time Do not work on access issues regularly WLUC members can create Task-Groups for specific topics
Comprehensive Planning	The *San Francisco Bay Plan*	*The Estuary Management Plan* *The Fraser River Estuary: A guide to Interpretative Themes and Recreation Access*
Public involvement	Mandatory under the McAteer-Petris Act and the *Bagley* Reactive Funding and staff availability limitations - *Keene Open Meeting Act*	Welcome but non mandatory Public invited depending on the issue
Education	Several initiatives	Indirect material
Assessment	Federal evaluation of states programs every 3 years Evaluation of the bay plan every 5 years	Plan review every 5 years Annual review of management strategies and implementation tools
Enforcement	Reactive Enforcement division	Non regulatory powers

4.4 Municipal

4.4.1 United States: City of San Francisco

Legislation/policy

Local governments are requested under the *California Coastal Act* to develop their own regulations on public access as part of their local coastal area plans (LCP). These regulations should be consistent with federal and state legal requirements on access (California Coastal Commission, 1999). In San Francisco, the recreation and open space element of the city's *Master Plan* includes specific public waterfront access policies (City of San Francisco, 1999b). These policies are incorporated in all plans that contains a portion of the city's shoreline under the following objective:

> Provide continuous public open space along the shoreline unless public access clearly conflicts with maritime uses or other uses requiring a waterfront location. (City of San Francisco, n.d.: 9).

Toward this objective, the general city policies on the issue are (City of San Francisco, n.d.: 9-11):

> Requires all new development within the shoreline zone to conform with shoreline land use provisions, to incorporate and maintain open space, to improve access to the water, and to meet urban design policies.
>
> Maintain and improve the quality of existing shoreline open space. Increase interagency cooperation to improve maintenance and renovation.
>
> Create a trail around the perimeter of the City which links open space along the shoreline and provides for maximum waterfront access.
>
> Create a visually and physically accessible urban waterfront along the Embarcadero corridor between Fisherman's Wharf and China Basin.
>
> Provide new public open spaces along the shoreline.

Similarly, the *Waterfront Design and Access* element of the Port of San Francisco *Waterfront Land Use Plan* includes four primary policies on public access matters

inspired by the concepts of continuity, sequence, variety, and connectivity (Port of San Francisco, 1997: 20):

> A continuous public access and open space program that encourages people to explore the entire waterfront.
>
> A sequence of significant open spaces occurring at frequent walking intervals.
>
> A variety of public access and open spaces to experience the waterfront's many activities.
>
> Public access and open spaces which provide connections between the city and the Bay.

The results expected from these policies expressed a clear wiliness of the port administration to improve waterfront access in their properties:

> In developing new public access and open space, the Port will build upon its base of existing public access and open space, create opportunities for people to explore the entire waterfront through a variety of recreational opportunities and connections with the water, and provide opportunities for spectacular views of the Bay and its maritime activities. (Port of San Francisco, 1997: 20)

Furthermore, the port defines qualitative standards for new public access and open space and for the public access on piers. For instance, visible connection to the water, area identity, site improvements, commercial facilities within and adjacent to public access and open spaces, design for security, access, circulation and destination areas on piers (Port of San Francisco, 1997).

Institutions

At the local level, the responsibility for providing public access rests on municipalities. Local governments generate their own local coastal plans with the logistic support of the designated state agency. LCPs are required to incorporate an access component that details the manner and location in which access will be protected and provided. After an LCP is certified by the state agency, most of the permitting authority exerted by the state under its coastal act is delegated to local municipalities, becoming the first public institution to meet when coastal permits are required in its area of jurisdiction. Within the City of san Francisco is the responsibility of the Planning Department to secure that waterfront access policies are part of all coastal city planning. The Port of San Francisco

deal independently with the issue but all waterfront access policies and related initiatives have to be in coordination with and approved by the city.

Funding

The city does not assign specific funds to waterfront access issues. Funding is directed to projects that cover several aspects of city planning simultaneously. Waterfront access can be one of them depending on the geographical position of the area of concern. Similar to the California Coastal Commission and the San Francisco Bay Development and Conservation Commission, the city and the Port of San Francisco primarily require developers to bear the cost of building and maintaining public access facilities. They also look for federal or state agencies willing to contribute. However, city taxes or port revenues can fund small projects.

Staff

There is no specific staff member assigned to public access at the City of San Francisco. For planning purposes the city is divided in quadrants and different city planners are assigned to each quadrant. Their responsibility is looking after all planning aspects of the city's *Master Plan*, including public access. At the Port of San Francisco, three people normally work, but not solely, on public access issues. The most recurrent background of employees in both institutions involved in waterfront access is in city and regional planning, land escaped architecture and urban design.

Comprehensive planning

Both the city and the Port of San Francisco public waterfront access policies are incorporated into their respective comprehensive land use plans governing all properties under their jurisdiction. Those policies are not applied in isolation but in an integrative manner, incorporating all other aspects of the planing process for a given area. For instance, development, transportation, maritime commerce, industry, navigation and fisheries activities, natural resources protection, and recreational facilities for public use (City of San Francisco, 1995, 1998).

Public involvement

Public consultation on the decision-making process is mandatory under the *San Francisco Sunshine Ordinance* (City of San Francisco, 1999: ss.67.3-67.17). This ensures that deliberations are conducted before the people and that city operations are open to public review. A Citizens Advisory Committee is in charge of gathering public concerns on city policy and projects occurring under the city's jurisdiction, including the port area. As each public access project is developed, individually or as a part of a coastal plan, approval is required from neighborhoods, public interest groups, and civic organizations.

Education

At the local level, the whole process of public participation is an important part of the education of all interested parties. In addition, since October 1999, the City of San Francisco is engaged in the preparation of a simplified version of the city's *Master Plan*. This will be available to the general public and interested parties.

The port does not have an educational program, other than guidelines and interpretative signs, to designate that a place is public. Nevertheless, access points and trails along the port are publicized in many tourism publications and are also included in city documents.

Assessment

The City of San Francisco Planning Department has established mandatory requirements for revisions and updates of the transportation element but not for public access policies. Those are reviewed only when necessary and if funding is available.

The Port of San Francisco's policy calls for a review and update of the *Waterfront Land Use Plan* every five years. The review has not been undertaken yet as the plan is only three years old. Neither the Port nor the City of San Francisco have a monitoring program to check if the already existing public access facilities are achieving their original purposes.

Enforcement

The City and the Port of San Francisco do not have an enforcement division that specifically target public access problems. Neither do they have inspectors for this purpose. Yet, both have building inspectors who are often in the field and can report public access violations. If the city is notified of a violation, depending on funding levels and human resources availability, staff can be assigned to deal with them. In most cases, violations are reported to the California Coastal Commission or to the San Francisco Bay Development and Conservation Commission, who have a stronger and more specific mandate to provide public access.

4.4.2 Canada: City of Vancouver

> Vancouverites seek new and more diverse public places - places where people can relax, walk, bike, socialize, celebrate, and play. . . . Nature will be protected and so will the public views to the mountains and water that make up the city's spectacular setting.
> (City of Vancouver, 1995a: 26).

Legislation/policy

All local governments in British Columbia operate under the *Municipal Act* (British Columbia, 1996), except Vancouver, which works under the *Vancouver Charter* (City of Vancouver, 1996a). The charter recognizes some unique needs of Vancouver and it gives certain flexibility to the city, but in general, this is a parallel document to the *Municipal Act*. As in this act, there is no reference in the charter to public waterfront access for recreational purposes. Despite this situation, since the rezoning process of False Creek South area in 1970 from industrial to residential, Vancouver has systematically developed and integrated public access policies in all city plans which have a coastal component (SERA, 1985; City of Vancouver, 1996b).[24] The policies are developed through planning, zoning, and parks provisions found in the city's charter and in the *Land Title Act* (British Columbia, 1996). They focus on increasing the recreational uses, the aesthetic value, and

[24] The report written by SERA consultant, *Water Access in Vancouver*, for the City of Vancouver includes a comprehensive review of initiatives previous to 1985.

the ecological quality of the waterfront, as well as, ensuring accessibility and linkage to surrounding areas. They general form is as follow (City of Vancouver, 1997: 11; 1998a: appendix A):

> Increase public access to the water, including barrier-free access, view points, greenways, and transit links.
>
> Encourage recreational and cultural activities on and along the water.
>
> Provide and encourage appropriate levels of public amenities along the waterfront
>
> Provide appropriate landscaping, outdoor furniture, and public art in waterfront parks and access points to attract people and enhance a wide range of public usage.
>
> Use the space along the water for educational displays and information about water and shoreline.

Within this framework, specific access policies are developed and included in each policy statement describing general planning principles that will guide future development on a site. A relevant example to this is found on the recently approved Southeast False Creek (SEFC) policy statement (City of Vancouver, 1999: 49, 53):

> *Public access to the waterfront should be a primary objective.*
>
> The waterfront should be designed to be publicly accessible and a principal amenity space for both SEFC residents and for the city as a whole.
>
> The shoreline should be designed to offer a diversity of aesthetic experiences . . .
>
> The treatment of the pedestrian/bicycle system should reflect the overall objectives of achieving a major public presence on the waterfront, by incorporating a diversity of activities and opportunities for recreational use of the water, and by increasing the ecological health and diversity of the waterfront habitat.
>
> A diverse network of pedestrian and bicycle paths should be provided through the site and the adjacent neighborhoods, linking the waterfront, public parks, community facilities, local commercial uses, and passenger ferry system and transit connections . . .

Institutions

Within the municipality of Vancouver, the Engineering and the Community Services are responsible for securing public access to the shore. Under a joint agreement, both

services host the Greenways and the Blueways programs. These programs, among other responsibilities, have the mandate of promoting waterfront access.

The Greenways Program was created in 1993 by recommendation of the city Urban Landscape Task Force. The task force suggested the development of greenways connecting all parts of the city. Greenways are "green paths" that accommodate recreational activities such as walking, cycling, rollerblading, jogging, stroller pushing, and using a wheelchair. They can be waterfront promenades, urban walks, environmental demonstration trails, heritage walks, and nature trails. Their purposes are to expand the opportunities for urban recreation and to enhance the experience of nature and city life (City of Vancouver, 1995b).

The Blueways Program was created in 1996 by recommendation of the Vancouver water opportunities advisory group (WOAG).[25] The WOAG mandate was to develop a common vision to preserve, enhance, and prevent loss of diversity on Vancouver's waterfront:

> A waterfront city where land and water combine to meet the environmental, recreational, cultural, and economic needs of the city and its people in a sustainable, equitable, high quality manner. (City of Vancouver, 1997: 1).

> The Blueways Program's role is to implement this vision. To do so the program developed a strategy based on the following goals (City of Vancouver, 19977: 1):

> Encourage and support a diversity of waterfront uses, activities, and structures that recognize a variety of users;

> Assess, protect, and enhance waterfront habitat;

> Protect water-based industry; and

> Increase public access to and along the water.

[25] WOAG members are from the public and the private sector. One is a city council representative. Seven members are appointed from: Vancouver Harbour Master, Vancouver Port Authority, Fraser River Estuary Management Program /Burrard Inlet Environment Action Plan Program, Verus Group, Vancouver Police Marine Squad, Marine Trades Association, Vancouver Park Board Commission, and Blue Gavel/Canada. Seven staff members represent the Engineering, Planning, and Parks departments.

Funding

There is no specific city funding for public access issues. Funding is directed to projects, which include several planning aspects. Such projects can be initiated by the Greenways and the Blueways programs or by any other office such as the Park and Open Spaces Service. The funding basically covers the salary of the planning analysts running both programs. Regarding amenities and facilities, Vancouver normally requires developers to bear the costs.

Staff

Presently, five staff members work full time for the Greenways and one for the Blueways programs. Securing public access to the waterfront is one of several responsibilities that both staff programs share. In access matters, their roles are to provide advice to other city staff involved in waterfront developments. They also coordinate city efforts and resources to implement established policies and guidelines pertaining to both programs. The most recurrent staff background is in planning, engineering, parks, and landscape architecture.

Comprehensive planning

Public access policies are incorporated into the city policy statements. These are comprehensive planning documents, which include considerations related to land use, built forms, open space, transportation and circulation, environment, economic development, and stewardship.

The city also seeks to harmonize its public access policies with other local and regional programs, as well as organizations with overlapping geographical areas of interests and/or jurisdictions. They are the Fraser River Estuary Management Program, the Burrard Inlet Environmental Action Plan Program, the Greater Vancouver Regional District Greenway Program, and The Vancouver Port Authority. The city establishes a partnership with them for coordinating planning and decision making. The level of coordination is defined case-by-case, depending on the goals of the programs and their level of interest promoting public access to the shore. The objective is to produce

consistent policies and guidelines that direct the decisions and development affecting Vancouver's waterfront environments (City of Vancouver, 1997).

Public involvement

Public involvement in city planning and decision making processes is not considered in the *Vancouver Charter* other than through elections and referendums. Nevertheless, the concept has been progressively included through the years in city policy and the public invited to participate (City of Vancouver, 1998b). City services and programs have been given a great deal of flexibility in developing public participation strategies that better serve the purposes of a given project and its inherent policies. For instance, public involvement is a basic principle for both the Greenways and the Blueways programs:

> [Is a WOAG principle to] ensure public input guides waterfront planning and decision-making processes. (City of Vancouver, 1997: 1).

In both programs the public was involved from the beginning in formulating the vision, strategies, and guidelines that are at the origin of city policies on public access to the waterfront. Today, citizens continue to be involved through public processes at different stages of coastal development.

Education

Education of the general public on waterfront access policies is mainly achieved through public meetings when new coastal developments are proposed by the city or by community groups. In addition, working together with other interests such as the Fraser Estuary Environmental Program, the Greater Vancouver Regional District Program, and the local tourism office, the city contributes to the production of brochures, maps, and signs indicating waterfront access areas among other features. Developers and private waterfront owners who desire to build on waterfront properties are apprised of all pertinent public access information through the Development Information Center. It operates under the city's Development Services.

Assessment

There is no an established mandatory assessment of city policies after they are in place. Reviews are done only if staff or council identify problems with a particular policy. Only programs that do not have a permanent status, such as the Blueways, get assessed annually when reapplying for funding. Vancouver does not have a formal monitoring program to follow up of proper uses and achievements related to public access facilities. Nevertheless, reviews are normally undertaken following complains by citizens.

Enforcement

In general, waterfront access is not an issue that needs mayor enforcement in Vancouver. The concept is well established and respected by developers and the general public. However, if a municipal inspector working in the field observes an irregularity, or someone calls to complaint, city staff can become involved in enforcement actions. Such a response is normally carried out by the Property Use Department, which sends inspectors to the site.

4.4.3 Discussion

San Francisco and Vancouver have comparable policies and a similar institutional organization to provide public access to the waterfront for recreational purposes (table 4). Yet, the differences on the legal and institutional support from upper level of governments are dramatic.

San Francisco waterfront policies, including the port's policies, built on two states laws that make mandatory to local governments to provide for public waterfront access: the *California Coastal Management Act* and the *McAteer-Petris Act*. Institutionally, the city and the port have the support of the California Coastal Commission and the San Francisco Bay Development and Conservation Commission. Both agencies must assist local governments in the preparation of their local coastal plans (LCPs). Furthermore, similar to the transference of federal regulatory powers to state approved coastal management plans, local governments get vested of regulatory powers by transferring

most of the permitting state agencies authority to local governments with approved LCPs. For instance, public waterfront access requirements on development permits.

There is no legal and institutional structure behind Vancouver's waterfront access policies comparable to the framework supporting San Francisco. As shown in sections 4.1.2 and 4.2.2 the lack of related federal and provincial legislation and designated agencies in Canada lets the issue of public waterfront access to the discretion of local governments. Vancouver bases its framework on the political will of elected politicians to provide for access. Continuing council support for this issue has allowed city planners to develop public access policy through the years, integrating them into all coastal development processes. It is also this local political will that is behind the creation of the Greenways and the Blueways Programs, which currently ensure the implementation of the city's access policies.

As a result, Vancouver is today a city with a continuos waterfront access throughout much of the shoreline that offers a number of amenities and facilities to locals and visitors. However, given the lack of legal and institutional framework at senior levels of government, Vancouver's waterfront reality could have been dramatically different. It could have been similar to the current situation in the District of North Vancouver, as described in the introduction of this study, or to many other localities in the Georgia Basin area where public access to and along the waterfront is difficult. Furthermore, there is no guarantee that in the future a new Vancouver city council will retain the present city waterfront access policies. In the event of negative changes, there is no legal recourse against such an action under the present federal and provincial legal framework.

Table 4. United States and Canadian municipal legal and institutional framework to provide for public waterfront access.

Criterion	**United States** San Francisco	**Canada** Vancouver
Legislation/ Policy	Mandatory under the California coastal Act and the McAteer-Petris Act San Francisco *Master Plan* policy Port of San Francisco *Waterfront land Use Plan* policy	Blueway Program policy Greenway Program policy
Institutions	Municipal Planning Department Port of San Francisco	Municipal Engineering and Community Services
Funding	Directed to all planning aspects of a project Requirements to development permit	Directed to all planning aspects of a project Requirements to development permit
Staff	Qualified Non a particular person assigned Under the responsibility of assigned planners to a city quadrant	Qualified 5 employees assigned to coordinate the entire Blueway and Greenway programs Under the responsibility of assigned planners to a city quadrant
Comprehensive Planning	City of San Francisco Master Plan Port of San Francisco Waterfront land Use Plan	Not explicitly included in the City Plan Par of all coastal City Policy Statements
Public involvement	Mandatory under the San Francisco Sunshine Ordinance	Non mandatory but a strong city policy
Education	Through the process of public involvement Interpretative guidelines of the city Master Plan	Through the process of public involvement Development Information Center Coordination with other programs in the region
Assessment	Reactive Review of the port Waterfront Land Use Plan every 5 years Funding and staff availability limitations	Reactive Funding and staff availability limitations
Enforcement	Reactive Funding and staff availability limitations	Reactive Funding and staff availability limitations

Chapter 5
Discussion and recommendations

This chapter begins with a comprehensive discussion of the study findings. These are followed by ten recommendations that would contribute to improve public access to the waterfront in British Columbia. The first nine are directed to the federal and provincial governments. They refer to the creation of laws, policies, and institutional changes. The last one is directed to nongovernmental organizations and all citizens concerned with increasing public waterfront access throughout the province.

5.1 Discussion

The purpose of this study was to determine if the existing Canadian legal and institutional frameworks are the causes of the reduced availability of public waterfront access in British Columbia and Canada in comparison with conditions in the United States. The answer to this question is yes. However, to be more precise, it is the nonexistence of such a framework in Canada that underlies the differences between these two countries.

There has not always been such a disparity regarding this issue between the United States and Canada. Prior to the approval of the US *Coastal Zone Management Act* of 1972 (CZMA), the status of waterfront public access in the United States was similar to, and in some instances even worse than, the present Canadian situation. The United States did not have an agency responsible for managing the coastal zone in an integrated manner and public waterfront access was not a national priority. Furthermore, the coastal population was increasing rapidly and in some states, the foreshore was private land. The success of the American strategy was based on a combination of bottom-up and top-down planning approaches to dealing with coastal issues.

Beginning in 1961, it was the perseverance of a concerned citizens' group to preserve San Francisco Bay that resulted in the passage of public waterfront access legislation for the first time. This was the *McArteer-Petris Act* of 1965. Even though this act had only a regional mandate, it was instrumental in bringing the issue from the municipal level to the attention of state and eventually national governments. A few years later in Washington, one of the states where the foreshore can be held by private owners, citizen demands for increased public waterfront access were eventually supported by the state legislature in 1971. That year public waterfront access was made a priority in the initial *Washington Shoreline Management Act* (Washington, 2000). Concurrently, the issue was also under discussion at the federal level, and it became a national priority for the entire nation in 1972 following adoption of the federal CZMA.

Public waterfront access has an important social value but it is not a crucial national issue by itself. Therefore, it is unlikely that a country will develop a legal and institutional framework to specifically secure waterfront access. However, the issue may easily be included within the broader setting of integrated coastal planning. This is the approach followed by the United States. Waterfront access became a national priority as part of a broader national strategy that promotes integrated coastal management.

The American legal and institutional framework is comprehensive and inclusive of all levels of government. Going up from the local to the federal jurisdiction, it seeks to achieve broader public interests through particular projects. The system is hierarchical but based on voluntary partnerships between the federal government and states and between these and local governments. States, counties, and municipalities that adhere to the national coastal management strategy proposed by the federal government get economic and technical assistance in exchange from the senior levels of government. By the same token, the federal government can enforce its national policies by conditioning the assistance to those states and local governments that do not comply with national requirements. In addition, the hierarchical American structure is balanced by mandatory public involvement in coastal decision making at the state and local levels and by the principle of federal consistency. This requires that federal actions that are reasonably

likely to affect any land or water use or natural resource of the coastal zone be consistent with the enforceable policies of a coastal state's federally approved coastal management program (OCRM, 2000).[26] Consistency forces the federal government to expose and explain its plans to a state or to local constituencies (Travis, 1999). It is a mandatory but flexible mechanism to avoid overlapping functions and jurisdictional conflicts between states and federal agencies (OCRM, 2000).

The existence of federal and state legislation, administered by designated institutions responsible for regulating and planning for management of the coastal zone, secures and standardizes public waterfront access rights along the entire coast of the United States. This framework, set by senior governments, is supportive of local governments in the creation and implementation of their coastal plans, which must maximize public waterfront access. In this context, contrasting access policies such as those of the City of Vancouver and the District of North Vancouver should not occur. Indeed, public access does not depend on the goodwill or on the opposition of a city council. After a local coastal plan (LCP) is approved by a federally recognized state coastal agency, provision of public access becomes the law.

The absence of an equivalent framework in Canada allows the issue of public access to be dealt with arbitrarily by local governments. Innovative approaches, exemplified in this study by the City of Vancouver and FREMP, remain exceptions without legal and institutional support. The long-standing absence of political interest at the federal and provincial levels to manage national and provincial coastal resources within a comprehensive framework of policies, goals, and legislation that includes all levels of governments, makes it unlikely that waterfront public access will be considered an issue of national or even provincial concern in Canada in the near future.

[26] Federal procedures include: (1) direct federal actions: activities and development projects performed by a federal agency, or a contractor for the benefit of a federal agency; and (2) indirect federal actions: activities not performed by a federal agency, but requiring federal permits or licenses or other forms of federal approval, and federal financial assistance to states, territories, and local governments (OCRM, 2000).

Taken in isolation, waterfront access is seen by the federal government as a land planning issue under provincial jurisdiction. However, because the foreshore has always been public land in Canada, providing access is seen by the provinces as a municipal responsibility. In turn, local governments often perceive waterfront access as a public parks and open space issue. Under this approach, a continuous public waterfront is not an objective. Providing access in a few places is often deemed to satisfy the logic of parks and open spaces. Each access area simply becomes one more discreet city park. Moreover, local governments are often under the pressure of influential coastal residents and industry owners. These land owners pay high property taxes for the privilege of locating on the waterfront. Unfortunately, many of them consider that this privilege permits them to block the public from reaching the coast. Consequently, they actively oppose access initiatives.

If Canada and the provinces are to elevate this issue above the discretionary will of local governments, it is necessary to implement an integrated approach to coastal management, accompanied by goals that are provincial in scale. This could be achieved through integrated provincial coastal planning legislation, or ideally, through a federal-provincial initiative to achieve integrated coastal zone management in Canada. In these matters, considerable time and energy can be saved by studying the American experience, as well as the FREMP and Vancouver initiatives. Nevertheless, before making any recommendations based on the American experience, it is important to understand the legal and political frameworks in both countries, as well as the possible pitfalls of the United States approach.

The American constitution allows a larger centralization of national powers in the central government than is currently possible in Canada. This normally results in better acceptance by state legislatures of a leading federal role than by Canadian provinces. This lead role is represented in the United States by NOAA's Office of Ocean and Coastal Resource Management (OCRM). The constitutional differences may also allow for a better acceptance of the coastal act (CZMA), which has major land-based resource management implications such as the mandatory provision of waterfront public access for

those states that chose to opt in to the federal act. In contrast, the Canadian federal government is constantly faced with the problem of being politically relevant while minimizing its invasiveness into provincial governance to the greatest extent possible. This applies particularly to the issue of land management where provinces are extremely jealous of their historical and legal freedom to manage natural resources (Robinson, 2000). Normally, the Canadian federal government seldom promotes the creation of institutions or legislation that in any manner may be interpreted as intrusive by the provinces. Cases to the contrary do exist, such as the Canadian health care system, but this is a glaring exception to this generalization. An agency comparable to NOAA-OCRM and an act similar to the CZMA are difficult to create under the Canadian legal and political structure. The farthest that the system might go in managing the coastal zone is probably the creation of a federal-provincial commission mandated to promote and coordinate articulated parallel federal and provincial legislation and institutions along the low-tide watermark.

5.2 Recommendations

#1: The governments of Canada and the affected provinces should recognize that the Canadian coastal resources, including marine and land base activities, are a national treasure and must be managed as a unit in an integrated manner in a coordinated federal-provincial effort, for the benefit of all Canadians.

Given the Canadian legal and political context, initiatives to manage coastal resources in an integrative manner could proceed most effectively if they were based on a joint federal-provincial initiative, protective of national interests, and respectful of the provincial administrative freedom. Such an approach would promote coordination among federal and provincial governments, and reduce the need for unilateral initiatives that in the end do not address complete issues, for instance the *Ocean Act*. Having already created this act, it would be redundant and unrealistic to think that the federal government would create a second set of coastal-related legislation. Making CZM a joint

responsibility would not invalidate the *Ocean Act*; rather it could become part of a broader national strategy by inviting coastal provinces to produce complementary legislation that articulates with the federal act. Such a joint declaration has the potential of becoming a powerful instrument shaping future federal and provincial coastal-related legislation and policy under common principles without been intrusive or modifying jurisdictional powers.

#2: As a consequence of recommendation #1, the federal and provincial governments should cooperatively create a "Canadian Coastal Commission."

A joint federal-provincial commission may be viable in the Canadian system as long as it does not create conflicts with the constitutional limits between the two senior levels of government (Robinson, 2000). Therefore its goal would be to coordinate coastal management in Canada while respecting the constitutional responsibilities of each party. The objectives of the proposed commission would be to:

- Develop land- and marine-based national social, economical, and environmental priorities in the coastal zone, and achieve their acceptance by the federal and provincial governments.
- Develop an integrated Canadian coastal zone management program, based on the priorities adopted by both parties.
- Recommend specific changes to the federal and provincial legal and institutional framework to achieve the objectives of the national program.
- Create a network of national coastal management experts that would recommend and assist in the implementation of coastal plans and programs in particular areas.

In general terms, DFO would remain the lead agency representing federal interests, becoming the "federal half" of the commission. The provinces would create the other half under the administration of their respective land management agencies.[27] The federal and provincial governments would negotiate identical terms of references and they would be

equals in the creation of the body, in the formulation of the recommendations, and in their power to accept or reject them. An important role of the proposed commission is to induce the federal and provincial governments to consult regarding the commission's recommendations. This would increase immensely the opportunities for coordinating the actions of both levels of jurisdiction (Robinson, 2000). The commission should also examine the desirability of creating regional coastal subcommissions in the Pacific, the Atlantic, and the Arctic regions to reflect the heterogeneity of Canadian coastal geography, demographic distribution, types of coastal resources, as well as the number and administrative characteristics of the provinces and territories involved.

#3: The Canadian government should assign funding to match provincial allocations for the implementation of their coastal programs based on recommendations made by the "Canadian Coastal Commission" proposed under #2.

Whereas the cost of operation of the commission should be shared equally by the parties, the federal government should establish a separate fund to assist the provinces in undertaking the implementation of their coastal programs. The criteria for allocation of this funding would be based on how the proposed provincial coastal programs conform to the national coastal strategy defined by the "Canadian Coastal Commission." This allocation should also take into account the stage of development of the program. As an incentive to promote the creation of provincial coastal programs, a larger percentage of matching funding should be assigned to the provinces at the beginning of the process. This could be slowly reduced over the years and eventually stabilized at a set level. This annual level of federal contribution should be small enough to ensure that provincial governments take responsibility for the major part of the funding of their coastal programs, but large enough to discharge federal commitments for sustainable coastal management. For example, an amount equivalent to 20-30% of the total provincial budgets to run their programs would be reasonable. Through this yearly allocation the proposed "Canadian Coastal Commission" could enforce the application of national

[27] In some instances, the federal government may have jurisdiction on land-based activities, and the provincial governments may have some type of jurisdiction on coastal marine waters. However, these are exceptions to the Canadian federal-provincial jurisdictional division of power.

principles in the coastal zone, such as the provision of waterfront public access. It also would represent permanent federal support to the provinces to promote an integrated approach to managing the national coasts. The assigned federal funding could be managed by Fisheries and Oceans Canada (DFO) for administrative purposes, but its allocation should be decided by the proposed "Canadian Coastal Commission."

#4: The British Columbia *Coastal Zone Position Paper* (1998) should be amended to include the maximization of public waterfront access, whenever possible, as a provincial goal.

The paper expresses the province's long-term vision, interests, and objectives in the coastal zone, identifying key actions under way and for the future (British Columbia, 1998). Public waterfront access should be expressed as one of the major social priorities on the coast. It can be argued that this is not necessary because the paper promotes sustainable, integrated coastal management, implying that public waterfront access is considered implicitly. However, because of the massive social and economic values of coastal access, its maximization should be a goal in itself. Without such an emphasis, implicit considerations rarely become explicit public rights.

#5: The principles and goals expressed in the provincial *Coastal Zone Position Paper* should be legislated after incorporating the amendments outlined in recommendation #4.

The proposed legislation would be the "British Columbia Coastal Act." It should be complementary to the federal *Ocean Act* and express a need to cooperatively manage the coastal zone in an integrated manner. This act should follow the recommendations of the "Canadian Coastal Commission" proposed in #2 and be inclusive of the specific needs of British Columbia in coastal matters. However, the creation of the proposed act should not be subject to the creation of the "Canadian Coastal Commission." If this does not occur in a timely manner, the province should enact its own coastal act. Initiating these procedures would increase the pressure for the need for a national coordination body. Finally, to simplify the coastal legal framework, the proposed act should have overriding power over

any of the existing provincial acts that currently have jurisdiction in the coastal zone. In effect, for the first time the authority would exist to coordinate the actions of all provincial agencies in the coastal zone.

#6: The provincial Land Use Coordination Office (LUCO) should be given regulatory powers and be designated the agency responsible for coordinating coastal management initiatives throughout the province in partnership with the federal government.

Since 1994 LUCO has served as a central agency for government land use planning. Its mandate is to improve corporate direction and coordination of all interministry strategic land-use initiatives (LUCO, 1999). LUCO incorporated the principles of integrated land use planning from the beginning in its operations. Working closely with federal, provincial, regional, subregional, and municipal governments, it has been involved in all comprehensive planning processes in the province during the 1990s. Furthermore, in addition to its terrestrial work throughout the province, LUCO has focused on several coastal management initiatives involving economic, social, and environmental issues. For instance, it coordinated the conceptualization of the provincial *Coastal Zone Position Paper* and the *Marine Protected Areas Discussion Paper*. It has also undertaken marine ecological mapping and produced coastal resource inventories and atlases that include key conservation, recreation, and cultural values in British Columbia's marine environment (LUCO, 1999).

LUCO's considerable accomplishments as a coordinating provincial agency qualify it for a lead role in integrated coastal management. This involves coordinating the efforts of single-sector resource management institutions and overcoming their inherent legal, institutional, and land-water administrative fragmentation (Clark, 1996; Cicin-Sain and Knecht, 1998). However, LUCO would need to be assigned regulatory powers by the province to empower it to become responsible for the "British Columbia Coastal Management Act" proposed in recommendation #5. Under this new mandate LUCO's responsibility should be to prepare a "British Columbia Coastal Program." This should be framed by national priorities defined under the proposed "Canadian Coastal

Commission" in recommendation #2, and be inclusive of provincial interests in the coastal zone, such as maximizing public access.

#7: Until the preceding recommendations are enacted, the provincial government should empower LUCO to coordinate the development and application of consistent policy on waterfront public access and other coastal matters throughout British Columbia.

This policy should encourage all local governments to maximize waterfront public access to the foreshore for recreational purposes, wherever possible. Policy should be also created that promotes a barrier-free provincial foreshore. This is a fundamental provincial responsibility that should not be passed on to the arbitrary actions of municipal governments. It requires immediate action by the provincial government to arrest further alienation of the foreshore from public access.

#8: The provincial government should fulfill the need for specific legislation, policy, and agency designation to plan and manage the provincial coastal zone in a sustainable manner based on regional characteristics.

A regional environmentally sustainable planning approach should be adopted as the basis of the provincial approach to coastal management (Travis, 1999). The strength of a regional policy is that it would be based on the geographic, environmental, and demographic heterogeneity of the province in a manner that is consistent with local values. For instance, public waterfront access tends to be more a concern in predominantly heavily populated areas. The ability to provide such access might become diluted in an act that covers the entire British Columbia coast. The San Francisco Bay Development and Conservation Commission in the United States might provide a useful institutional structure to study the implementation of this recommendation. Indeed, FREMP coastal access policies are also a very progressive approach to the provision of public waterfront access in a coastal setting.

#9: Integrate FREMP's waterfront public access policies into the management plans of each FREMP partner agency.

None of FREMP's partners has individually developed policies as detailed, comprehensive, and advanced as those adopted by FREMP. Yet, FREMP's policies are not enforceable. If these were to be adopted in the management plans of FREMP's partners, this agency could then focus on the articulation, efficient application, and enforcement of the policies through its partners' regulatory and planning capacity.

#10: Non-government organizations should create regional coalitions of concerned citizens that can consider a broad range of coastal management needs including waterfront access legislation from the provincial government.

In the United States, a regional public concern in the San Francisco Bay area in 1961 led to the creation of the McArteer-Petris Act, the creation of BCDC, and the insertion of waterfront public access as a nation-wide citizens' right under the Coastal Zone Management Act of 1972. The proposed regional approach does not imply that initiatives started within individual municipalities cannot be successful, for instance the City of Vancouver. However, they can also easily fail, as in the District of North Vancouver. In the present Canadian legal and institutional framework, waterfront public access demands focusing only on a particular municipal jurisdiction risk being easily suffocated by politically influential waterfront owners opposed to public access. Joint actions of citizens' groups representing the large majority of communities sharing a common shoreline would increase the probability of success. They would accomplish this by supporting each other and by bringing the issue beyond the municipal arena to the extent where they could not be ignored by provincial authorities. Moreover, this also would support the principle that waterfront public access is an issue that transcends local administrative boundaries.

Finally, under the discretionary Canadian system, decisions at senior levels of government are subject to the political will of those in power. Political will is generally

triggered only by popular concern. If public demands are able to initiate the political process, the provincial or federal governments can make decisions and pass laws and policies much more quickly than the American system, whose legislative and executive powers reside normally with opposite political parties. Therefore, this last recommendation is probably the first step to trigger the implementation of the nine others.

Epilogue

This study addressed the importance for a nation of having a legal and institutional framework to secure public waterfront access in the context of integrated coastal management. However, it should not be assumed that achieving those objectives would automatically secure access. In the opinion of Will Travis, Executive Director of BCDC and long-time advocate for public waterfront access, the major obstacle to overcome does not necessarily lie with these objectives. His words that follow are an appropriate epilogue for this study and should be duly taken into account by all coastal managers:

> I will conclude by stressing that the major obstacles to an effective public access program are not legal, financial or any of those other nice quantifiable and logical issues. The major obstacle is that folks who have bought a picture window on the sea do not like someone standing in front of their window. It is largely an emotional reaction, but lots of people find that it just is "not right" to have the public lollygaging along the shore side of private properties. Lots of people who feel that way are members of local planning boards, city councils, and county commissions. Therefore, even though we may have state laws which empower requiring public access as a condition of coastal development permits, we may find that public officials are unwilling to exercise this authority.
> (Travis, 1987, emphasis added).

References

Archer, Jack H., Donald Connors, Kenneth Laurence, Sarah Chapin Columbia, and Robert Bowen. 1994. *The Public Trust Doctrine and the Management of America's Coasts.* Univ. of Massachusetts Press. Amherst, Massachusetts, MA.

Artukhin, Yurii V. 1990. "Anthropogenic effects on recreational beaches." In *Recreational Uses of Coastal Areas,* 231-234. P. Fabbri *ed.*, Kluwer Academic Publishers. Dordrecht, The Netherlands.

Bahary, D.L., 1995. "Crossing Borders: The Practice of Comparative Research." In *Empirical Political Analysis: Research Methods in Political Science*. Ed. J.B. Manheim and R.C. Rich. New York: Longman, 245-260.

BCAL [British Columbia Assets and Land Corporation]. 1999. British Columbia Assets and Land Corporation: An Agency of the Government of British Columbia. URL: http://www.bcal.bc.ca/

BCDC [San Francisco Bay Development and Conservation Commission]. 1985. Public Access Design Guidelines. San Francisco, CA.

BCDC [San Francisco Bay Development and Conservation Commission]. 1998. *San Francisco Bay Plan*. San Francisco, CA.

BCDC [San Francisco Bay Development and Conservation Commission]. 1999. BCDC Digital Library. URL: http://ceres.ca.gov/bcdc/commlib/commlib.htm

BCDC [San Francisco Bay Development and Conservation Commission]. 2000. State of California: San Francisco Bay Development and Conservation Commission. URL: http://ceres.ca.gov/bcdc/

Bird, Eric and Peter Cullen. 1990. "Recreational uses and problems of Port Phillip Bay, Australia." In *Recreational Uses of Coastal Areas,* 39-51. P. Fabbri *ed.*, Kluwer Academic Publishers. Dordrecht, The Netherlands.

British Columbia. Ministry of Environment, Lands and Parks. Land Policy Branch. 1995. "Riparian Rights and Public Foreshore Use in the Administration of Aquatic Crown Land." Occasional Paper No.5. Victoria, B.C.

British Columbia. 1996. 1996 Revised Status of British Columbia. URL: http://www.qp.gov.bc.ca/bcstats/index.htm

British Columbia. 1998. *Coastal Zone Position Paper*. Inter-agency Coastal Working Group. Victoria, BC.

British House of Commons. 1992. *Coastal Zone Protection and Planning*. Environment Committee. Session 1991-92. Second Report. Vol.1. London, England.

California. 1999a. State Constitution. URL: http://www.leginfo.ca.gov/const.html

California. 1999b. California Law. URL: http://www.leginfo.ca.gov/calaw.html

California. 2000. California Coastal Commission: California Coastal Act and Other Relevant Legal Information.
URL: http://ceres.ca.gov/coastalcomm/web/ccatc.html

California Coastal Commission. 1987. *California Coastal Resource Guide.* Eds. M. Caughman and J. S. Ginsberg. University of California Press. Berkeley, CA.

California Coastal Commission. 1997a. *California coastal Commission Strategic Plan.*
URL: http://www.ceres.ca.gov/coastalcomm/strategy.html

California Coastal Commission. 1997b. *California Coastal Access Guide.* University of California Press. Berkeley, CA.

California Coastal Commission. 1999a. Who We Are.
URL: http://www.ceres.ca.gov/coastalcomm/web/whoweare.html

California Coastal Commission. 1999b. *Public Access Action Plan.*
URL: http://ceres.ca.gov/coastalcomm/access/accesspl.pdf

California Coastal Conservancy. 2000. Coastal Conservancy.
URL: http://www.coastalconservancy.ca.gov/

California Coastal Conservancy. 1995. *San Francisco Bay Shoreline Guide.* University of California Press. Berkeley, CA.

Canada. 1994. *Park Canada: Guiding Principles and Operational Policies.* Cat. No. R62-275/1994E

Canada. 1996. *The Ocean Act: An Act respecting the Oceans of Canada*. Statutes of Canada 1996. Chapter 13, Bill C-26.

Canada. 1999. Canadian Constitutional Documents and Proposals.
URL: http://www.cs.cmu.edu/afs/cs.cmu.edu/user/clamen/misc/Canadiana/politics/constitutions/README.html

Canada. 2000. Transport Canada: Marine Acts and Regulations.
URL: http://www.tc.gc.ca/Actsregs/marine_e.htm

Canning, Douglas J. 1994. "Shorelands and Coastal Zone Management Environmental Quality and Accountability Indicators." Olympia, WA: unpublished.

Carter, R.W.G. 1990. "The recreational use and abuse of the coastline of Florida." In *Recreational Uses of Coastal Areas*, 3-17. P. Fabbri *ed.*, Kluwer Academic Publishers. Dordrecht, The Netherlands.

Cicin-Sain, Biliana and Robert W. Knecht. 1998. *Integrated Coastal and Ocean Management: Concepts and Practices.* Washington. WA. Island Press.

City of San Francisco. n.d. *Program for Implementing the Recreation and Open Space Element of the Master Plan*. San Francisco, CA.

City of San Francisco. 1995. *South Bayshore: An area plan of the Master Plan of the City and County of San Francisco*. San Francisco, CA.

City of San Francisco. 1998. *Northeastern Waterfront: An area plan of the Master Plan of the City and County of San Francisco*. San Francisco, CA.

City of San Francisco. 1999. The San Francisco Sunshine Ordinance. URL: http://www.ci.sf.ca.us/infoctr/sunshine/index.htm

City of Vancouver. 1995a. *CityPlan: Directions for Vancouver*. Vancouver, BC.

City of Vancouver. 1995b. *Vancouver Greenways Plan*. Vancouver, BC.

City of Vancouver. 1996a. *Vancouver Charter*.
URL: http://www.qp.gov.bc.ca/stat_reg/statutes/vanch_00.htm

City of Vancouver. 1996b. *Waterfront Policies*. Unpublished city report. 7 p.

City of Vancouver. 1997. *Blueways: An Initiative of the Vancouver Water Opportunities Advisory Group*.
URL: http://www.city.vancouver.bc.ca/commsvcs/planning/bluenew.htm

City of Vancouver. 1998a. Policy Report Urban Structure. Nov. 18, 1998. RTS No. 304. CC File N0. 3138.

City of Vancouver. 1998b. City of Vancouver Public Involvement Review – Phase 2. Final Report – April 1998. Submitted by Context Research Ltd. Consultant.

City of Vancouver. 1999. Southeast False Creek Policy Statement: *Towards a sustainable urban neighbourhood and major park in Southeast False Creek*. City of Vancouver planning Department. July 1999.

Clark, John R. 1996. *Coastal Zone Management Handbook.* Florida. FL. Lewis Publishers.

Clogg, J. 1999. "Tenure Background Paper." West Coast Environmental Law: Publications. URL: http://www.wcel.org/wcelpub/default.cfm

Day, J. C. November 5, 1999. Personal communication with professor. School of Resource and Environmental Management. Simon Fraser University. Burnaby, BC.

Day J. C. and D. B. Gamble. 1990. "Coastal Zone Management in British Columbia: An Institutional Comparison with Washington, Oregon, and California." *Coastal Management* 18: 115-141.

DFO [Fisheries and Oceans Canada]. 1996. "Minister Mifflin Welcomes Passage of the *Oceans Act*." *News Release*. NR-HQ-96-100E, Dec. 19.

DFO [Fisheries and Oceans Canada]. 1997. *Role of the Provincial and Territorial Governments in the Oceans Sector*. Cat. No. Fs 23-319/1-1997E. Ottawa, ON.

Dogan M. and D. Pelassy. 1990. *How to Compare Nations: Strategies in Comparative Politics*. 2d. ed. Chatham House Publishers, Inc. Chatham, NJ.

The Economic Planning Group of Canada. 1997. *Nova Scotia Marine Tourism Study: final report.* Nova Scotia Economic Development and Tourism. Tourism Nova Scotia. Halifax, NS.

Fabbri, Paolo. 1990. *Recreational Uses of Coastal Areas.* Paolo Fabbri *Ed.* Kluwer Academic Publishers. Dordrecht, The Netherlands.

FREMP [Fraser River Estuary Management Program]. 1990. *Proposed Recreation Plan: Fraser River Estuary*. Report of the Recreation Activity Work Group. New Westminster, BC.

FREMP [Fraser River Estuary Management Program]. 1994. *A Living Working River: An Estuary Management Plan for the Fraser River.* New Westminster, BC.

FREMP [Fraser River Estuary Management Program]. 1996. *The Fraser River Estuary: A Guide to Interpretative Themes and Recreation Access*. Final Report prepared for the recreation subcommittee. Burnaby, BC.

Gamble, D.B. 1989. An evaluation to the British Columbia approach to coastal zone management. Unpublished master's thesis: Natural Resources Management Program, Simon Fraser University. Burnaby, BC.

Georgison J.P. and J.C. Day. 1993. *Protecting Our Waters, or Protecting the System?: Assessing Institutional Arrangements for Water Quality Management in British Columbia.* Report submitted to British Columbia Minister of Environment, Lands and Parks. Aquatic Resources Research Project Subcomponent. School of Resource and Environmental Management. Simon Fraser University. Burnaby, BC.

Goodhead, Tim and David Johnson. 1996. *Coastal Recreation Management: The sustainable development of maritime leisure*. Ed. T. Goodhead and D. Johnson. London, UK. Chapman & Hall.

Hardin, G. 1968. "The Tragedy of the Commons." *Science* 162: 1243-1248.

Higham, J. January 27, 2000. Personal communication with land inspector. British Columbia Assets and Land Corporation. Surrey, BC.

Jones, L.F. and E.C. Olson. 1996. *Political Science Research: A Handbook of Scope and Methods*. Ed. L.F. Jones and E.C. Rich. New York: Harper Collins

LUCO [Land Use Coordination Office]. 1999. British Columbia Land Use Coordination Office. URL: http://www.luco.gov.bc.ca

Maguire, John C. 1996. "Fashioning an Equitable Vision for Public Resource Protection and Development in Canada: The Public Trust Doctrine Revisited and Reconceptualized." *Journal of Environmental Law and Practice*. Vol.7, No.1, (Dec.): 1-22

Masterton, Jim. March 3, 2000. Personal communication with assistant manager community planning. District of North Vancouver. North Vancouver, B.C.

Morgan, E. August 12, 1999. Personal communication with coastal specialist. NOAA Office of Ocean and Coastal Division, Northeast Region.

Morgan, E. January 20, 2000. Personal communication with coastal specialist. NOAA Office of Ocean and Coastal Division, Northeast Region.

NOAA [National Oceanographic and Atmospheric Administration]. 1999a. *About OCRM*. URL: http://wave.nos.noaa.gov/OCRM/aboutocrm.html

NOAA [National Oceanographic and Atmospheric Administration]. 1999b. *Coastal Zone Management Act of 1972*, as amended in 1996.
URL: http://wave.nos.noaa.gov/ocrm/czm/CZM_ACT.html

NOAA [National Oceanographic and Atmospheric Administration]. 1999c. *Coastal Zone Management: The Coastal Zone Management Program.*
URL: http://www.ocrm.nos.noaa.gov/czm/welcome2.html

NOAA [National Oceanographic and Atmospheric Administration]. 1999d. Sustaining America's Coastal Communities and Resources: a strategic framework for the coastal zone management program.
URL: http://wave.nos.noaa.gov/OCRM/pdf/strat_plan99.pdf

OCRM [Office of Ocean and Coastal Resource Management]. 1999. National Ocean Service. URL: http://wave.nos.noaa.gov/programs/ocrm.html

OCRM [Office of Ocean and Coastal Resource Management]. 2000. Federal Consistency.
URL: http://www.ocrm.nos.noaa.gov/czm/federal_consistency.html

Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action.* Cambridge University Press. New York, NY, USA.

Owen, S. 1998. "Land Use Planning in the Nineties: CORE Lessons." *Environments: A Journal of Interdisciplinary Studies* 25 (2&3): 14-26. Special Double Issue: Land and Water Planning in British Columbia in the 1990s.

Pogue, Pamela and Virginia Lee. 1999. "Providing Public Access to the Shore: The Role of Coastal Zone Management Programs." *Coastal Management*. 27: 219-237.

Pogue, P. and V. Lee. 1998. "Effectiveness of state coastal management programs in providing public access to the Shore: A national overview." Technical Report submitted to NOAA/OCRM, Washington, DC. USA.

Port of San Francisco.1997. *The Port of San Francisco Waterfront Design and Access: An Element of the Waterfront Land Use Plan*. San Francisco, CA.

Robinson, R. May 18, 2000. Personal communication with former executive chairman of the federal Canadian Environmental Review Office. Vancouver, BC.

SERA. 1985. *Water Access in Vancouver*. Report prepared for the City of Vancouver by SERA consultant. 40 p.

Smallwood, Kate P. 1993. *Coming Out of Hibernation: The Canadian Public Trust Doctrine*. Faculty of Law, University of British Columbia. Vnacouver, BC.: Master's Thesis.

Tigerstrom, Barbara. 1998. "The Public Trust Doctrine in Canada." *Journal of Environmental Law and Practice*. Vol.7, No.3 (Jun): 379-401.

Travis, W. 1987. "An Overview of the Factors to Be Considered in Balancing Competing Interests in Public Access." San Francisco Bay Conservation and Development Commission. San Francisco, CA. USA: Unpublished.

Travis, W. October 8, 1999. Personal communication with Executive Director of the San Francisco Bay Development and Conservation Commission. San Francisco, CA.

United Nations. 1995. *Guidelines on Environmentally sound Development of Coastal Tourism.* Economic and Social Commission for Asia and the Pacific. United Nations, New York.

United States. 1999. U.S. Code. *Coastal Zone Management Act of 1972*. URL: http://www4.law.cornell.edu/uscode

Walker. 1980. *The Oxford Companion to Law*. Oxford, UK. Clarendon Press.

Washington. 2000. Background: Washington's Shoreline Management Act. URL: http://www.wa.gov/ecology/sea/SMA/backgroun.htm

Williams, Stephen. 1995. *Outdoor Recreation and Urban Environment.* New York, NY. Routledge.

Wong, P.P. 1990. "Recreation in the coastal areas of Singapore." In *Recreational Uses of Coastal Areas,* 53-62. P. Fabbri *ed.*, Kluwer Academic Publishers. Dordrecht, The Netherlands.

Yarnell, P. "Port Administration and Integrated Coastal Management under the Canada Marine Act in Vancouver, British Columbia, Canada." *Coastal Management* 27: 343-354.

Yin, R. 1994. Case Study Research: Design and Methods. Applied Social Research Methods Series, Vol.5. Sage. Thousand Oaks.CA.

Appendix I

Interviewees

United States

NOAA Office of Ocean and Coastal Resource management (OCRM)
Elisabeth Morgan. Coastal specialist and coastal access coordinator.

California Coastal Commission (CCC)
Linda Locklin. Manager coastal access program.

San Francisco Bay Conservation and Development Commission (BCDC)
Will Travis. Executive director.
Joseph LaClair. Senior planner.
Caitlin Sweeney. Coastal planner.

City and Port of San Francisco
Stephen Shotland. Planner. City and County of San Francisco.
AnMarie Rodgers. Planner. City and County of San Francisco.
Dan Hodapp. Planner. Port of San Francisco.

Canada

The Fraser River Estuary Management Program (FREMP)
Sharon Folkes. Acting water and land use coordinator.

City of Vancouver
Karen Hoese. Blueways program coordinator.
Noel Peters. Surveyor.

Other informants (Canada)

Roy Robinson. Former executive chairman of the federal Environmental Review Office.
Jeremy Hingham. Land inspector, British Columbia Assets and Land (BCAL).
James Masterton. Assistant manager community planning. District of North Vancouver.
Reena Lazar. Economic development coordinator, FREMP.
Raymond Louie. Projects and Community engineer, City of Vancouver.
Joanne Franko. Planning assistant. City of Vancouver.
Colleen McDonald. Concerned citizen. Village of Belcarra, British Columbia.