INCREASING COMMUNITY CAPACITY IN COASTAL ZONE MANAGEMENT:
STEPS TOWARD INTEGRATED RESOURCE PLANNING

by

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To My Parents
for their faith, patience, and support

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ABSTRACT

Nova Scotia is geographically, environmentally, socially, and culturally defined by its coast. Despite the significance of this resource, little has been done to develop a management policy that specifically deals with issues that affect its integrity. To ensure the continued use of this resource for present and future generations of Nova Scotians, the development of a coastal management strategy is necessary. It has been recognized by various planning and resource management authorities that community involvement in the development and implementation of resource management strategies increases the probability of long-term management success. Increasing the capacity of coastal community residents to become involved in the management process is therefore integral to the realization of effective and responsible coastal management.

Through the examination of three Nova Scotian communities that have had success in community resource management, a number of factors which contribute to the communities' abilities to take on management initiatives have been derived. These factors are applied to a theoretical framework that proposes 1) Building Awareness, 2) Empowerment, and 3) Support as mechanisms for enhancing the capacity of coastal communities to become involved in coastal management.

CHAPTER 1

Introduction

Nova Scotia is geographically, environmentally, socially, and culturally defined by its coastline. The coast has also been a major influence on economic and demographic development in the province, which has resulted in heavy and sometimes conflicting use of the coastline. Despite the significance of the resource, very little has been done to manage or conserve it. The consequence of this has been the exploitation and degradation of some of the province's coastal resources while potential threats to coastal integrity still loom.

Growing international, national, provincial, and local recognition of the importance of the coast as an essential natural resource has increased the pressure on governments to create and implement coastal management strategies. It has also been globally recognized that the inclusion of community groups and members in the development and implementation of coastal management strategies enhances the probability of management success. Members of coastal communities can offer unique and localized perspectives on resource issues, and their support is critical to the realization of management strategies. This has been well documented in reports and studies such as *Agenda 21, Earth Summit '92, Coastal Zone '94*, and the recent provincial document *Coastal 2000*, which all acknowledge that some level of community involvement is imperative to the development and implementation of coastal management practices. Given the importance of community involvement in coastal management, time and consideration is needed to determine how communities can be integrated into coastal

management initiatives and how their potential as effective and responsible participants can be increased.

The purpose of this thesis is to determine how to increase the involvement and participation of Nova Scotian communities in coastal resource management. This study corresponds with objectives stated in the government released *Coastal 2000* document; specifically: "how to formulate methods for community involvement in addressing specific issues of coastal resource management", and "how to ensure a more integrated approach to coastal zone management" (1994, p.79).

In exploring how to increase community involvement, three Nova Scotian communities that have had success in resource management are examined and analysed. These case study communities provide credible and relevant lessons about the formation and implementation of community management initiatives. The lessons derived from these case studies provide the basis for a theoretical framework aimed at increasing community involvement in coastal management province-wide.

1.1 Coastal Issues in Nova Scotia

Nova Scotia has over 10,500 kilometres of coastline bordering the Northumberland Strait, the Atlantic Ocean, the Gulf of St. Lawrence, and the Bay of Fundy. The coastline was a dominant factor in provincial settlement patterns, resulting in a ribbon of small coastal communities that have traditionally relied on the coast for transportation, access to marine resources and defence. Currently, more people are being attracted to the coast for the recreation, leisure activities, and quality of life it affords. There are approximately 364 small communities and several larger industrial towns situated along the Nova Scotia coastline (Fig. 1). While coastal resources have had a tremendous impact on development in this province, development has subsequently increased the demand placed on coastal resources which threaten their future environmental, economic and cultural use.
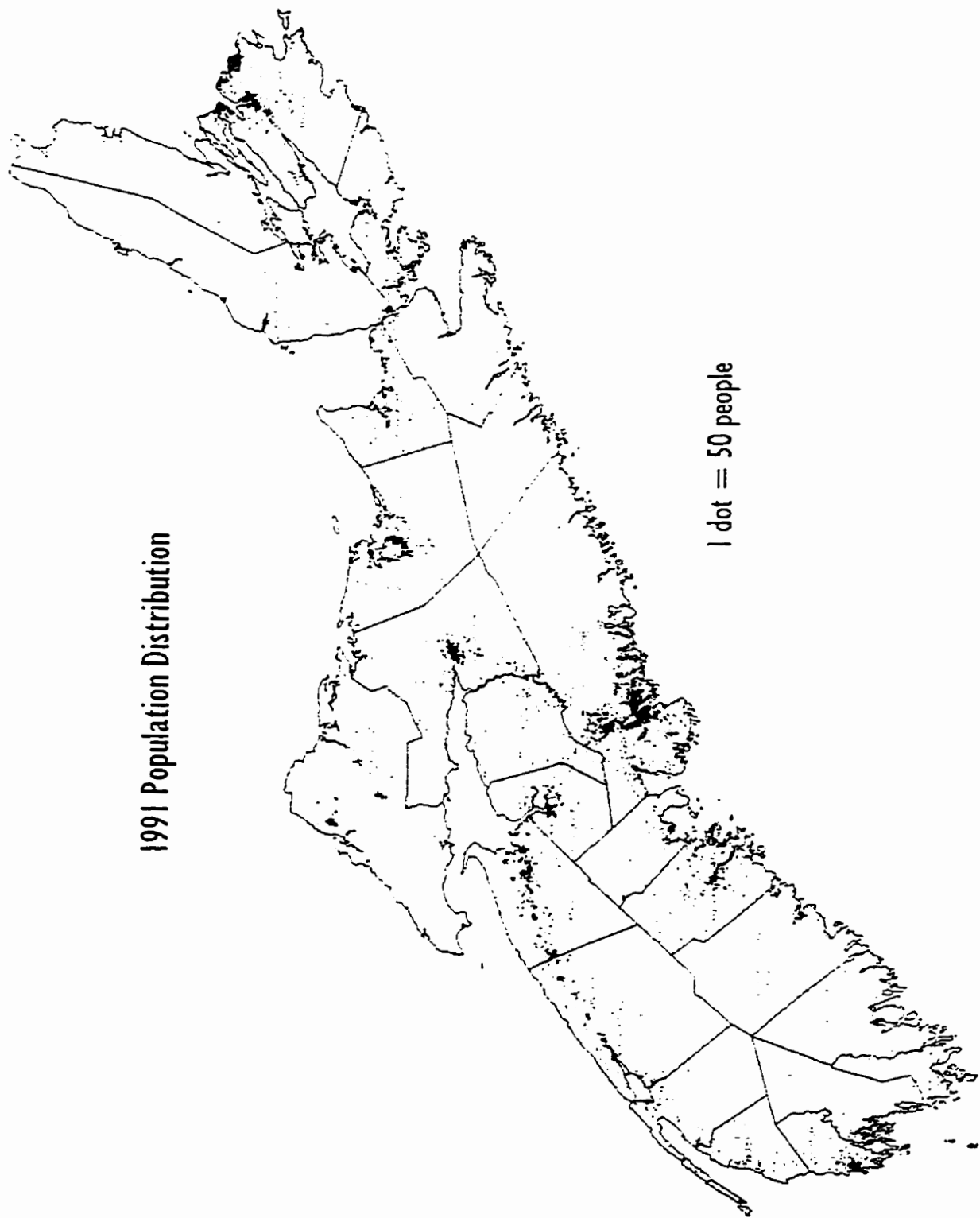
Figure 1: **Population Distribution of Nova Scotia, 1991**
(Source: Department of Municipal Affairs,
http://www.gov.ns.ca/homa/muns/info/dotdistn/pop91.htm)

Nova Scotia has a strong social and cultural heritage founded upon the province's marine history, economy and coastal lifestyle. Museums all around Nova Scotia celebrate the province's heritage in ship building, marine transportation, naval defence, and fishing. The coast also provides numerous recreational opportunities that are valued not only by people who live here, but by people who come to visit Nova Scotia. The coast and small fishing villages have become the icons of Nova Scotia and have contributed to a strong sense of place, the importance of which is reflected in the work of local artists and musicians. This sense of place, cultural and social identity associated with the coast is an important factor to the well-being of Nova Scotians.

Environmentally, the coastal zone supports a number of complex and often specialized ecosystems. Along the 10,500 kilometres of coast, one can witness several different ecosystems, each one of which is environmentally and ecologically significant. Plants and animals found within these zones are generally highly adapted to their specific environments and therefore geographically restricted. The health of coastal ecosystems is important to the resource-based coastal economy, to the health of the population who live near and visit the coast, and to the general integrity of the environment. The health of our environment is becoming increasingly important as we begin to understand human existence is part of nature, not independent from it. Coastal ecosystems are particularly important, as they are "part of an integrated whole that is an essential component to the global life support system" (*Earth Summit '92*, 1992).

Economically, coastal resources are worth billions of dollars to the province. Despite the moratoriums on fishing, the provinces coastal waters maintain a fishing industry valued at $500 million in 1992 (*Coastal 2000*, 1994, p.7). Dyked coastal lands are considered some of the most valued and productive farm lands in the province. Port and mineral exploration operations situated on the coast are important sources of revenue for several communities. The coast is also a major assets for the tourism industry which supports "tens of thousands" jobs and generates a substantial amount of government revenue

through taxation. During 1996, the tourism industry generated $905 million dollars in direct revenues, and the estimate for the 1997 tourism revenue is over one billion dollars (*Tourism Nova Scotia*, 1997). A survey done on why people visit Nova Scotia revealed that the number one reason was to enjoy the natural beauty of the province (*Tourism Nova Scotia*, 1997).

Given the multiple uses and the social, economic, and environmental significance of the coast, a number of issues and conflicts have arisen concerning its well-being. The major issues have been outlined in Table 1.1 to provide a brief overview of the current situation.

1.2 Coastal Management

Perceptions and concepts of coastal management vary in relation to coastal zone definitions and the interests at stake. It is necessary to recognize that the coast is a collection of resources interconnected and dependent upon many land- and water-based activities, which makes it difficult to spatially define. As well, perceptions of the coast are diverse and generally reflect local values, uses, and beliefs. Johnston et al. state that given the complexity of the coast, coastal management "involves the reconciliation of so great a variety of interests — local, national, and international; conservationist and exploitative — [that it] demands a high degree of independent action from agencies concerned with the coastal zone, [while] enveloping them all in a sophisticated system of cooperation that attempts to develop and abide by long-range coastal zone plans" (1975, p.13).

Given the immensity and number of issues affecting the coast, there is a need for government regulation and policy that specifically address the management of coastal assets. This type of management could be manifested through legislation regulating pollution and impact assessments, and consolidating the current multi-jurisdictional responsibilities of the coast, so that clear objectives and mechanisms can be established to address problems

Table 1.1 Summary of Coastal Issues in Nova Scotia

Environmental Protection	• Disregard for environmental assets in favour of development • In adequate research to provide proper protection
Resource Protection	• Erosion and other natural processes threatening cultural, social and economic resources
Economic Resources	• Need to balance economic interests (tourism, fishing) with environmental interests • Need to provide alternative options for fishermen
Conflict	• Incompatible uses of coastal resources • Insensitive development of coastal lands
Management	• No provincial coastal management policy • No single agency is accountable and there is a lack of co-ordination amongst government
Public Education	• Public awareness of coastal management is required to address inappropriate uses • Need community support to ensure that coastal management policies are effective
Resource Access	• Access to traditionally used coastal resources, such as beaches, is being restricted • Need to increase restrictions on coastal mineral exploration to curb damage to the coastal environment

that impede its sustainable use. However, legislation and regulation alone will not enhance the quality of the coast if its full use is not understood and if broad based support for coastal management is not gained. Community involvement in coastal management can help assure that coastal management strategies are effective and socially responsible.

Coastal management is best defined as "a dynamic process in which a co-ordinated strategy is developed and implemented for the allocation of environmental, social, cultural, and institutional resources to achieve the conservation and sustainable multiple use of the coastal zone" (Government of Canada, 1996). This process involves 1) understanding that coastal resources are part of a larger system, 2) acknowledging the social, cultural and economic importance of those resources, 3) using that knowledge to decide what is the best and most compatible use, and 4) developing and implementing a management strategy based on that information.

Coastal community involvement can contribute to the realization of coastal management in a number of ways. Community residents can provide knowledge about coastal ecosystems, resources, and their use that is not available at provincial or municipal levels. Rather than creating the perception that government is encroaching upon communities through regulations and control, community involvement in decision making increases awareness of issues while fostering ownership of local resources. The implementation and enforcement of coastal policies is dependent upon the support and co-operation of community residents, since it is through community actions and values that change occurs. Although the importance of community involvement is clear enough, how to encourage and solicit community involvement is not.

1.3 Community Capacity

Community involvement is an important factor in the success of coastal zone management. Johnston et al. proclaim that communities are "the principal component for regulation of the ocean environment" (1975, p.7). The extent to which communities can participate in management initiatives is dependent upon their capacities. Kursel defines community capacity as "the collective ability of residents in a community to respond to external and internal stresses, to create and take advantage of opportunities, and to meet

the needs of residents diversely defined" (1996, p.369). In applying this notion to coastal communities, we need to determine what is required for communities to become effective participants in coastal management. If the capacity of coastal communities is increased in this regard, community residents will be better able to sustainably manage resources for their own benefit, and provincial management mandates will more likely be achieved.

In determining the capacities necessary for community involvement in coastal management, we must have a degree of understanding about the complexities of coastal communities. The importance of coastal resources to local economies, identities, and social well-being has already been discussed. As well, coastal communities have a distinct locality-based identity, they are naturally and socially different from inland communities, and are often politically complex based on their resource dependency (Johnston et al., 1975). This complexity must be considered when determining how to effectively integrate coastal communities into coastal management initiatives.

1.4 Methodology

This thesis uses three case study communities that have had success in community-based management to determine the factors that provided them with the capacity to develop and implement management strategies. The communities that will be examined are:

- Kingsburg;
- Pictou;
- Chéticamp.

These particular communities were chosen because each provides a different example of management issues, community-based organization, and management approach. Kingsburg is a small rural community in which a special interest group has been established to conserve the areas natural and cultural assets. Pictou is a large urban region with a community organization based on partnerships with various stakeholders and government. And Chéticamp is a medium sized town with community-based and supported

development agency. Kingsburg and Chéticamp were selected due to prior knowledge of their community-based management initiatives, and because they are unique examples of communities that have a capacity for community organization and management implementation. Pictou was selected because it offers an example of a larger, more complex situation in which a community-based organization was pivotal. Together, these three communities provide examples of community-based management from which comparisons can be drawn. A comparison of the factors that enabled these communities to take on management initiatives is done to determine if any key factors were critical in all scenarios, and therefore possibly critical for other communities to attain if they are to become active participants in community-based coastal management.

The case studies are presented in Chapters 2 through 4. Each case study gives an overview of the community and the issues affecting their well-being, outlines the scope and context of their respective management strategies, and discusses factors that contributed to their success. Research for the case studies was done through visits to the communities; discussions with people involved in the management organizations and living in the communities; discussions with people who have knowledge of both the case study communities and community management; and through various documents produced by the community groups, government, and outside consultants. These methods of research were used to provide an understanding of the basic management mechanisms and objectives as well as the overall success of the management strategies gauged by those involved, those affected, and those from the outside the communities.

Findings from the case studies are summarized and further analysed in Chapter 5. A comparison of the factors deduced from case studies allows for certain key factors to be revealed. These key factors are discussed based on the information provided by the case studies, and other sources of information on coastal and community management, to determine their relevancy in achieving community management success. Chapter 6 proposes a theoretical framework which applies the key factors to increasing community

involvement in provincial coastal management. The framework is based on information attained through books and documents on coastal management and community development.

CHAPTER 2

The Kingsburg Coastal Conservancy

The Kingsburg Coastal Conservancy (KCC) is the first of three case studies on community planning. The KCC provides an example of a community organization that has developed a management strategy aimed at the protection and conservation of natural and cultural resources on Kingsburg Peninsula. Located approximately 20 kilometres southeast of the town of Lunenburg, Kingsburg Peninsula is an area that has a number of magnificent beaches, well kept historical homes and a picturesque country landscape. External pressures threatening the cultural and environmental integrity of the area prompted residents of Kingsburg to develop an organization that could address local issues. The result was the formation of the KCC and a Fifteen Year Land Acquisition Strategy. The KCC is an excellent example of coastal community management dealing with environmental and cultural issues. This chapter examines the formation of the Conservancy; how the management strategy works to address issues; and factors that contributed to the community's capacity to become involved in resource management.
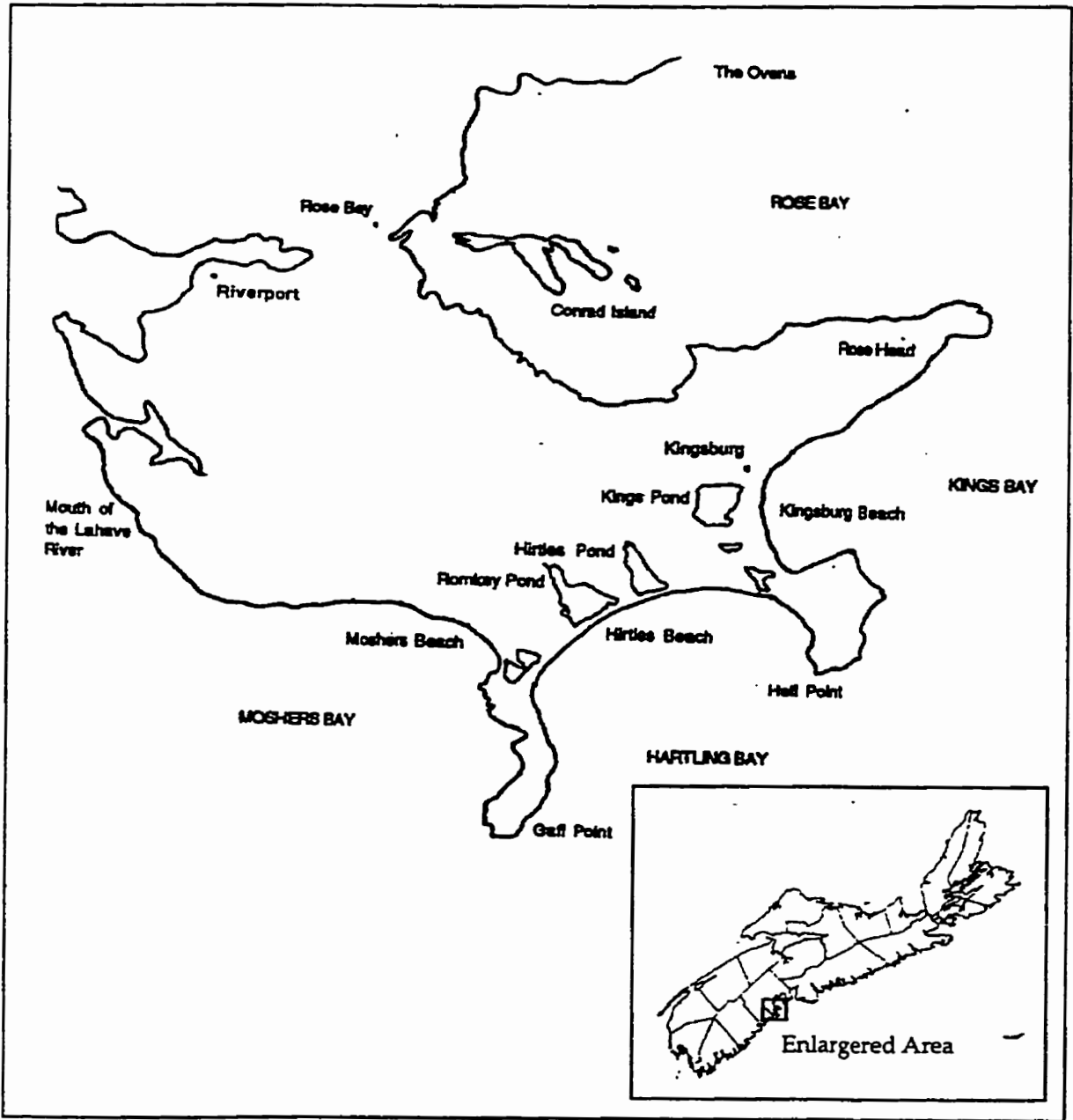
Figure 2:   The Kingsburg Peninsula
(Source: Kingsburg Coastal Conservancy, p.3)

2.1 An Overview of Kingsburg Peninsula

Kingsburg Peninsula consists of 1708 acres of land, with 18 kilometres of shoreline, and is geographically defined by three beaches which are anchored by three bedrock headlands [Fig. 2]. Within this geographical area are the communities of Kingsburg and Upper Kingsburg, with a combined population of approximately 300 people. The peninsula has a number of geological and biological features, which create several different habitats and support a diverse ecology. Culturally, Kingsburg Peninsula is an excellent example of a historical rural village with settlements that date back to the 1700s. The original village cluster and agrarian land system can still be recognized and the historic buildings have been well preserved.

Recreation, cottage development, environmental degradation and loss of traditional access to the coast have had several implications for the environmental and cultural integrity of this area. The peninsula's exceptional beaches and unfettered natural landscape present recreational opportunities that attract people from neighbouring towns and Halifax, as well as tourists. Unfortunately, the increased use of the area has resulted in problems ranging from inadequate parking and public facilities to dune degradation due to inappropriate hiking trails and access points. The pristine qualities of the landscape and the village of Kingsburg have increased demand for cottage development. The result has been the privatization of traditional access points to beaches and degradation of the aesthetic quality of the built environment. Cottage development to date has negatively affected 11% of the Kingsburg dune system because of a lack of building regulations and construction activities on the sensitive dune systems (Jacques Whitford, 1994). Concern over the effects of these external and internal stresses on the local quality of life and environment date back over ten years. Those concerns provided the motivation for local residents to form the KCC.

2.2 The Kingsburg Coastal Conservancy

The KCC was founded in 1993. It is non-profit land trust association that is attempting to protect the entire peninsula through a fifteen-year land acquisition strategy, and by holding conservation easements. The association was founded by a number of concerned residents who had personal interests in environmental protection and the quality of life provided in this small ocean-side community. The motivation and aspirations for the establishment of the KCC can be attributed to 1) the local interest in preserving the environmental, cultural, and historical assets of the peninsula, 2) prior success of the *Committee to Save Kingsburg Beach* in a conservation project, and 3) the detrimental effects of increased development and recreation in the area. Based on these motivating factors, the KCC has evolved into an official Society, the primary focus of which is to "secure the lands and coastline of the Kingsburg Peninsula in order to conserve and protect these assets for people in perpetuity" (Kingsburg Coastal Conservancy, 1996, p.3).

The majority of people that formed the KCC had a particular interest in the area's environmental well-being, historical assets and cultural traditions. In 1995, a total of seven people were involved in the KCC. These people were primarily old hippies or "the second rung of old timers" — a local terminology used to describe people who moved to the area during the 1970s and 1980s for the quality of life and environment it afforded. Their interests in protecting the peninsula can be traced to their initial reasons for deciding to settle in the area. Within this particular interest group there are a number of people with skills and knowledge especially applicable to environmental and community management. One of the main originators of the KCC was Anne Folliard, a graduate of Dalhousie University's School of Resources and Environmental Studies, whose time and dedication were critical factors in the formation of the KCC and the Fifteen-year Land Acquisition Strategy. Her previous work as an environmental management consultant and her vested interest in Kingsburg were tremendous assets to this community group. As well, the KCC had members with legal expertise and access to other conservancy movements.

Another contributing factor was the community's confidence, attained through the success of The Committee to Save Kingsburg Beach. The committee was initially established in the late 1980s to pressure government authorities to take action in the protection of Kingsburg Beach. The group's establishment coincided with the release of government studies which identified Kingsburg Beach as an important example of a Nova Scotian beach. It was assessed within the top 11% of beaches in the province, and was noted as one of only five locations where a dune/wetland system could be found (KCC, 1996, p.7; Jacques Whitford, 1994, p.62). The Committee to Save Kingsburg Beach rallied for protection of the beach using written reports and petitions. The beach was eventually designated under the *Nova Scotia Beaches Protection Act* in 1993. The designation was considered a controversial move because it denied some owners of beach-front properties the right to build. The protection declaration was challenged in court on the grounds that it renounced procedural fairness and was not enacted in good faith (Cluett, 1996). A comprise was eventually reached that allowed land owners with building permits to proceed with development, but no further building permits were granted. The designation is still considered a victory for the Committee to Save Kingsburg Beach, and motivated members of the group to continue with further protection of the peninsula.

Further protection and conservation of the peninsula was deemed necessary, given the pressure on the area for cottage development and recreation. Cottage development posed a threat to the local community because it diminished the area's aesthetic and historical characteristics; did not encompass local traditions and culture (such as commonly recognized access paths to the beach); and weakened the community by turning it into a seasonal holiday village. As well, the lack of building regulations resulted in the environmental degradation of sensitive areas where development had occurred. In a study conducted by the Nova Scotia Department of Natural Resources, it was reported that, if unregulated development were to occur along the beach front of Kingsburg Beach, an estimated 43% of the dune system would have been lost. Cottage development was also cited as a

primary reason for the escalation of local property values, which decreased the ability of local people to buy land. Concern over recreational use was a twofold issue. People in the community wanted to preserve the opportunities for passive recreational use of the peninsula, while ensuring recreation had minimum effect upon the area's environmental integrity.

The motivation provided by local interests, prior success, and threats to community values resulted in the formation of the KCC in 1993. In 1995, the KCC became a registered charity which is able to voluntarily dedicate land for conservation. Most recently, the KCC was granted status under an agreement with provincial and federal governments to accept environmentally sensitive land as donations for tax breaks. There are only seven such organizations to be given this status in Canada.

The KCC is a private Society run on a volunteer basis. Meetings for the Conservancy are not open to the public. This has created some debate about the extent of the KCC's local representation. Its formation and the development of the land management strategy have created some conflict within the community, primarily between the "old timers" who have lived in the area for generations and the "new comers" who have recently purchased land or built. Nonetheless, the KCC should be commended for its work and achievements in coastal community management that address sustainable use and development.

The interests and role of the KCC are reflected in its *Memorandum of Association* (KCC, p.1996). 19 objectives and goals are listed, specifying the nature of the KCC's mandate. These goals and objectives are provided here in summation:

- to acquire, protect, and conserve lands and waters of the Peninsula;
- to foster and promote awareness of the natural assets in the area;
- to promote research, education, and good use of natural resources on the Peninsula;
- to permit public access and responsible use of Conservancy lands;

- to advance the objectives of the conservancy through forming partnerships and sharing information;
- to raise funds and allocate all funds to the realization of the Conservancy's objectives.

The goals and objectives of the KCC are embodied in the Fifteen-Year Land Acquisition Strategy which proposes to purchase and protect all lands on the peninsula. As well, the management strategy provides a number of actions directed at addressing current and urgent issues.

2.3 The Fifteen Year Land Acquisition Strategy

The ultimate goal of the KCC is the purchase and protection of the 18 kilometres of shoreline and 1708 acres of land on the peninsula. The justification for this is that all the "pieces" of the peninsula are integrated environmentally, ecologically, and culturally, and therefore must all be protected (KCC, 1996, p.9). The KCC proposes to achieve its goal over a fifteen year period through strategic land acquisitions, holding conservation easements, the development of partnerships with institutions and organizations, and a series of mutually supportive short-term goals and action plans.

To date, the KCC has been successful in meeting a number of its objectives in protecting Kingsburg Peninsula. Forty thousand dollars was raised, through donations, for the purchase of nine acres of land on Gaff Point. A development moratorium has been struck on Zwickers Land and a group established to handle its management. The Nature Conservancy of Canada is attempting to protect Hell's Point as a wilderness sanctuary, which assists the efforts of the KCC. A partnership has been formed with the Riverport and District Board of Trade in support of a Five Year Sustainable Tourism Strategy for Hirtles Beach. Further implementation of the Fifteen Year Land Acquisition Strategy involves the purchase and protection of more land through a number short-term goals and priority action plans.

As of 1996, the KCC had five priority situations dealing with issues related to the protection of peninsular assets. An outline of the priorities and relevant actions is provided to develop an understanding of the process required to implement the goals.

Priority 1:   *Ensuring access to Kingsburg Beach and Hirtles Beach*
- The purchase of property for sale along Hirtles Beach with money raised through the KCC, interested partners, and potentially from the Nova Scotia Economic Renewal Agency
- Negotiation with the Municipality of Lunenburg for access right-of-ways
- Developing a Hirtles Beach Management Plan to secure access, provide appropriate facilities, and ensure its long-term protection
- Create parking spaces and marked access points along Kingsburg Beach
- Develop a coastal management plan and a land use plan for the peninsula as a supplement to the Sustainable Tourism Plan for the Riverport Area

Priority 2:   *Protect Gaff Point, the western headland of Hirtles Beach*
- Compile a survey of the area
- Identify strategic lots that must be purchased by the KCC

Priority 3:   *Establish a continuous hiking trail around Kingsburg Peninsula*
- Obtain a compilation of all existing surveys of the properties of the Peninsula
- Purchase strategic properties as they become available

Priority 4:   *Ensure continued access on Beach Hill   part of the traditional   Hirtles Beach walk*
- Purchase property and (or) negotiate with current land owner to ensure access

Another priority of the KCC is the protection of Moshers Beach under the *Beaches Act*. The KCC was working with the Department of Natural Resources to achieve this goal, however, the beach did not meet requirements

for special designation. Currently, another method of protection is being devised.

2.4 Lessons From the Kingsburg Coastal Conservancy

The review of the KCC and its Fifteen Year Land Acquisition Strategy offers a number of lessons that are applicable to community based management strategies. In particular, it revealed that were a number of factors that contributed to the community's ability to development a community-based management strategy. These factors and their relationship to the development of the management strategy are illustrated in Figure 3 and are briefly summarized below.

Threat to Valued Community Assets

The community was originally impelled to take management action because of threats to valued community assets. The pristine environment and cultural traditions were highly regarded by a number of residents in the area, and their preservation was important to maintaining the quality of life the peninsula afforded. The awareness and appreciation of local assets was crucial to the formation of the KCC and subsequent land management strategy.

Prior Success

Motivation was also inspired through the success of the Committee to Save Kingsburg Beach. The protection of Kingsburg Beach inspired faith in the residents that something could be done, and that the time and effort they invested into attaining its protection were not in vain.

Figure 3.   Conceptual Model of the Development of the Kingsburg Management Strategy
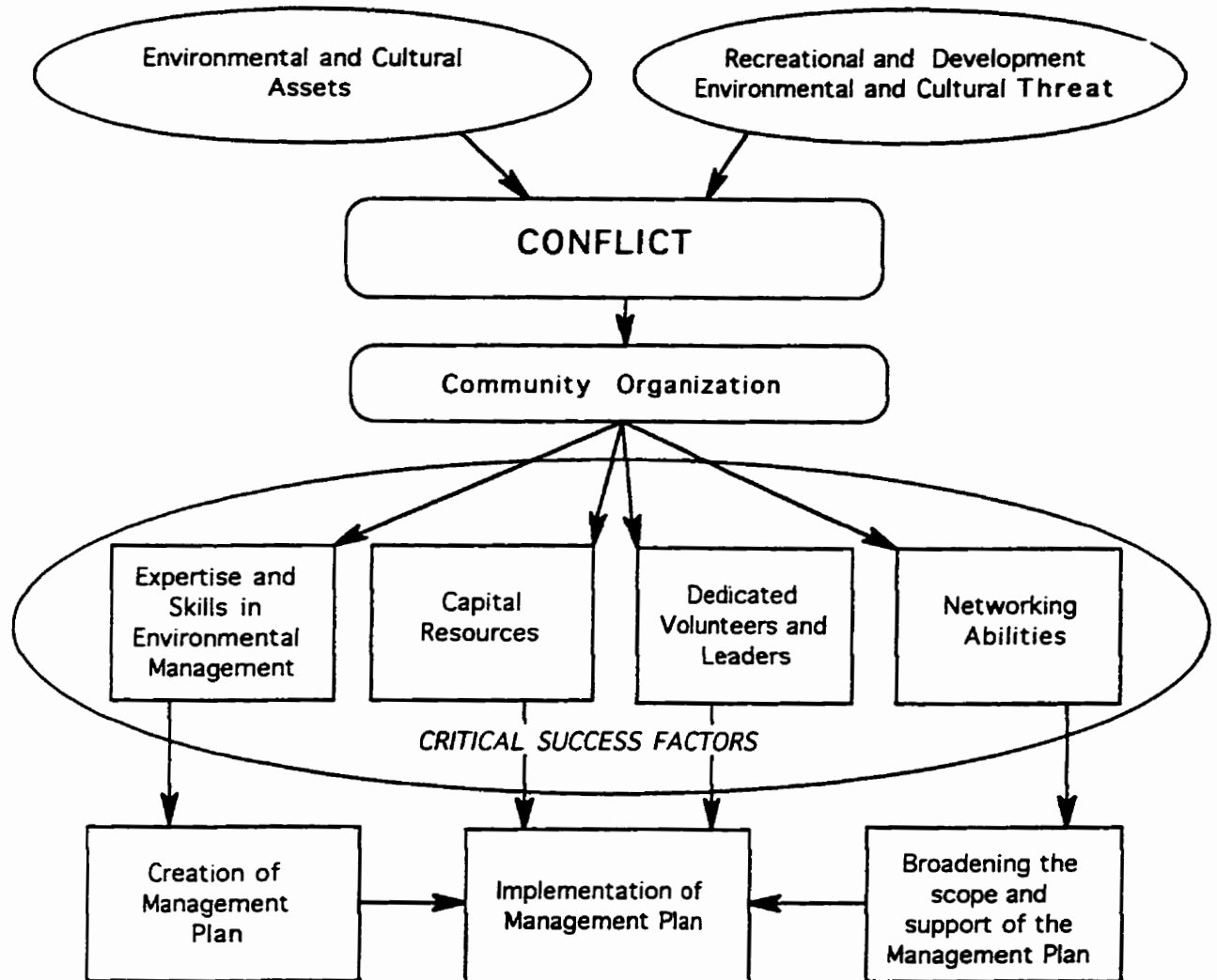
Human Resources

The KCC is run on a volunteer basis. The commitment and dedication of local residents were integral to the formation and perpetuation of the Society. The members of the KCC were also endowed with experience in environmental management, legal expertise, organizational skills, and fund-raising capabilities. The members were also good at networking and promoting their cause, which resulted in the formation of partnerships and increased recognition for their case.

Special Interest Group

The KCC is a special interest whose meetings and membership are not open to the general public. The motivation for its action is based upon members' own personal motivations. This has caused problems in the community, dividing residents about the most appropriate action for resource management.

Funding

The implementation of the Fifteen Year Land Acquisition Strategy involves a considerable amount of funding. For example, the purchase of Gaff Point cost $40,000. Fundraising is one of the main objectives of the KCC, and must be done on an ongoing basis so that properties can be purchased as they become available. Other sources of potential funding include the Economic Renewal Agency, for the purchase of lands along Hirtles Beach — an important local and provincial recreation spot. Fundraising abilities are essential to this community organization

Partnerships

Partnerships have been pursued with government agencies, universities, interest groups, and naturalist and environmentalist societies. Successful partnerships in the case study include the Nature Conservancy of Canada, the

Department of Economic Renewal, the Department of Natural Resources, and the Riverport and District Board of Trade. These partnerships aided through funding and co-operation based on mutual interests. The KCC realizes that partnerships are important in attaining goals and for the long term sustainability of their strategy. Further partnerships are being pursued by the KCC with Dalhousie University and DalTech, as part of a University-Community-Government Linkage (KCC, 1996, p.15); the World Wildlife Fund of Canada; The Tourism Industry Association of Nova Scotia; and the Bluenose Atlantic Coastal Action Program.

Special Status

The KCC was granted special status under an agreement with provincial and federal governments to accept environmentally sensitive land donations in exchange for tax breaks. This special status is a key component to the KCC's ability to implement the land acquisition strategy. It provides incentive for people to place their undeveloped land under protection, and ensures that the land will be preserved. To date, negotiations have commenced to accept the first piece of donated land. The granting of this status indicates that the KCC has been recognized as a significant partner in resource management, and has provided the KCC with a powerful and invaluable tool for land management.

2.5 Conclusions

Out of all of the factors that contributed the development and implementation of the Kingsburg Coastal Conservancy, the fact that it is comprised of a group of like-minded people is most important. The people involved in the Conservancy had particular interests, which enabled them to come together in pursuit of a common goal. The group had a definite agenda which met their particular needs. By keeping the Conservancy closed to the public, and not attaining community consensus or consultation, left the people in the Conservancy to pursue their goals uncontested. As well it saved

time in the lengthy, and often tedious process of gaining community support. The consequences of this had a negative affect on the community as a whole, causing divisions amongst its residents. It should also not go unrecognized that most of the people in the group had something to personally gain from the Conservancy's actions — protection from what they deemed undesirable development in their community. The benefits of arresting development also contradicted one of the Conservancy's concerns — the fact that cottage development was increasing property values to meet the international market. Chances are that the protection of land and restriction on development will further increase the value of developed land, and the majority of local people will still not be able to afford land in the vicinity. However, the Conservancy has achieved the conservation and protection of lands on the peninsula which is commendable, and which probably would not have happened without the personal motivation of this skilled and like-minded group.

CHAPTER 3

The Pictou Harbour Environmental Protection Project

The Pictou Harbour Environmental Protection Project is the second case study of coastal community management in this thesis. Pictou has a long history of industrial and exploitive resource use, which has adversely effected the quality and sustainable use of the marine environment. With the support of the federal Atlantic Coastal Action Program, the town of Pictou and surrounding communities have developed an integrated comprehensive environmental management plan to deal with the consequent disparity between economic, social, and environmental use of the coastal watershed. This case study is at look why and how the community is involved in coastal management, and the supportive structures that enhanced the community's capacity to effectively address coastal issues.
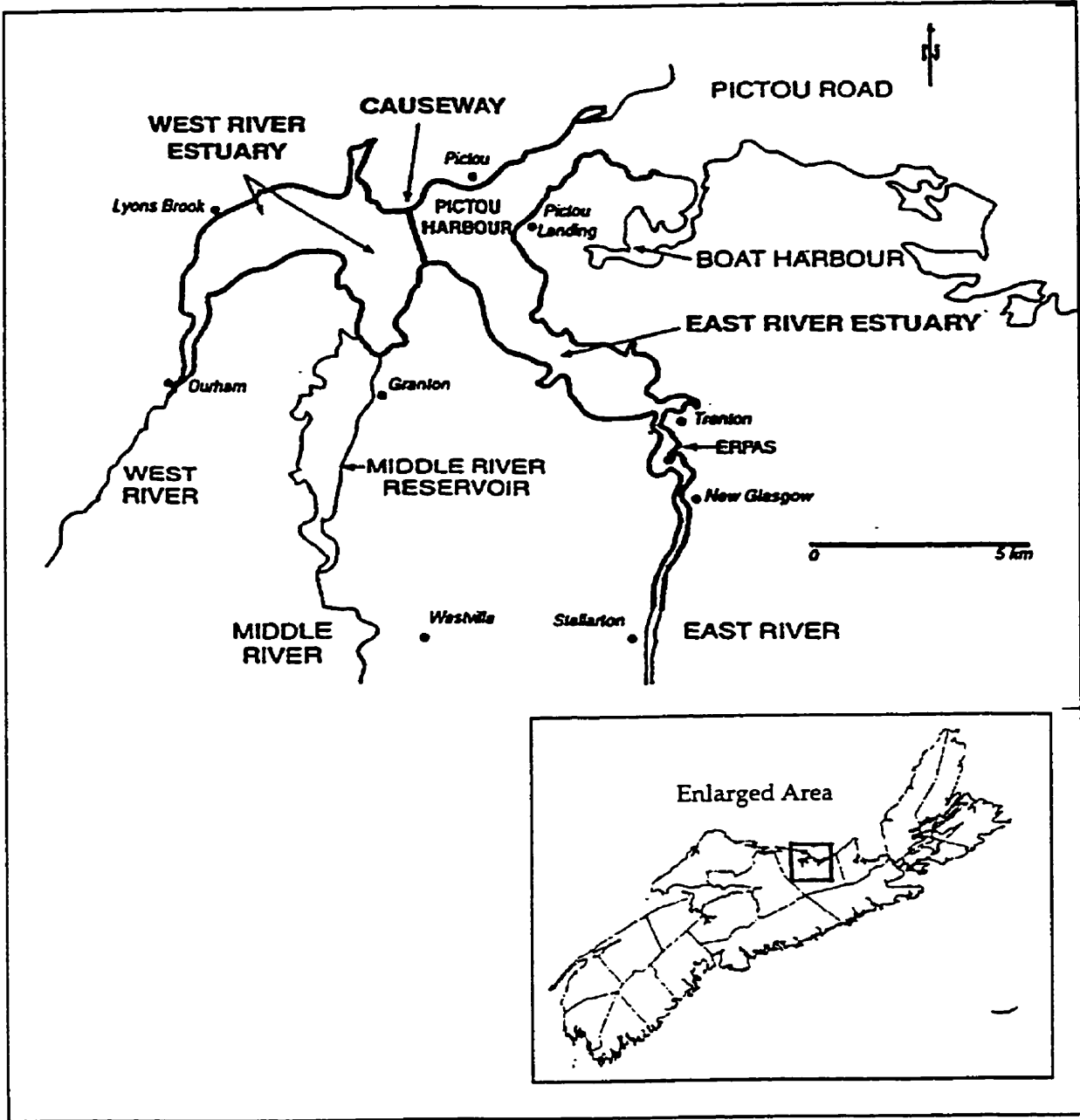
Figure 4.   **Pictou Harbour Watershed**

(Source: PHEPP, *Our Community, Our Future*, 2-11)

3.1 Pictou Harbour: Environmental, Economic, and Social Context

Pictou Harbour is part of an estuarine system formed at the mouth of the East, West, and Middle Rivers of Pictou County (Fig. 4). An estuary is a highly ecologically productive environment incorporating terrestrial, marine, lake and ocean dynamics, and is sheltered or semi-enclosed by a seaward barrier (Carter, p.184). Within the watershed boundaries of the Pictou Harbour estuary there are salt marshes, wetlands, forests, rivers and streams. These ecosystems support a variety of plant and animal species which are both water- and land- dependent. Estuaries also provide resources and sheltered conditions suitable for urban development and industry. Partly because of their value to trade, commerce and quality of life, the waters and adjacent streams and rivers of Pictou Harbour were one of the first industrialized areas in Nova Scotia and remain one of the heaviest concentrations of industry (PHEPP).

Since the 18th century, industrial development and human settlements have placed stress on Pictou's marine environment through point-source and non point-source pollution. Current human activities that rely on or affect coastal resources in Pictou include forestry, fisheries, agriculture, pulp production, strip mining, electricity production, tourism, and urban development (PHEPP, 5-6). Problems resulting from some of these activities include:
- Air and water pollution;
- Soil erosion;
- Encroachment of human activities upon wilderness habitat;
- Excessive harvesting or misuse of renewable resources;
- Destruction or manipulation of plant and animal habitat;
- Disposal of human waste into the environment.

Pictou County is also home to one of six pulp and paper mills in the province. Pulp mills produce more contaminated effluent than any other industrial source in the Atlantic Region (Eaton et al., p.143). As a result of pulp mill effluent, Boat Harbour, adjacent to Pictou Harbour, was declared one of Canada's worst hazardous waste sites (PHEPP, 5-6). Despite

environmental stress, the economic benefit of industry and development is very important to the region. In Pictou County, manufacturing accounts for 22.8% of the regional labour force (PHEPP, 2-9), and creates significant economic spin-offs. However, pollution and environmental degradation from industrial and human development have not only adversely affected the health of the environment, but have created conflict among other users of the watershed.

It is estimated that wildlife-related expenditures in the region are $393 million annually, generated through consumptive (recreational hunting and fishing) and non consumptive (hiking, camping, bird watching) activities (PHEPP, 3-16). As well, the coastal environment and watershed provide recreational opportunities that are traditionally valued, ingrained in the community identity, and support a growing tourism industry. The conflict between tourism and recreation, and, clear cutting, effluents and industrial land use is just one example of the conflict between industrial development and other activities. While a strong industrial economy is important to the social well-being of Pictonians, the degradation of the environment has negative implications upon the quality of life enjoyed by the people of Pictou and long term sustainability of the area's overall economy.

3.2 Community Involvement in Environmental Management

The importance of the environment to the people of Pictou has been demonstrated through the community's involvement and activism in environmental protection. Community involvement in environmental issues can be traced back to the 1960s, when efforts through lobbying resulted in the construction of an industrial treatment facility to curb shoreline pollution from pulp mill effluent. By 1988 the group Citizens Against Pollution (CAP) was established. It was comprised of 800 paying members from a broad cross-section of the community (PHEPP, 2-1). As a result of CAP, the federal government provided $150,000 for a study to identify types and degrees of pollution in the area's marine environment, and to recommend

ways to solve pollution problems in the harbour area (Qtd. in PHEPP, 2-1). Thus the Pictou Harbour Environmental Action Plan (PHEAP) was created, and the people of the Pictou area became involved in environmental management.

Although several studies were conducted through PHEAP, lack of funding prohibited the creation of an action plan. However, Pictou was still recognized as an environmental "hot spot." This fact, the preliminary work that had been done, and the history of community involvement made Pictou Harbour an ideal candidate for the federal government's Atlantic Coastal Action Program.

3.3 The Atlantic Coastal Action Program

ACAP is an outcome of the Canadian government's national *Green Plan* ,aimed at the promotion of sustainable development. The primary goal of the Green Plan is to enhance and maintain ecological processes with the understanding that most local economies are directly or indirectly linked to a healthy environment (Government Canada, Sharing Vol. I). The $10 million ACAP program was designed to focus on the degraded state of the Atlantic marine environment through the development of several coastal management strategies.

ACAP initiatives and concepts differ from traditional government planning processes, in that emphasis is placed on community-based strategic planning in an attempt to foster responsibility, ownership, and a sense of community amongst residents of the sites (Donnelly, p. 508). The three main principles of ACAP attest to this assertion are:

- to involve all stakeholders;
- to have a commitment to partnerships;
- to make decisions by consensus.

(ACAP, Sharing, Vol. 1)

ACAP invites coastal communities to form committees that combine the efforts of local residents, interest groups, industries, and government agencies

(Forrest, p.35). Through integrated planning, ACAP hopes to promote a sustainable approach to development that views both environmental and economic issues as important factors to the health of the community.

ACAP also focuses on solving coastal issues through watershed-based management. This approach is particularly appropriate for coastal management, since the majority of coastal environment problems are the result of land-based activities (Johnston). Watershed based management is founded on the concept of ecosystems and recognizes that elements of an environment are interconnected, not closed units immune from each other. However, watershed boundaries do not often conform to politically established boundaries and multijurisdictional problem solving is often required to suitably address management needs. Through ACAP, partnerships between all three levels of government have been established to enhance cooperation for effective watershed management.

ACAP partnerships with communities are based on a number of commitments and responsibilities. ACAP commitments include fulfilling a role as an active stakeholder in developing local environmental management strategies; providing access to expertise when required; and allotting $50,000 for five years to hire a project co-ordinator and establish a local office. ACAP provides additional funding on a project basis. As part of the ACAP agreement, communities are required to develop a comprehensive environmental management plan (CEMP). The CEMP is essentially "a blueprint for environmental action in the community" (PHEPP, 2-2). As part of the integrated planning philosophy, the CEMP must include establishing partnerships between businesses, industries, existing community groups and concerned citizens, and address environmental issues through co-operative actions. While ACAP provides funding, local committees are also required to find other sources of funding to perpetuate the project.

3.4 Comprehensive Environmental Management Plan

Currently, PHEPP involves 87 members (Christie). These members include organizations, groups, various government agencies, industries, interest communities, professionals, and members of the general public who consider themselves stakeholders in the Pictou watershed. The involvement of these organizations reflects the PHEPP mission statement to "create a situation whereby stakeholders within the Pictou Harbour Watershed will work co-operatively to improve environmental integrity of their community" (PHEPP, 5-11). In agreement with ACAP, PHEPP has hired a director to co-ordinate the project and established a local office. The director of PHEPP is Bob Christie, who was chosen for his history of involvement in local environmental projects, his professional knowledge of industrial chemical production, and the trust he had gained from both members of the community and local industrial companies (Christie).

The PHEPP committee has also developed a comprehensive environmental management plan in compliance with ACAP requirements. The CEMP details local environmental resources, related issues, and methods for addressing those issues. The two main components of the CEMP are the Environmental Stewards and Partnership Program, and the Stewardship Action Plan.

3.4.1 The Environmental Stewardship and Partners Program
The Environmental Stewardship and Partners Program (ESPP) is one of the more impressive accomplishments of PHEPP. It consists of twenty-nine affiliates (Table 3.1) who have made a goodwill commitment to achieving the goal of environmental improvement through co-operative planning and action. The basic principles of ESPP are :
- pollution prevention;
- waste minimization;
- environmental innovation;
- open communications;
- environmental education and training;

♠ community involvement (PHEPP, 5-12).

The ESPP allows separate interest groups and governments of different jurisdictions to identify common interests and develop common goals. Because each participant has contributed to the plan and made a formal commitment, it is more likely that the plan will be implemented. The results of ESPP include environmental standards that exceed official regulations; trust and cooperation between members; and the creation of a more realistic and achievable management plan.

Table 3.1   Environmental Stewards and Partners in PHEPP

Federal	Agriculture and Agri-food Canada
	Canada Mortgage and Housing Corporation
	Environment Canada
	Fisheries and Oceans Canada
	Human Resources Development Canada
	Natural Resources Canada
	Transport Canada
Provincial	Nova Scotia Department of Agriculture and Marketing
	Nova Scotia Department of Housing and Municipal Affairs
	Nova Scotia Department of Natural Resources
	Nova Scotia Department of Environment
	Nova Scotia Department of Fisheries
	Nova Scotia Department of Health
	Nova Scotia Department of Transportation and Public Works
	Nova Scotia Department of Education and Culture
	Nova Scotia Museum of Industry
	Nova Scotia Power Incorporated
	Public Works And Government Services Canada
	Sports and Recreation N.S.
Municipal	Pictou County District Planning Commission
	Pictou Regional Development Commission
Quasi - Governmental	New Glasgow Riverfront Development Association
	Pictou County Tourist Association
	Pictou Waterfront Development Corporation
Interest Groups	Maritime Fishermen's Union
	Pictou Harbour Environmental Protection Project
Public	Nova Scotia Agricultural College
	Nova Scotia Community College (Pictou Campus)
Private	Kimberly-Clark Nova Scotia
	Stora, Port Hawkesbury
	Wood lot owners
	Farmers

(Source: Our Community, Our Future, 7-10)

Besides providing support and co-operation in achieving environmental goals, partnerships have also contributed through funding and "in kind" donations which are critical to daily operations and the implementation projects. As well, companies such as Kimberly Clark have realized that improving community relations is good business. It enriches the corporate image, benefits company employees, and in the long run can save money on costly clean-ups. Examples of partnerships in PHEPP indicate the value of broad-based support and co-operation for environmental management strategies and the mutual benefits that can be gained by both the community and businesses alike.

3.4.2 Environmental Stewardship Actions

The second component of the CEMP is the action plan aimed at addressing environmental issues. In creating the action plan, the PHEPP committee initiated a community consultation process to identify sustainability issues and key areas where there was interest in pursuing action. This study resulted in the Environmental Stewardship Action Plan, which details environmental and sustainability issues, identifies appropriate partners for addressing the issues, and provides a list of actions that will amend the situation.

Since not every issue can be addressed simultaneously, actions are prioritized to create a progressive order that allows the committee to focus on one issue before moving on to the next. Environmental Stewardship Actions consistently evolve as issues are addressed, new information becomes available and new situations arise. As the issues change, so do the partners and participants in the actions plans. This process illustrates the dynamic nature of PHEPP, which has been essential to the project's long term viability.

Figure 5.   Conceptual Model of the Development of the PHEPP
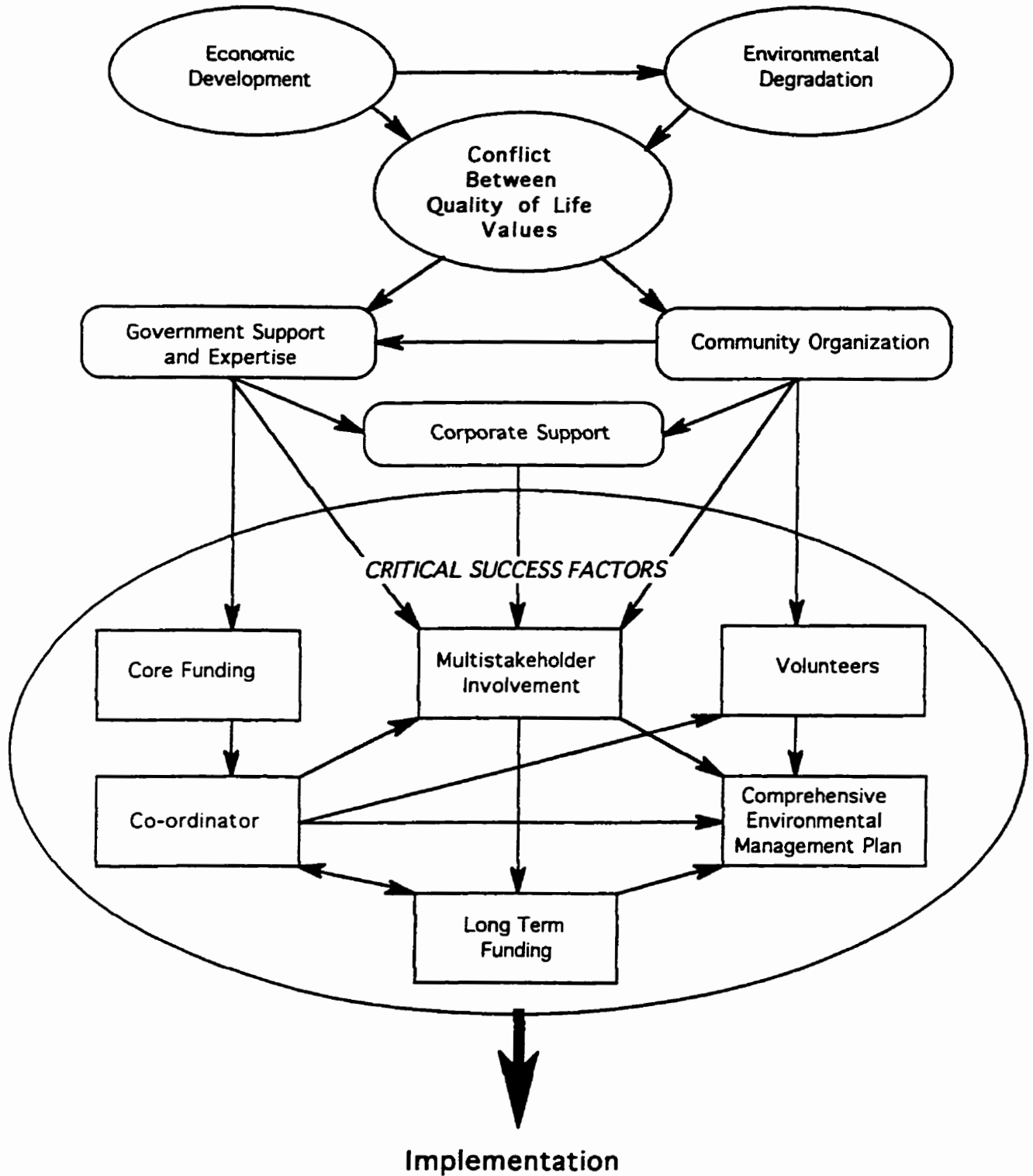
3.5 Lessons of the Pictou Harbour Environmental Protection Project

The evolution, formation and implementation of the Pictou Harbour Environmental Protection Project offer several lessons about the factors required for community-based groups to become effective coastal managers. These factors are briefly reviewed and also conceptually illustrated in Figure 5, to give a better understanding of how they contribute to the process and enhancement of the community's role in PHEPP. In Figure 5 it is demonstrated that the process and structure of PHEPP is very complex, resulting in a web-like model in which several factors are related and dependent upon each other.

Threats to Environmental Assets

Community involvement in environmental management was initially sparked by concern over the effects of pollution on the coastal environment. Pulp mill effluent had obvious effects on marine and shoreline resources, and degraded their recreational, economic, and aesthetic value. The coastal environment is important to the community for cultural and economic reasons, and the degradation and subsequent loss of the diversified use of the resource affected the integrity of the whole community. This provided the motivation for people to form organizations and address issues related to the health of the coastal environment.

Understanding and Awareness of Environmental Issues

Local environmental issues have been surfacing in the Pictou community since the 1960s. Over the years several interest groups have operated to increase community awareness and address issues related to pollution and resource exploitation. This has resulted in a community which is cognizant of environmental issues and understands the need to address them. Broad based concern about environmental issues is demonstrated by the 800-plus paid members of CAP in the 1980s. The establishment of PHEPP was readily accepted by the greater community because of the residents' familiarity with

environmental groups and awareness of issues which affected their well-being.

Coordinator

Through the ACAP agreement, PHEPP was provided with funding for a paid co-ordinator. The current co-ordinator, Bob Christie, has a number of attributes which make him an ideal candidate for the position. He is a local resident with a family history in the area that dates back to 1837, giving him local credibility in the community and genuine concern about the future of the area. His professional background as an industrial chemical process operator provides him with a working knowledge especially applicable to the environmental management requirements of the Pictou watershed. And he has a long history in environmental activism starting with the formation of CAP. All of these factors have earned him trust and a good reputation amongst both industry and the general community. As well, as a paid co-ordinator Mr. Christie is able to fully dedicate his time and efforts to the realization of PHEPP. Given the scope and complexity of PHEPP, the momentum and direction it requires could not be achieved on a volunteer basis. The co-ordinator fulfills a special and much needed role in this community-based environmental strategy.

Community Definition

One of the main principals of PHEPP is community involvement in the development and implementation of the CEMP. PHEPP's definition of community includes businesses, industry, government and local residents. Membership is open to anybody who is interested. This all-inclusive ideology of community has been integral to the success of PHEPP because it recognizes the multi-faceted nature of community. This has helped gain PHEPP broad-based community support, which has been important to progress the committee has made toward achieving its goal to improve the quality of the local coastal environment.

ACAP

As an ACAP affiliate, PHEPP has gained recognition, funding, human resources and the co-operation of all levels of government. This type of support has enabled PHEPP to broaden its scope and better pursue its agenda beyond what most community-based groups are capable of. The recognition of PHEPP as a partner in environmental management has helped increase the group's credibility; funding has enabled PHEPP to actualize many of its objectives; and access to human resources has enabled PHEPP to have the expertise required for comprehensive environmental management. As well, given the multijurisdictional nature of the coast, the co-operation between government departments that ACAP provided has been crucial to the realization of many goals.

Multistakeholder Approach

The involvement and participation of ESPP members has been critical to PHEPP for a number of reasons. Several of the problems related to the health of the watershed environment are the product of its diverse use and piecemeal management. By including industry, businesses, and different government departments in the management strategy, PHEPP has been able to better address issues and conflicts related to the use of the watershed. Without this level of co-operation, PHEPP would not have been able to effectively address the causes of the pollution which affect the greater watershed. The Environmental Stewards and Partners Program provides an excellent example of how acceptable solutions for improving the environmental health of the watershed can be accomplished through co-operative planning and management (Forrest, p.37).

Dynamic Structure

Consistent revision and amendments to PHEPP allow it to evolve as environmental problems and management needs change. In this sense,

PHEPP is a living plan and committee hopes the dynamic structure will assist in keeping the project relevant in the future.

3.6 Conclusions

The fact that PHEPP was part of an ACAP initiative contributed greatly to the community group's ability to develop and implement such a complex and comprehensive management plan. Many of the factors that contributed to the success of PHEPP were a direct result of ACAP. ACAP provided PHEPP with an agenda, funding, human resources, the ability to establish an office and hire a co-ordinator, and gain the co-operation of government departments at all levels. Without the assistance of ACAP, it is unlikely that a community group could successfully take on such an initiative. What we can learn from this case study is how government and community groups can work together to achieve common objectives. As critical as ACAP was to the community's ability to develop and implement a watershed management strategy, the community was also vital to the governments agenda of addressing coastal pollution and the sustainable use of the watershed.

CHAPTER 4

Chéticamp: A Community Management Study

The community of Chéticamp is the third and final case study to be presented in this thesis. Chéticamp is a small Acadian village nestled between the Cape Breton Highlands and the Gulf of St. Lawrence on the north west coast of Cape Breton Island. Although Chéticamp does not have coastal management strategy, a study of this community does provide several lessons in community-based management. Despite its location, cultural isolation, and the region's depressed economy, Chéticamp has excelled in maintaining economic independence. This has primarily been achieved through community-based management strategies that incorporate social, cultural and economic elements. This case study offers insight into what enabled the people of Chéticamp to successfully develop and implement community-based management strategies. This information is applicable to gaining a better understanding of how community dynamics can affect or contribute to a community's ability to manage resources.

4.1 Chéticamp: A Community Profile

Chéticamp was originally founded in 1785 by French settlers returning from the 1755 deportation executed by the British. These early settlers located in the Chéticamp area because of its isolation and the access it afforded to an abundance of natural resources. Today, the community has a population of approximately 3,500 and is somewhat of an anomaly in this primarily English-speaking region. Over 90% of the residents in Chéticamp are of Acadian descent and French is the principal language used in business,

education, and the general community. The community's cultural uniqueness is also reflected in its music, art, and special events such as the annual "La Mi-Carême" masquerade. The Acadian culture is a very important aspect of Chéticamp and has contributed to a strong community identity and social cohesion.

For over 200 years fishing was the major industry in the Chéticamp. Since the collapse of the ground-fish stocks in 1992, the industry has drastically declined, affecting local employment and the traditional way of life. Only one fish processing plant is still in operation, and of the more than 600 people employed in the industry before 1992, only about 250 people remain (CDC, The Industries). Although the fishery industry is still significant to the local economy, relying on catches of lobster, snow crab, and other non-endangered species, tourism is quickly becoming the principal industry in the area.

The tourism industry in Chéticamp has been gaining momentum over the past few years, primarily because of the community's ideal location at one of the two gateways to the famous Cabot Trail and the Cape Highlands National Park. Through infrastructure and marketing campaigns the Chéticamp Development Commission and the Chéticamp Tourism Association are trying to capitalize on the area's cultural and natural assets to attract tourists. Nova Scotia Visitor Traffic Flow statistics for 1992 indicate that 82,400 nonresidents passed through, stopped, visited or stayed overnight in the village of Chéticamp (CDC, The Industries). The volume of tourists is expected to continue increasing as European and motor coach markets are attracted to the region. To many people in Chéticamp, developing the tourism industry is considered essential for the future of the community (Deveau, Doucette).

4.2 Community Development in Chéticamp

In terms of community development, Chéticamp is particularly noted for its economic independence (Scoggins, MacIntyre). Chéticamp has an extensive

history in community development that dates back to the late 1800s. Today, there are 16 co-operatives in operation, which generate 300 jobs and a payroll of $2.3 million. As well, there is Chéticamp Development Commission (CDC), a local quasi-government agency dedicated to pursuing economic development in the community. Both the co-operatives and the CDC were created to address issues that affect the well being of the overall community. They have enabled the community of Chéticamp to retain many of the economic and social benefits derived from local development.

Co-operative businesses and ventures were first introduced to Chéticamp in the late 1800s by Reverend Pierre Fiset. Rev. Fiset helped the people of Chéticamp organize their own economic ventures, including a gypsum mine and a number of small businesses. His visionary and inspirational ideas not only changed the fate of Chéticamp, but influenced Tompkins and Coady who later commenced the Antigonish (Co-operative) Movement.

The first official co-operative in Chéticamp was a fishery founded in 1915. It resulted from local economic deprivation caused by large fish-buying companies from outside the region. Local fishermen were forced to sell their catches to these companies for minimal reimbursement. MacIntyre describes the situation:

> Fish companies controlled almost all aspects of the people's lives. They owned the boats, advancing money to the fishermen for food in the winter, and for equipment in the summer. The summer's catch was already owed to the company before it was landed (p.110).

The formation of a fishery co-operative enabled local fishermen to escape the control of those from outside the community who had little interest in Chéticamp's well being.

The Chéticamp Development Corporation (CDC) has played a more recent role in the economic development of Chéticamp. Established in 1983 as a non-profit community organization, the CDC's mandate is "to serve the economic needs of the Acadian community of Inverness North" (CDC, History). It operates as an umbrella agency helping the community in areas of

strategic planning and economic development. The current priorities of the CDC include tourism infrastructure; fisheries infrastructure and projects; support of the business community; and forming partnerships with other agencies to address long-term economic and community development. The agency employs a full-time Community Development Officer and a receptionist-secretary, with operational costs funded through community contributions, membership fees, and contract and administration fees. The CDC also has a Board of Directors which is composed of 21 people representing various community and interest groups.

Social, cultural, and geographic isolation have created a determination amongst Chéticamp residents. They discovered early-on that it was up to them to take care of themselves, as nobody else was going to do it for them. Wilkinson and Quarter found a similar scenario in the Evangeline region of Prince Edward Island where residents link their desire for self reliance to cultural distinctiveness:

> The perspective of distinctiveness provided a sense of direction that guided the activities of initiators and organizers. This direction was toward a type of development that would benefit the whole community and would value social and cultural needs equally with economic ones. Self reliance was seen as the preferred means to attain this goal (p. 129).

Recent CDC projects which integrate social, cultural and economic benefits include the establishment of a French college, a local hospital, a community radio station, an artists co-operative, and a seniors home.

4.3 Chéticamp Today

Today, the community of Chéticamp is going through an economic and social transition. The successes of past community development strategies have created a relatively stable economy and a cohesive community foundation. However, current changes in economic and demographic structures are affecting the foundations of the entire community. Traditional industries such as fishing and the lifestyles they afforded are subsiding as new industries

such as tourism steadily increase. A shift in the social composition of the community is also occurring as Chéticamp becomes less isolated and more part of a global community.

Although economic and social development initiatives still persist, the lack of urgency has affected the supportive response of the community. Raymond Doucette of Le Conseil Co-op de Chéticamp notes that the co-operative movement has been lost on young people. He attributes this to the fact that there is not such an obvious need for the community to pull together as there was several years ago. Laurette Deveau of the CDC agrees with this and states that "people know they will not go hungry". Unlike the older generations who had no choice but look out for themselves, younger generations are acutely aware of social safety nets. While support programs were established with the right intentions, both Deveau and Doucette feel such programs have undermined the motivation that enabled the people of Chéticamp to build their community.

The effects of this change in attitude toward co-operative and community development can be felt at many levels within Chéticamp. Young families are more apt to shop at larger regional centres where bigger stores offer more competitive prices and a greater selection. High school students prefer to speak English rather than French. Even the fishery co-operatives are suffering as local fishermen sell their catches to larger fish-buying companies that can afford to pay a few cents more a pound.

Lack of education about community development may be a factor contributing to this change in attitude. Local schools do not teach the community history despite Chéticamp's extraordinary achievements. Currently, Le Conseil Co-op de Chéticamp is trying to encourage high school students to get involved through a youth apprenticeship program. As well, local promotion of the CDC as a community asset is underway. Current community leaders recognize that new tools and techniques will be necessary to perpetuate Chéticamp's social and economic stability.

4.4 Lessons of the Chéticamp Case Study

Chéticamp's experience in economic development offers several lessons that are applicable to understanding factors that contribute to a community's capacity for self-management. History, culture, strong and visionary leadership, and community education have all been important in enabling Chéticamp to be adaptable and innovative. As well, recent events in the community provide lessons about the sustenance of community-development strategies. The information derived from this case study about community capacity is discussed below.

Reason for Action

Many of the community development projects undertaken in Chéticamp are the direct result of an urgent situation or a perceived need. This is evident from the formation of the first fisheries co-operative, which was established to address economic deprivation. Motivation for the development and implementation of other projects is based on a similar premise: to address local issues that affect community stability and quality of life. The construction of a local hospital and seniors home are an example of this. What can be concluded from this is that a community is most likely to pull together and take action when there is something that threatens or impedes the quality of life of local residents.

Integrating Social, Economic, and Cultural Aspects

Many of the community-based projects in Chéticamp generate economic, social, and cultural benefits. While it may seem obvious that economic stability would create a level of social stability, enabling culture to flourish, Chéticamp's success at comprehensive development projects works the other way around. What distinguishes Chéticamp is that members of the community have "transformed their cultural solidarity and their social solidarity into an economic resource" (MacLeod in Scoggins, p.25). In this

situation, community-based development projects, which result from a cohesive community, continue to generate broad benefits. As successful ventures increase economic well being, cultural and social solidarity is further emphasized. This indicates that cultural and social stability can be determining factors for success in community-based management strategies.

Leadership

Chéticamp offers two examples of how leadership roles can be fulfilled and advance community-based development. As an individual, Reverend Fiset fulfilled an important leadership role when he established the co-operative movement in Chéticamp. His visionary ideas and personal dedication to the people of Chéticamp have had a lasting effect on the social and economic structures of the community. Today, the CDC acts as a community development advocate. Through its Board of Directors and paid staff, the CDC pursues community development through project support and building community awareness. The people who contribute to the CDC bring with them experience and expertise which have proved to be a valuable asset resulting in many successful ventures. In both of these examples there are understanding, connectedness, dedication, and concern for the community. This has been an important factor to both the CDC's and Reverend Fiset's ability to assume local leadership roles and successfully implement local management strategies.

Community Support

Community support has been integral to the co-operative and community development movement in Chéticamp. The level of support for local development projects is indicated by the large number of residents who are members of the CDC and various co-operatives. Financial and volunteer contributions from the community are critical to the CDC's survival. As well, community support is integral for the success of co-operative ventures. Broad-based support for development initiatives in Chéticamp has been achieved through the integration of cultural, social, and economic aspects of

the community. The importance of community support to the success of local development has been recognized through various programs that are attempting to foster greater community support among younger people. This case study indicates community support is both vital to successful local management initiatives, and can be strengthened through projects which comply with community issues and education.

4.5 Conclusions

Although strong and influential leadership is often attributed to Chéticamp's success in community development (Scoggins), one can not underestimate the value of community cohesion and cultural solidarity in Chéticamp. Community cohesion and cultural solidarity have been the backbone to the success of the community's co-operative development. With the support of the people who live in Chéticamp, the co-operative movement would not have worked. The reasons for cohesion and solidarity in Chéticamp can be attributed to the fact that historically they are geographically and socially isolated which created a spirit of determination and a mind-set that they had to look after themselves as no one else was going to; and strong leadership which made people aware of the importance and value of community. It is interesting how the community of Chéticamp is having problems with community support amongst the younger generation as they become more integrated with the rest of Cape Breton, and the rest of the world through technology and tourism. But what can be learned from this is that the strength of community can be a major factor in the success of community-based management initiatives.

CHAPTER 5

Summary and Interpretation of Case Study Lessons

The purpose of this chapter is to examine the contributing factors associated with the formation and implementation of the community-based management strategies presented in the three case studies. From the lessons presented in the previous three chapters (listed in Table 5.0 for reference) six fundamental factors are apparent: 1) motivation; 2) leadership; 3) community support; 4) partnerships; 5) funding; and 6) management resources (tools, skills, and expertise). These factors are compared and analyzed to determine their relevancy and to acquire a better understanding of how they influenced community capacity in management activities.

Table 5.1 Summary of Factors from Case Studies

Kingsburg Coastal Conservancy	✔ Threat to valued assets ✔ Human resources ✔ Interest Group ✔ Funding ✔ Partnerships ✔ Special Status
Pictou Harbour Environmental Protection Project	✔ Threat to environmental assets ✔ Community definition • Co-ordinator ✔ Partnerships ✔ Funding ✔ Dynamic Structure
Chéticamp	✔ Threat to community ✔ Leadership ✔ Community support ✔ Integration of economic, social, and cultural elements

5.1 Motivation

In each of the three case studies, motivation to commence management action was a result of two determinants. First, there was an element which was highly regarded by the greater community. Second, this communally valued element was somehow placed in jeopardy. For instance:

- The Kingsburg Coastal Conservancy was formed to protect the peninsula in perpetuity against the detrimental affects of development and use on the environmental quality and cultural heritage of the area;

- The Pictou Harbour Environmental Protection Project was the result of extreme water and shore pollution that affected the diverse use of the resource and the community's quality of life;

- In Chéticamp, economic hardships resulting from outside influences threatened the community's social and cultural well-being, which impelled the community to pull together and act in common interest.

The case studies reveal that when community values conflict with circumstances people are most apt to take action. This requires understanding which assets are important to individual communities and the current or potential threats to those assets.

In the three case studies, community assets were determined by community values. In Kingsburg the pristine environment, access to the coast and rural village lifestyle are what attracted many of the residents who participated in the KCC to the area. The value of those community assets was understood from the onset. In Pictou, the situation was more complex. Economic development is considered very important to community well-being, but not to the point of sacrificing valued environmental resources. In Chéticamp, cultural and social solidarity are the basis of the community's identity, and thus the possibility of the demise of this solidarity provided the impetus for its preservation. Maser writes that "people both define their local communities and are defined by them, in that communities play a primary role in maintaining cultural values within and among generations. [Community values] determine what appropriate behavior, poverty, and success are" (p.169). Therefore, recognizing and understanding the value of community assets can help determine and influence the actions of community members.

In each case study, the effects of a negative influence on a valued community asset were apparent to community members. In Pictou and Chéticamp this understanding was gained through direct experience; community members encountered first-hand the implications of a negative influence on their well-being. In Pictou, pollution from industry and development affected the community's recreation and resource-based use of the Pictou watershed. In Chéticamp, economic hardships due to external exploitation affected the well-being of the entire community. In Kingsburg however, community action was based on both experience and assumption. Although there were some

negative implications of cottage development and unregulated activities, motivation to take action was also fostered through members of the KCC who were educated, understood trends, and had previous experience in environmental management. It can be derived from this that action is most likely to occur when threats to community assets are acknowledged and understood, regardless of the current situation.

Motivation for action was also provided through prior success. In all three case studies, benefits derived from previous community efforts had been witnessed by community members. This provided confidence for community-based management groups and created enthusiasm amongst the general community. It indicates that efforts are not in vain, and that positive changes can be achieved.

Transferable Lessons:

- Determining what is precious and beyond compromise in a community directs management goals.
- Awareness about the value of coastal resources and the current or potential threats to coastal resource integrity creates motivation.
- Acknowledging community efforts and successes in management initiatives provides encouragement and perpetuates management strategies.

5.2 Leadership

Leadership refers to the actions of key people whose initiative impels the advancement of management strategies. Leadership was an important contributing factor to the case study communities' abilities to organize, develop, and implement management strategies. Through their dedication and commitment, project leaders provided momentum and focus to strategic initiatives. In Chéticamp, "dedicated and long-sighted leadership" is noted as one of the most significant reasons behind the community's success in co-

operative development (Scoggins, p.25). And in Kingsburg, the contributions and devotion of Anne Folliard to the KCC must be acknowledged as a major factor for the conservancy's success. Successful and effective project leadership in these communities has been the result of three primary factors: the availability of time; a genuine concern for the community's well-being; and the possession of appropriate management skills and knowledge.

The management strategies reviewed all required a considerable amount of time and effort to develop. While KCC was fortunate to have Anne Folliard take on the project full-time, not every community has such skilled residents who have the time required for such an undertaking. In Pictou, the scope of the project required the employment of a full-time co-ordinator. In the role of co-ordinator, Bob Christie took on the responsibility of organizing and developing PHEPP. Karen Swan noted that this leadership role was crucial to PHEPP, as the time and dedication required could not have been committed on a volunteer basis.

The benefit of having leadership roles filled by community residents is that they have an understanding and attachment to the community that cannot easily be found in an outsider. Bob Christie's interest in the well-being of Pictou stems from his family history in the area, which dates back to 1837. Anne Folliard also has a vested interest in the future of Kingsburg, given that she has lived there for a number of years and is familiar with local issues. And in Chéticamp, the cultural and social structures that define the community and affect local projects are best understood by community residents. The sense of attachment to community seems to fuel the interest of project leaders. As well, residents have a more comprehensive understanding of local issues.

Other important leadership qualities include management skills and knowledge relevant to strategy objectives. In all of the case studies leadership roles were filled by people who had appropriate experience and training for the initiatives in which they were involved. The combination of time allotted to strategy development and their understanding of the communities

they were planning for allowed the leaders of the case-study groups to effectively fulfil their roles.

Transferable Lessons:

- Leadership roles are fundamental to project development and implementation
- Leadership roles are best fulfilled by people from within the community because of their connections to the community and their inherent knowledge and understanding of local issues
- Strategy development and implementation requires a degree of dedication and time depending upon the scope and magnitude of the strategy — this can not always be provided on a volunteer basis
- Effective leaders require a number of management skills and knowledge relevant to strategy objectives

5.3 Community Support

The case studies revealed that community support had a significant impact on the success of management strategies. Support for local management initiatives was primarily indicated through community endorsement and participation. The case studies provide examples of how community support can affect the development and implementation of management strategies; ways in which support can be fostered; and the repercussions of not attaining community support.

Community support contributed to management initiatives in several ways. In Chéticamp, the success of the co-operative movement was dependent upon the community buying into an ideology. The community members also showed support by taking out co-operative memberships, participating in fund raising events, and contributing to local projects on a volunteer basis. In Pictou, the community has aided management initiatives through participation in public consultation and the partners program, volunteer

work, and by funding contributions. Broad-based community support also contributed to committee and leadership confidence in both cases by reinforcing the relevance of the management strategies. And in both, community support is regarded as an important element to the long-term viability of the management strategies.

Community support for the PHEPP and Chéticamp management strategies was not a haphazard occurrence. In these case studies, support was built through public education programs, the provision of opportunities for residents to get involved, and the inclusion of interest groups. Examples of initiatives that have fostered community support include:

- The youth apprenticeship program of the CDC;
- CDC fund-raising events that incorporate social activities for the community;
- Public consultation in Pictou;
- Open membership in PHEPP;
- PHEPP public-awareness projects such as newsletters and fact sheets.

Another reason that both PHEPP and Chéticamp have been able to gain broad community support is that their management initiatives appeal to many different members of the community. In Pictou this was particularly important as the PHEPP committee did not want to alienate itself from the community by being viewed as a radical environmental group (Christie).

In the Kingsburg case study, broad-based community support was not achieved. Public involvement in the KCC was not considered viable, given the urgency of the situation under which the KCC was established. However, KCC meetings are still not open to the public. The lack of broad community involvement in KCC initiatives has caused a number of problems within the greater community. The division between "people from away," "old timers," and "old come from aways" has been amplified. This division among the community can be attributed to the inability to reconcile different community values, lack of understanding, and insufficient opportunities for other people to become involved. However, the lack of community support has not

hindered the implementation of the management strategy thus far. But the problems associated with this approach are not considered desirable.

Transferable Lessons

- Communities support management initiatives through volunteer work, funding, co-operation, and endorsement.
- Attaining community support for projects is important to community relations.
- Broad-based community support is not a haphazard occurrence, but requires nurturing and sensitivity.

5.4 Partnerships

In both the Pictou and Kingsburg case studies, partnerships with other organizations greatly assisted the management groups in meeting strategy objectives. These case studies provide several examples of partnership models and contributions. This will be discussed in terms of:
- Government Partnerships;
- Private Partnerships;
- Non Government and Interest Group Partnerships.

Government Partnerships

The most significant government partnership examined in this study was between the community of Pictou and the federal government under the ACAP program. This partnership was a result of both the federal government's and the community of Pictou's concern over the poor environmental health of Pictou Harbour. The outcome of this partnership was a series of commitments from both parties that supported the environmental management of the Pictou watershed. The federal government recognized itself as a stakeholder in the environmental well-being of the watershed, and supported PHEPP through funding, services, co-

operation, and provision of expertise. PHEPP's commitment included developing a CEMP with the support and input of the greater Pictou community. The benefits of this particular partnership were twofold: a better understanding of community needs in management projects and a more efficient use and allocation of government resources. One of the strongest elements of the ACAP project is that it is complementary to established community management initiatives; "in no way does it replace those initiatives, it simply provides a baseline and enhances existing initiatives" (ACAP, Vol. 1, p.9).

Government involvement with the Kingsburg Coastal Conservancy has been much more indirect. The KCC has worked in partnership with various government departments for the protection and conservation of peninsula lands. Examples of government partnership with the KCC include:
- work with the Department of Natural Resources for the protection of Moshers Beach to ensure its preservation in perpetuity (KCC, p.14);
- forging a partnership with the Municipality of the District of Lunenburg to develop standards, building, and zoning by-laws, as well as negotiating beach access points (KCC, p.16).

Wendy Muise, a member of the KCC, stated that the government departments which have been involved in Kingsburg initiatives have been helpful and quick to act on their behalf. These government departments have provided surveys, studies, and advice in accordance with KCC projects.

Private Partnerships

Private partnerships are an important component of PHEPP. Partnerships with the private sector have primarily been forged through the Environmental Stewardship Partners Program (ESPP). The establishment of these partnerships coincides with the PHEPP goal of not imposing conditions and standards on private industries, "but rather to have commitments made in good faith in a spirit of co-operation, and for goals [of environmental management] to be integrated into the day-to-day functioning of the body concerned" (PHEPP, 1997). Through the involvement of industry and

business, the program encourages sound business-management that contributes to the environmental, economic, and social well-being of the Pictou area. The private partnerships that have been established have been integral to the success of PHEPP and the attainment of environmental-management goals. Standards and conditions have exceeded official regulations; private partners have contributed through monetary and in-kind donations, and community relations have been improved. The overall effectiveness of the management strategy can be largely attributed to establishment of these private partnerships.

The Kingsburg Coastal Conservancy has not established any "partnerships" with the private sector. Given that Kingsburg Peninsula is primarily a residential community, there has been no real need to develop partnerships with industry or businesses.

Non-Government and Interest Groups

The Kingsburg Coastal Conservancy has effectively aligned itself with several non government organizations in pursuit of the implementation of its strategy. An example is the preservation of Hell Point, which is currently being addressed by the Nature Conservancy of Canada (Kingsburg Coastal Conservancy, 1996). NGOs have also been recognized for their support of joint efforts to manage coastal activities, protect habitats, and meet common environmental goals. Partnerships with NGOs and interest groups have been outlined in Chapter 2.

Several interest groups and NGOs have been recognized as partners for various projects in PHEPP. Such groups include the Federation of Agriculture, Yacht Clubs, wood lot owners, and the River Monitors Association. PHEPP does not try to recreate groups that already exist, but instead solicits the co-operation of these groups for PHEPP initiatives. Several of these groups have joined PHEPP as stakeholders and are participating in the Environmental Stewardship Actions program.

Transferable Lessons

- Partnerships are necessary, given the complexity and resources required for management initiatives,
- Partnerships with various organizations contribute to project implementation, long-term funding, and the provision of expertise.

5.5 Funding

Funding was imperative to each of the management strategies reviewed in the case studies. It was primarily used for administration costs and project implementation, though none of the case studies obtained or used funding in the same manner. The uses and sources of funding in the case studies are best discussed in terms of core funding and project funding.

Core Funding

Core funding is essentially money which covers set-up, administration, and operation expenses. PHEPP was the only case study in which core funding was provided by government. Through the ACAP agreement, PHEPP was provided with $50,000 per year for five years to hire a co-ordinator and maintain a local office. Core funding was particularly important to PHEPP given the complexity and magnitude of the initiative. PHEPP required a focus and dedication that could not have been achieved on a volunteer basis (Swan). Paid professional staff and community presence through a local office have been identified by S.B. Moir Consulting as an important contributing factor to the success of ACAP programs. Although core funding for PHEPP was initially provided by the federal government, part of the funding agreement requires the committee to secure multiple sources of core funding for the future. Thus, it is hoped, dependence upon government funding is diminished and the project becomes self-supporting. Future sources being pursued for this funding include local industries, businesses and community donations.

Neither Chéticamp nor the KCC have government-provided core funding. In Chéticamp the CDC relies on the support of the community as well as membership fees to provide funding for staff and office expenses. Currently, the CDC director is paid on a part-time basis. Salaries fluctuate, depending on available funds. The KCC is managed by volunteers. While this situation worked under urgent conditions, where there was an impelling force for people to get involved, over the long term complaints about volunteer burn-out have dampened the initial momentum (Folliard).

Core funding functions in a number of ways. It ensures the continuation of management strategies over a given period of time. It allows groups to concentrate on management initiatives, knowing that a commitment has been made. It can provide the means for hiring experienced staff who can dedicate the time and effort required for complex undertakings. The community-management-based groups in the case studies demonstrate that there are many potential sources of core funding, particularly if partnerships have been established with the business community.

Project Funding

Project funding was essential in all of the case studies for the implementation of strategy plans. In each case study, action projects were devised for the realization of management goals. In Kingsburg, this included the acquisition of land; and in Pictou, the implementation of the CEMP, which ranged from project promotion to assessment, to infrastructure projects. In Chéticamp, it included funding local development projects, providing community education, and promoting economic development. Sources of project funding revealed in the case studies included in-kind donations from local businesses and community members (such as printing services or the loan and operation of equipment); all levels of government; community fund-raising events; industries and businesses; community institutions; and private agencies with special interests (such as the Naturalist Society). Sources of

funding are often linked to initiatives. In Pictou, funding from the government was for the purpose of implementing a watershed management project, as part of a national commitment to cleaning up Canada's coastal zone.

Transferable Lessons

• Core funding establishes a commitment to management initiatives.
• Core funding is essential for complex management strategies that require time and dedication beyond volunteer commitments.
• Project funding is essential for the implementation and realization of many strategy objectives.
• There are several sources of funding for community-based projects.

5.6 Management Resources, Skills, and Expertise

For the development and implementation of the management strategies reviewed, a number of resources and skills were required. Skills used in the case studies included facilitation, administration and communication capabilities; scientific and environmental expertise; and knowledge of government structures, legislation, and legal systems. The availability and access to these skills and resources contributed greatly to the success of the community-based groups.

While many of these skills and resources came from members of the various committees, some additional consultation was needed. In the PHEPP case study, Environment Canada had a significant role in accommodating resource and skill requirements. Through its ACAP representative, Environment Canada provided access to technical and scientific expertise, guidance, advice, in-kind donations, and the services of other government departments required for effective watershed management. In a study conducted by S.B. Moir, it was found that ACAP members were highly satisfied with the results of this arrangement. The only shortcomings noted

were that the representatives lacked facilitation and training skills and did not have authority to commit resources (S.B. Moir, p.26).

In Kingsburg, the KCC was comprised of a number of skilled and educated people who came from within the community. A particular benefit was the assistance and support of Anne Folliard, an environmental management consultant and community resident. Further legal and government resources enabled the community to secure special status as a charitable organization that is able to accept land donations in return for tax breaks. This special recognition is also an important management resource that has assisted the group in meeting management goals.

In Chéticamp, management resources and skills have come from within the community as well. On the CDC board of directors there are several people with experience and knowledge of business and co-operatives that is appropriate for CDC initiatives. As well, people such as Laurette Deveau, through her official paid position as manager of the Co-op Council, have greatly assisted the CDC with public relations, administration, and program development.

What can be inferred from this is that management strategies require a number of resources and skills in fields relevant to strategy goals. In community-based coastal zone management, these skills and resources include scientific and environmental expertise, knowledge of environmental management, communication and administration abilities, and knowledge of legal and government frameworks. Special recognition, such as that given to the KCC, has also greatly assisted communities by empowering them to have more management authority. While some of these skills and resources are found within communities, it may also be necessary to get outside assistance.

Transferable Lessons

- Scientific and environmental expertise, knowledge of environmental management, communication and administration abilities, and

knowledge of legal and government frameworks are required in coastal management initiatives.

● Not all communities possess members with the necessary skills and resources, but they should be made available.

● Special recognition is an empowering resource which can increase a community's capacity for effective management.

5.8 Review of Transferable Lessons

Table 5.2 Summary of Transferable Lessons

Motivation	● What is precious and beyond compromise in local communities important in determining management objectives ● Awareness of the threats to valued community assets provides impetus to act ● Celebrating and acknowledging efforts and success in coastal management encourages and perpetuates management strategies
Leadership	● Leadership is fundamental to project development and implementation ● Leadership roles are best fulfilled by local people ● Depending upon the scope of the strategy, leadership dedication and time are required and can not always be filled on a volunteer basis ● Effective leaders require management skills and knowledge relevant to strategy objectives

Community Support	• Attaining community support is important to community relations • Communities show support through volunteer work, funding contributions, co-operation, and endorsement of projects • Broad-based community support is not a haphazard occurrence, but requires nurturing and sensitivity
Partnerships	• Partnerships are necessary given the complexity of and the resources required for management initiatives • Partnerships with government, private, and non-government organizations assist community-based groups through funding, project development and implementation, and expertise
Funding	• Core funding establishes a commitment to management initiatives • Core funding is essential for complex management requirements • Project funding is essential for the implementation and realization of many strategy objectives • There are several sources of funding for community-based projects
Resources and Tools	• Scientific and environmental expertise, knowledge of resource management, communication, facilitation, and administration abilities, and knowledge of legal and government frameworks are required • Access to skills and resources is required • Special management tools are required to meet objectives

CHAPTER 6

Theoretical Framework for Enhancing Community Involvement in Coastal Zone Management

The purpose of this thesis is to determine factors necessary to assume more effective community involvement in coastal zone management. In Chapter 1 it was argued that community involvement is an important aspect of coastal management. To reiterate, Johnston et al. proclaim that communities are the principal component for regulation of the ocean environment (p.7). Furthermore, the Australian *Living on the Coast* document states that "[government] action alone will not bring about improvements in the way the coastal zone is managed. All people who use the coastal zone, individuals, community groups, government and industry need to play an active role in maintaining the quality of the coastal environment" (Commonwealth Coastal Policy). The case studies in chapters 2 through 4 demonstrated that community-based management is both a possible and an effective way of addressing local resource issues. Given the importance of community involvement and the effectiveness of community management in addressing local resource issues, increasing the management capacity of communities is an important step toward the realization of a provincial coastal management strategy that is both responsible and effective.

Through the case studies it was revealed that there are a number of determinants which enhance a community's capacity to become involved and successful in resource management. These determinants were discussed and analysed in Chapter 5. In pursuit of increasing community capacity for coastal management, the lessons from the case studies are applied to a theoretical framework. The purpose of the framework is to provide a guideline for government to enhance community involvement in coastal management.

The framework proposes that a three-pronged approach be taken to enhance community based coastal management. The framework is based on a model conceived by Wilkinson and Quarter which outlines the elements necessary for comprehensive community economic development (p. i). The basic structure of the Wilkinson and Quarter model is appropriate in scale and context due to its focus on community development through community based action. The premise of the framework presented in this chapter is to increase community capacity for coastal zone management through 1) Building Awareness, 2) Empowering Communities, and 3) Supportive Structures. Each of the components is discussed with reference to the lessons in Chapter 5. As well, a list of objectives and actions are provided at the end of each component section suggesting how the framework can be applied.

6.1 Building Awareness

Building awareness is a tool for achieving the critical factors of motivation and community support. From the case studies it was apparent that motivation and community support are integral to the initiation and acceptance of community-based strategies. Without motivation there is little to compel people to take action. And without community support the vitality, congruity, and magnitude of a management plan are diminished. Building awareness about the need and benefits of coastal zone management addresses several of the lessons learned through the case studies including:

- Public awareness about the value of community resources and the current or potential threats to those resources increases the motivation of community members to take management action;
- Determining what is precious to a community directs management initiatives;
- Attaining community support is important to community relations when implementing a local management strategy;
- Broad-based support is not a haphazard occurrence and requires public education and consultation.

In each of the three case studies awareness of threats to a valued community asset was the basis for community action. This awareness was the result of two things: broad recognition of the importance of particular community assets, and knowledge — either through direct experience or insight — that these assets were in jeopardy. While many coastal communities are acutely aware of the value of coastal resources and threats to resource integrity, in some communities the value of and problems associated with the coast may not be as apparent. Increasing public awareness about the value of the coastal environment, threats to the integrity of the coastal environment, and the benefits of coastal management can induce the motivation and support necessary to successfully commence management projects.

Given the diverse nature and uses of the coast, initiatives for increasing awareness about the need and benefits of coastal management should have a broad-based appeal to gain the support of a number of people. This may require soliciting the help of key local leaders who have an understanding of regional issues and politics. As learned in the Pictou case study, having an advocate from the local community can dispel fears about the intention of a project and build trust and understanding between community members and groups active in coastal management. Coastal management should not be portrayed as a radical environmental concept or as a government sanction, but rather it should be promoted as a tool for responsible development that will have a positive impact on the participating communities.

Objectives

- Stressing the environmental, economic, social, and cultural value of the coast.
- Educating people about potential and current threats that affect the use of coastal resources such as pollution, loss of access, detrimental use, and erosion; and the implications of those threats.
- Familiarizing people about the benefits and advantages of coastal zone management.

Methods of Implementation

- Commence a provincial campaign about coastal issues and management through advertisements, regional seminars, presentations and workshops.
- Solicit the support and co-operation of regional leaders to increase local awareness about coastal management.

6.2 Empowerment

Empowerment involves ensuring that community leaders, organizations, and residents have the skills, recognition, and resources necessary to fully realize their potential as coastal managers and stewards. The case studies provide examples of a number of empowering qualities and tools that assisted leaders and volunteers in achieving resource management success. Leaders were endowed with knowledge and skills in resource-management. Volunteers fulfilled numerous contributing roles through effective organization, training, and the application of the expertise they had to offer. Organizations used management tools and resources such as legislation and scientific data to meet goals and objectives. The recognition of effort and work put forth by community groups enhanced their credibility and helped sustain the momentum for their management initiatives. However, not all coastal communities in Nova Scotia have residents with the ability, knowledge, and access to resources required to effectively develop and implement coastal management strategies. To increase the capacity of communities in coastal management a three prong empowering approach is proposed: 1) ensuring

communities members have adequate skills and resources to assume the responsibility of coastal management; 2) providing management tools and resources that reflect community values and goals; and 3) recognizing community groups and organizations for the work they are doing.

6.2.1 Empowerment Through Preparation

In the case studies it was learned that leaders of community-management organizations had the appropriate knowledge and skill for resource management. As well, it was determined that there are advantages to having leaders come from within communities as they often have a better understanding of local issues, culture, resources and their uses, and can engender community support and trust better than people from outside the community. While some coastal communities in Nova Scotia may already have resourceful residents who have taken on leadership roles in coastal management, in other communities opportunities for residents to address coastal issues may be limited through the lack of knowledge, skills, or confidence. The potential of individuals to become involved in coastal management could be increased with the provision opportunities to receive relevant training, education, and assistance. This could be achieved through workshops and seminars sponsored by the government and through partnerships with other communities or institutions that have experience in resource management.

The contributions of volunteers are indispensable in community projects. In the case studies, volunteers played a major role in the implementation and development of resource management strategies. They gave their time and effort to perform tasks that ranged from fundraising and administration to research and consultation. While many of the skills volunteers provide contribute to management projects, the nature of coastal management sometimes requires tasks that demand more specialized knowledge. In a study conducted by McKim and Matthew (1994) entitled *Facilitating Community Based Environmental Monitoring*, it was found that given the proper training community volunteers can effectively perform research and

conduct studies often necessary in coastal management. The provision of training, sessions, instructional videos and literature on various activities associated with coastal management will allow volunteers to fulfill more vital roles. As well, another benefit of increasing the capacity of community volunteers is that their understanding of coastal issues is enhanced. This contributes to the long-term sustainability of initiatives as increased understanding can reveal the need for action and change (Maser, p. 176).

6.2.2 Empowerment Through Management Tools

There are several examples of tools that empower community groups in resource management. By-laws, legislation and regulations are management tools that were used by the Pictou Harbour Environmental Protection Project and the Kingsburg Coastal Conservancy. The KCC provides an example of how legislation can be used to meet management goals as well as how it can also fail to address local issues and concerns. In the Kingsburg case study, legislation was used to ensure the protection of Kingsburg Beach based on its importance as a provincial asset. However, Moshers Beach, although considered a valuable local asset, did not meet the provincial requirements. There is an abundance of legislation that can be used in coastal management which community groups should be aware of. As well, amending legislation and regulations that affect coastal resources to better meet local management goals can empower community groups to be more effective in protecting coastal assets. The same may be applied to municipal by-laws which address environmental assessment requirements, building codes and land use.

6.2.3 Empowerment Through Recognition

In some coastal communities, efforts to manage coastal resources have already commenced. In these circumstances, and as more communities become active, leaders, organizations, and communities must be

acknowledged for the work they are doing and the accomplishments they have achieved. Recognition is important for a number of reasons:

- recognition of efforts can boost the moral and motivation of community groups;
- it allows groups to network and collaborate on projects, which can help avoid the duplication of work;
- it provides the government with an idea of how coastal management is progressing, so that reassessment of policies is possible.

Recognition of community efforts in coastal management can be achieved through the formation of government/community partnerships, membership in a provincial organization dedicated to the advancement of coastal management, and by granting awards for excellence in community-based coastal management. The contributions of community members are the backbone of local management strategies and they should be recognized and commended for the work they do which not only improves the conditions of their communities, but the province as a whole.

Objectives:
- To provide opportunities for community members to gain the skills and knowledge necessary to undertake coastal management initiatives.
- To provide management tools and legislation that assist communities in meeting local management needs.
- To acknowledge work that contributes to coastal zone management.

Methods for Implementation:
- Establish a Community Leadership Program that provides training and education in coastal zone management to instill the necessary skills and confidence in community leaders.
- Create instructional videos, seminars, and workshops about the various tasks commonly involved in coastal management to increase the capacity of volunteer participation.
- Make available information on legislation that is useful in coastal management.

- Conduct studies on how legislation and municipal by-laws might better address local coastal issues.
- Establish a provincial organization for community groups, private sector organizations and government agencies doing coastal management work, to increase networking and the sharing of information.
- Award communities that are excelling in coastal management.

6.3 Support

The case studies indicated that community organizations require external support for the realization of many of their goals. This is because many of the actions and resources necessary for the implementation of a management strategy are beyond the means of community-based groups. The most vital forms of support identified through the case studies were funding; management expertise and advice; and co-operation and collaboration on management initiatives. These supportive mechanisms were primarily provided by various government agencies, the private sector, non-government organizations, and institutions such as universities. To achieve effective management of the coastal environment, a support system which can assist communities in meeting local coastal management objectives is integral.

From the case studies it was learned that there are two main types of financial support: core funding and project funding. Core funding is primarily used for ensuring the continuation of a project over a number of years through the employment of staff and the provision of daily operating costs. Project funding is required for the implementation of strategic action plans. As demonstrated in the case studies, the type and source of funding necessary for management initiatives is dependent upon the scale of the strategy and the local human and financial resources available. PHEPP required core funding, given that it was a large and complex undertaking that demanded focus and dedication beyond volunteer capacity. Project funding needed to implement strategies in the case studies varied from project to project ranging from

$40,000 for the KCC land acquisition strategy to $2,000 for a volunteer water quality monitoring program in Pictou. While not every community requires the same financial support, access to funding can determine the progress and success of community initiatives.

Funding for coastal management initiatives must be accessible to communities. While special grant money for management projects must be set aside, it is unrealistic to assume that government can take full financial responsibility. Information about fundraising ideas and alternative funding sources should be made available. As well, government should encourage private sector contributions to coastal management initiatives through tradeoffs or tax breaks. Where government funding is available care should be taken to ensure that it does not limit community independence in management planning. Funding for coastal management should have a set of criteria to ensure it will be effectively used, but still allow flexibility in its use to meet independent community needs.

The co-operation and involvement of other organizations is also a very important supportive mechanism for community groups. The Kingsburg Coastal Conservancy and the Pictou Harbour Environmental Protection Project provide examples of how the private sector, government, and non-government organizations can assist community groups in meeting management goals. The involvement of these organizations is extremely important given their influence and abilities to assist in meeting local management objectives. Industries often affect the health of the environment; government agencies have regulatory powers and resources necessary for the implementation of management plans; non-government organizations may have similar interests which make collaborative efforts possible; and business and other local institutions can help community organizations through in-kind donations. Government can support community groups by establishing working partnerships and increasing their involvement where required. Private sector contributions to community groups can also be encouraged by officially recognizing of their efforts. Kimberely Clark in Pictou provides an example of how an

industry/community effort benefited the company by creating a responsible company image. In this day and age when environmental health is becoming an greater concern globally, such recognition can have a significant influence on company policies. Government can also assist collaborative efforts between institutions and non-government organizations by supporting and assisting these groups in meeting their goals.

The importance of human resources in coastal management has been stressed often. While initiatives to increase the ability of local residents to take on coastal management issues have been proposed, access to additional human resources is still important. Facilitation, conflict resolution and scientific expertise, which are often necessary in the development and implementation of coastal management strategies, demand specialized knowledge and education. Pictou provides an excellent example of how government can assist local communities in this capacity. Through an Environment Canada representative, the community had access to government expertise in every department. The establishment of regional centres with paid co-ordinators could broaden this window of access to government resources. This would also increase government participation and efficiently use valuable government resources. Current efforts to consolidate government action on coastal management would be an important component to this idea, as the co-operation and expertise of several departments would be required.

Objectives:
• To make funding available to community groups for the development and implementation of coastal management strategies.
• To encourage co-operation and collaboration between all levels of government and private sector, non-government organizations, and local businesses.
• To provide access to human resources, such as facilitation skills, conflict resolution skills, and scientific expertise, which may not be available within small community groups.

Methods for Implementation:

- Create a Coastal Management Project Fund that is devoted to implementing projects related to coastal management.
- Establish regional resource centres with coordinators (preferably from the region) who are qualified in resource management and have access to the expertise of other government departments.
- Create a provincial private sector recognition program to provide incentive for private sector participation.

6.4 Summary

The importance of community involvement in coastal management is not debatable. Members of coastal communities have a knowledge and understanding of coastal issues that can only be attained through living by and from the coast. As well, it is through the actions of the people who use the coast that the success of coastal management initiatives will be determined. The ideas proposed in this framework are geared toward increasing the probability of successful and effective coastal management through the integration of communities into planning and management process.

The objectives and subsequent actions for implementation of the proposed framework for increasing community capacity in coastal management have a natural order of priority which has been outlined in Table 6.1. Number one indicates the actions which should be pursued first. Actions with the same numbers should be pursued simultaneously. Prioritization is based on the fact that the implementation of some actions is dependent upon the realization of others. For example, creating motivation and increasing community support for coastal management initiatives is important for the establishment of community groups.

The proposed framework provides a general guideline for helping to promote and realize community-based management initiatives in coastal

Table 6.1 Summary of Theoretical Framework

LESSONS	MODEL	ACTION	PRIORITY
1. Motivation 2. Community Support	Awareness	1. Commence a provincial campaign about coastal issues and management 2. Solicit the support and cooperation of regional leaders for increasing local awareness of coastal management	1 1
3. Leadership 4. Skills and Expertise	Empowerment	1. Establish a Community Leadership Program 2. Create instructional videos, seminars, and workshops about various tasks commonly involved in coastal management 3. Make available information on legislation that is useful in coastal management 4. Conduct studies on how legislation and by-laws might better address local coastal issues 5. Establish a provincial organization for partners in coastal management 6. Award communities that are excelling in coastal management	2 2 2 3 1 3
5. Funding 6. Partnerships	Support	1. Create a Coastal Management Project Fund devoted to implementing projects related to coastal management 2. Establish regional resource centres with co-ordinators (preferably from the region) who are qualified in resource management and have access to expertise in government departments 3. Create a provincial private sector recognition program to encourage participation	1 1 3

management. What must be remembered though, is that not every community fits the same mould. This was demonstrated through the case studies where each community had different strengths, different needs, and different goals. The framework allows for flexibility in that as actions are implemented, communities will be able to take advantage of them. For instance — if a community has already established a working group aimed at addressing local coastal issues, than they would have more to gain from Empowerment and Support than Building Awareness. Thus, the actions in the framework should be implemented as soon as possible despite the prioritization so that the needs of communities at various stages can be met. What the prioritization does is provide a starting point for communities who have not yet begun to address issues regarding the sustainable use of the coast.

The ideas proposed in this framework are not quick fix solutions to coastal problems, but rather a suggested a process for responsible and effective coastal management based on the inclusion of coastal communities in provincial coastal management. There are other considerations that need to be addressed such as the development of internal government policy on coastal management and the review and enactment of regulations and legislation regarding the coastal environment. Although some of these issues are briefly discussed in this study, it has mainly been discussed from the perspective of enhancing community capacity in coastal management and meeting local management needs. Enhancing community capacity is just one aspect of a much larger puzzle, but a very integral and important one. The management successes of the case study communities demonstrate that local management is effective and worth pursuing as a viable alternative to traditional government planning and management practices. As stated in the Coastal 2000, "Working together we are more than capable of meeting the challenge of changing the way in which we have historically managed our coastal area. This will ensure that it remains healthy and vibrant for generations to come" (p. iii). We must give coastal communities a voice and an opportunity to become active participants in making decisions that affect their future well-being.

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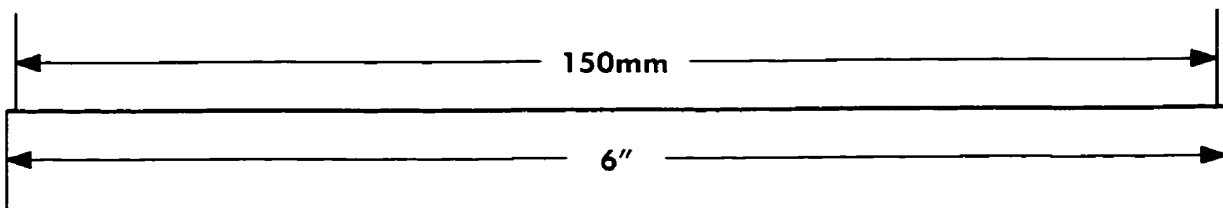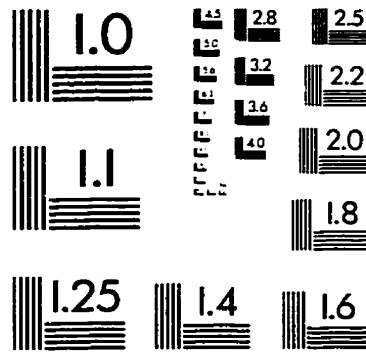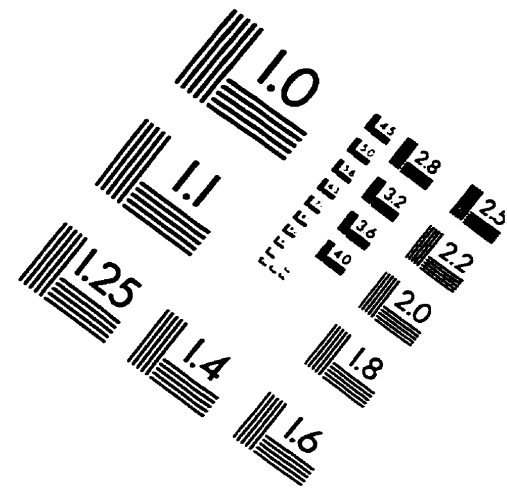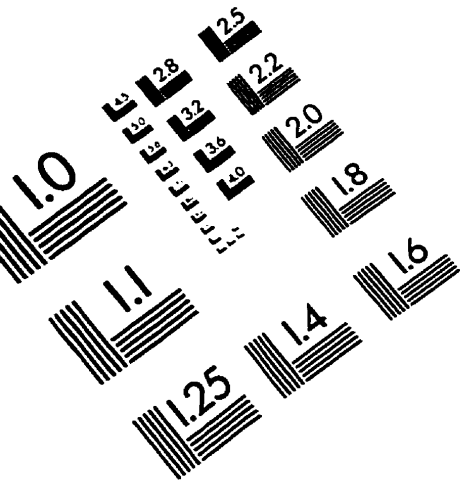Muise, Wendy. Kingsburg Coastal Conservancy. Personal Interview. July, 1997.

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IMAGE EVALUATION
TEST TARGET (QA-3)