

Final External Project Evaluation

EXECUTIVE SUMMARY

This is the final evaluation of a three-year project entitled the Patagonian Coastal Management Plan funded by the UNDP Global Environmental Facility (GEF). It was directed at the design of the project, the process by which the planning phase of this coastal management initiative has been conducted and at assessing Patagonia's readiness for an initial phase of implementation. The project team within the Fundacion Patagonia Natural (FPN) has done an outstanding job of creating a foundation of technical assessments, public education and instigating productive dialogue on the public policy issues selected as the focus for a coastal management initiative that spans three provinces and over 3000 kms of coastline. The Patagonia coastal management initiative stands at the threshold of formal adoption by provincial commissions at the ministerial level. The ingredients for a detailed plan of action and a set of policies and procedures by which effective management can be initiated have been assembled. There is strong support for formal adoption and implementation of a CZM plan within provincial and central government and among major stakeholders in the private sector. These are major accomplishments that have been attained with remarkable efficiency and technical excellence over the three years of the GEF project. This coastal management initiative, if sustained, holds the greatest potential for conserving Patagonia's extraordinary biodiversity over the long term. This biodiversity will be under increasing pressure as the region develops. Only a cross-sectoral, integrated approach to environmental management, as developed by this GEF project, holds the potential for balancing among needs for biodiversity conservation and needs for development in Patagonia.

1. INTRODUCTION

Project Overview

Country:	Argentina
Project number and title:	ARG/92/G31 - Patagonian Coastal Management Plan
IPF (1987-1990):	US\$ 10.950,000
Duration:	3 years
Executing agency:	UNDP/OPS
Implementing Agencies:	Fundacion Patagonia Natural Wildlife Conservation International (WCI)
UNDP contribution:	U.S\$ 2,800,000 Source of Funds GEF

The project was designed in 1992 as a three-year effort funded at US\$ 2.8 million and implemented by the Fundacion Patagonia Natural (FPN) with technical support from the Wildlife Conservation Society (WCS). The project was funded through the Global Environmental Facility (GEF) administered by UNDP through the biological diversity element of that program. The objective of the project is to preserve Patagonias spectacular concentrations of large marine birds and mammals along a 3,000 km coastline stretching from the northern boundary of the province of Rio Negro to the

Straits of Magellan. This area includes three of the four provinces that make up the Patagonian region of Argentina. The majority of Patagonia is an arid, desert-like plain that has traditionally supported sheep farming and a sparse population currently of somewhat more than one million, most of which is concentrated in small coastal towns. The coast comprised of beaches, cliffs, islands, points and bays, is in largely pristine condition and supports a scattering of seasonally dense populations of large marine birds, particularly penguins, and several species of seals. Several species of whales are seasonally abundant close to shore. The wide continental shelf that in places extends beyond the 200-mile exclusive economic zone (EEZ), is one of the most productive fishing grounds on the planet and the focus of one of the most rapidly growing industrial fisheries. This productivity is the product of the nutrient rich, northward flowing Patagonia current that supports great schools of fish, squid, that in turn support the mammals and birds that are the focus of this project. The region's rich endowment of marine resources is complemented by oil and gas reserves that are mostly on-shore and at the southern end of the province. Other as yet largely undocumented and unexploited on-land mineral resources include gold.

Evaluation Methodology

This final evaluation was undertaken by Stephen Olsen, Director of the University of Rhode Island Coastal Resources Center and James Tobey, who is coordinating a project at the Center designed to develop a common methodology for learning from experience in coastal management worldwide. The evaluation began with a careful review of documents provided by the GEF Coordinator for Latin America and the Caribbean at UNDP/New York. Many other documents were reviewed during the site visit. The evaluation team was in Patagonia from January 6 through January 11, 1997. The schedule for the site visit and the people contacted are given in Appendices B and C. On January 11, the team met with the UNDP Program Officer and Environmental Advisor in Buenos Aires. Drafts of this evaluation report were provided to the Director of the implementing agency, the Fundacion Patagonia Natural (FPN), the Director of the Wildlife Conservation Society (WCS), the Program Coordinator in New York, and the Program Officer in Buenos Aires during the week of January 20. A final version was submitted to UNDP/New York on February 7, 1997. There are two major categories of evaluation-process evaluation and outcome evaluation. This final evaluation, as suggested by the Terms of Reference, is primarily directed at the process by which coastal management is proceeding in Patagonia. An outcome evaluation that addressed each of the objectives and outputs called for by the Project Document was completed six months before by Dr. Kriwoken. This assessment of outcomes is further detailed by the September 1996 Final Report submitted by the FPN to UNDP.

This evaluation has provided the first opportunity to apply the evaluative instruments that are being developed by the Coastal Resources Center. The formulation of a common methodology for learning from, and therefore evaluating, coastal management programs has been supported thus far by the U.S. Agency for International Development through its Cooperative Agreements with the URI Coastal Resources Center. Dr. Tobey's collaboration in this evaluation was supported by the Coastal Resources Center and the USAID Cooperative Agreement. The further development of the methodology is being sponsored through a partnership that currently includes UNDP and the Swedish Foreign Assistance Program (SEDA). Appendix D presents the instruments used in this evaluation and discusses some of the lessons learned from this experience.

2. ANALYSIS OF THE PROJECT DESIGN

2.1 Scope and Objectives of the Project

According to the February 1993 Project Document (PD) *The Development Objective* of the Coastal Zone Management Plan (CZMP) is:

... to provide the coastal zone of Patagonia with tools for implementing sustainable use of its natural resources and for protecting its biological diversity. Reaching this objective has been planned in light of the needs and interests of the local communities.

The project thus makes the essential links between (1) biodiversity conservation and the broader development context, and (2) the needs for biodiversity conservation and the needs of the local human society.

The project has been structured around four principal objectives that, in a simplified form, may be stated as follows:

- (1) To upgrade baseline data, management techniques and legislation on coastal resources relevant to the protection of biodiversity.
- (2) To establish a participatory process to integrate the information that will be the basis of the CZM Plan.
- (3) To upgrade institutional and human capabilities for responsible coastal management.
- (4) To promote community participation in the management process.

These four objectives are expanded in the Project Document to 20 outputs, 88 specific activities, as well as a total of 34 achievement indicators.

The fundamental strategy underlying this complex design has been to produce a scientifically-defensible baseline of information on Patagonia's marine birds and mammals that can serve as a basis for assessing future change to these resources. In full conformance with the 1996 operational strategy of the GEF (that was published only five months before the Patagonia project was completed), this information has been gathered and presented following strategic principles that emphasize:

- ¥ the integration of conservation with sustainable use in sustainable regional development plans and policies
- ¥ a focus on the sustainable management of ecosystems
- ¥ the integration of biodiversity objectives with cross-sectoral management strategies
- ¥ targeting biodiversity objectives in strategic and cost-effective ways (GEF Operational Strategy p. 14).

The budget approved for the execution of the project as set forth in the project document reflects the complexity and fragmentation brought by the many sub-objectives and tasks. This is further complicated by the fact that there are many tasks listed under sub-objectives for which there is no line item in the budget and conversely there are some line items in the budget that suggests tasks that do not appear under the objectives. The greatest drawback to this somewhat cumbersome design, however, is that it is not linked to a clear conceptual framework. There is no logical sequencing of groups of activities that can provide themes for distinct stages in the formulation and approval of the CZM Plan. Similar kinds of activities are listed under more than one of the four major objectives.

In summary, while the objectives of the project encompass all major features that define the “what” of a planning phase that will culminate in the formal approval of a CZM Plan, the design is not helpful in setting forth “how” this goal will be achieved in practical operational terms.

2.2 Balance Among Project Components

A great strength of the program is its dedication to promoting “a new way of thinking” within the inhabitants of Patagonia and the institutions of provincial government. The project has made impressive strides in promoting consideration of the long-term future of the region and the need to visualize the consequences of current trends in the qualities of the region and the development process within the context of a single interdependent ecosystem. Thus, the project has promoted the centrally important idea that “ecosystem management allows the integration of scientific knowledge of ecological relationships with that of sociopolitical conditions and values ...” (GEF Operational Strategy, p. 15).

The challenge for all projects that work to promote this fundamental idea is to maintain a dynamic balance among activities that include:

- ¥ public education
- ¥ institutional strengthening
- ¥ policy-relevant research
- ¥ public participation in all stages of management
- ¥ the formulation of public policy and the plans by which it will be implemented.

These essential components are all present in the Patagonia GEF project. However, an analysis of the lists of activities and of the budget suggests that by far the greatest emphasis and allocation of resources has been upon the scientific studies that have produced the baseline of information on the abundance of marine birds and mammals. While numerous individual studies on marine birds and mammals have been undertaken, there has only been one review of the legal and institutional framework for coastal management and one survey of the economic forces that are likely to affect this marine biodiversity. The relatively slight attention given to economic, social and institutional aspects of how Patagonia’s coastal and marine ecosystem can be managed has predictably resulted in a CZM Plan that while rich in information on biodiversity, gives limited practical guidance on how the emerging management process should unfold. The inadequacy of the attention given to such analysis and to activities that would have generated experience in the testing and detailing of public

policy and management practice has led to the current deficiencies in the draft CZM Plan. As discussed in some detail in Section 3 of this report, the July 1996 draft made available for this evaluation does not address the design of an institutional framework for the management and regulation of the objectives and activities set forth by the plan. There is no guidance on how the many activities proposed should be sequenced or how activities might be focused on specific issues or geographic sites.

The lack of balance between natural science on the one hand and the economic, social and institutional aspects of ecosystem management on the other, has not prevented the project from making major achievements in public education, institutional strengthening, and promoting the processes of participatory democracy that underlie sustainable management. The sub-objectives and activities listed in the project document that apply to these essential features of coastal management have been met or exceeded despite the relatively small budgetary allocations made to them. It is noteworthy that the training activities called for in the project document are focused on the topics related to fisheries and marine fauna and did not include attention to the legal and institutional aspects of coastal management. The significant advances that have been made in promoting the central ideas and values of the project within Patagonian institutions appears to have resulted as much from formal training than from the involvement of members of the staffs of the public and private institutions involved in the many workshops and discussion sponsored by the project.

2.3 Local Ownership of the Project

The GEF Operational Strategy states (p. 14):

Sustainable achievement of global biodiversity benefits will greatly depend on the extent to which GEF activities are country driven.

One of the greatest strengths of the project is that it is “owned” by a Patagonian institution—the Fundación Patagonia Natural - which is composed of Patagonia residents that are recognized as leading figures in Patagonian society. This GEF project has greatly strengthened a pre-existing NGO that draws together the community of natural scientists and conservationists dedicated to the conservation of Patagonia’s unique wildlife. It has provided them with the means to make progress towards goals to which they are already dedicated. Many members of the foundation who have worked together as the core team for the GEF project are members of the staff of the Centro Nacional Patagónico, a major research center located in Puerto Madryn and/or the local university. The project team therefore had a pre-existing networks of contacts within the provincial governments of Patagonia, the relevant institutions of central government in Buenos Aires and with the leadership in several of the region’s most important businesses.

Conversations with government officials and business leaders in Patagonia and with those familiar with the project elsewhere strongly suggests that the Fundación—n is a well-respected organization in which the public and the government have considerable trust. This is reflected in requests by government agencies for the foundation’s recommendations on a diversity of topics and a great willingness to move forward with the implementation of the plan and further development of the ideas that underlie it. The benefits of local ownership are also reflected by the apparent efficiency

and high quality that characterizes the many projects undertaken with GEF funding. The project team, being familiar with the agencies and individuals that became involved in the project, has contributed to the high standard and efficiency with which project activities have been conducted. Here again, however, the products that are weakest are in those areas unfamiliar to the project team, namely economics, institutional analysis, and policy formulation.

2.4 Technical Support to Project

External technical support to the FPN has been provided primarily by the Wildlife Conservation International (WCS). This continues a productive partnership between Patagonia's scientific research community and the WCS that began in the 1960s. The worldwide experience and high level of technical excellence within the WCS on topics related to wildlife conservation and management has doubtlessly contributed to the technical quality in the activities that have produced the baseline of information on Patagonia's marine birds and mammals. The Director of the WCS, Dr. William Conway, has taken a personal interest in the program. He helped to shape the P.D. and, in his periodic visits to Patagonia, critiques major documents and advises the FPN staff on its work and its priorities. Dr. Conway has excellent contacts within the Argentine central government in Buenos Aires and has played a valuable role in fostering relationships between the FPN and this project and relevant agencies of central government. The sustained support of the WCS is believed by the project team to have played a central role in the successes of the GEF project.

Early on in the project the FPN developed what has proved to be a productive partnership with a Buenos Aires-based NGO, Fundacion Ambiente y Recursos Naturales (FARN). This is an organization that was founded just after the fall of the military dictatorship in 1985. FARN is composed primarily of lawyers and is dedicated to the promotion of participatory approaches to how natural resources policies are formulated and implemented in Argentina. FARN has been supported by the Ford Foundation. This partnership resulted in pioneering work within the municipality of Puerto Madryn in the use of public hearings to help formulate public policy and provide public input to major development decisions. The success of these public hearings has encouraged other municipalities and provincial government to use this technique elsewhere in Patagonia.

The FPN and the project would have benefited from exposure to experience in coastal management in other countries, to training in the techniques of coastal management and in stronger backup in how a CZM Plan is formulated and implemented. The only training provided to the project team was the participation of two of its members in a single one-week course on the economics of the sustainable use of natural resources conducted by Dr. Theo Panayotou in Colombia.

2.5 Evidence of Adaptive Management and Incremental Design

The growing literature on the principles and practices of coastal management all emphasize that adaptive management and strategic behavior lie at the core of sustained success. It is therefore appropriate in this final evaluation to assess whether this project shows evidence of adaptive and strategic behavior by those conducting this project.

Discussions with members of the project team and with those in government and the private sector who have been involved in the project suggest that the past three years have been an exciting learning process for all concerned. The project is to be commended for the risks that it has taken in experimenting with previously untested approaches to public education, to such procedures as public hearings, and the design of workshops that draw together members of the research community with the public and private sector to discuss important issues posed by the further development of Patagonia. While these experiments have introduced a group comprised primarily of natural scientists to the challenges of ecosystem management in which human society is a dominant force to be understood and regulated, the project has until now been reluctant to enter into the management process itself. The Project Document states that provincial-level coastal Commissions would be formed during the three years of the project. These Commissions according to the project's design, would by the end of the project have generated a body of experience in the challenges of formulating, and possibly testing, elements of natural resource management policy and plans. This strategy was confirmed by those attending the first annual project workshop held from May 29 to June 1, 1994. It is unfortunate that the project team decided not to follow through. The adaptive management process would have been enhanced if the second and third years of the project had been structured around annual priorities set by those participating in the second and third annual project workshops. Such annual priorities could have been based on a review and assessment of the experience gained in the previous year and would have modeled the participatory and strategic management process that lies at the heart of successful coastal management.

3. THE PROCESS BY WHICH THE CZM PLAN WAS DEVELOPED

3.1 Identification and Assessment of Management Issues and Stakeholders

In 1992, a book was published entitled *Tracks in the Sand, Shadows in the Sea: Marine Mammals of Argentina and Antarctica* (Lichtner and Campagna, 1992, Terra Nova editions, Buenos Aires). It contained an article by Dr. William Conway, Director of the New York Zoological Society that made an eloquent plea for an ecosystem-based management program that would protect the abundant populations of marine mammals and birds along the 3000km coast of Patagonia. This article prompted the formulation of one of the first projects designed to conserve coastal biodiversity through the Global Environmental Facility (GEF).

The Project Document was drafted primarily in Patagonia by members of the FPN and the WCS working closely with GEF/UNDP staff in New York. The constraints imposed by GEF project criteria required that the issues selected as the focus of the project apply directly to the goal of biodiversity conservation. Secondary attention was given to the broader array of management issues that are typically considered when framing a coastal management program. However, since the advocates for the project were conservationists associated with the WCS, a focus on this topic fitted well their interests and experience and the long series of initiatives and studies with the WCS that began in the early 1960s.

The design of the project was discussed at internal meetings of the Fundacion in 1992, followed by consultations with such national agencies as the CONICET. Once an initial framework was in place,

a two-day, by-invitation, workshop was held later that year that drew together national and provincial level researchers, governmental officials and NGOs with interests in the four major topics that have been examined as the major forces affecting the conservation of marine birds and mammals:

- ¥ the management of wildlife preserves,
- ¥ tourism,
- ¥ pollution, and
- ¥ fisheries.

The workshop provided a forum for discussing the interconnections among these topics and developed a consensus among this broad-based group on the design of the GEF project.

The unswerving focus of the project since its inception on the conservation of marine mammals and large birds is both its great strength and, potentially, its greatest vulnerability. In terms of the three major forms of coastal management suggested by Olsen et al. (1997) the Patagonia program is “enhanced sectoral management.” The program is focused on one issue only, but places that issue in the context of the large scale ecosystem and development processes that are at work. This focus has fostered an unusually high level of technical excellence and has concentrated the project's resources on a constrained agenda that has been within the capabilities and capacity of the project team and its associates to carry out efficiently given the personnel and financial resources available. The risk lies in the modest degree of importance given to biodiversity conservation within Patagonian society and within the prevailing institutional and political system within which the project must find support if its work is to be sustained and its objectives are to compete successfully against other, sometimes conflicting, priorities.

3.2 Policy Relevant Research

The principle emphasis of the project has been upon the generation of a baseline of information against which future change can be assessed. This has, in some cases, required sophisticated research and the application of a variety of techniques for assessing the size of wildlife populations and making initial estimates of potential causes of observed shifts in their abundance. The PD's long and ambitious set of technical studies have, with minor, exceptions, all been completed during the three years of the project. These studies and their status are listed in the project's Final Report.

It is beyond the scope of this evaluation to comment on the quality and the potential usefulness of these studies. A cursory review of some of them suggests that that they are well written and well documented. They have been produced and distributed as a recognizable document series. The strategy underlying the many research tasks undertaken is that they will, together, provide an objective, scientifically sound benchmark against which future change in the populations of the species of concern can be measured. On the basis of such information, it is hoped, well informed arguments can be made to take action to address the likely sources of any future declines which - given the mounting pressures of development - are all too likely to occur in the future.

The research has strengthened earlier assumptions as to the relative importance of threats to marine mammal and bird populations. Since both are believed to be primarily food limited the greatest long term threat probably lies in the rapidly growing fisheries on the Patagonian shelf. The most abundant

fish of commercial importance, the Patagonian hake, is also an important source of food to several species of marine birds and mammals. Hake populations are being significantly reduced by fishing and further declines are considered inevitable. The project has, through its successful on-board observer program, developed a good rapport with the inshore fishing industry and assembled the first data on at-sea discards and on the mortality of marine birds and mammals due to fishing gear entanglements. While the discard level- that ranges from 10 to 50 percent-is significant, but not unusual in a trawler fishery, the mortality in fishing gear of the species of concern to the project appears to be insignificant. There is, however, a major conflict between a mariculture operation involving spat collecting gear for mussels off the Golfo San Juan, Chubut, that is causing mortalities and disturbance to the right whales that are seasonally abundant in that area.

The second major threat one, and the one that is best documented in the impact of chronic oil pollution on penguins. Counts of oiled birds washed up along the coast reveal that as many as 10 percent of the total population of Megellanic penguins are killed by oiling each year. In addition, an oil spill offshore in 1991 killed an estimated 17,000 penguins that washed ashore along 400 kms of coast between Peninsula Valdes and Cabo Dos Bahias in Chubut.

Of lesser significance at present are the impacts of urban wastes-both sewage and dumps. Unmanaged garbage dumps have been documented as the reason for increases in local gull populations. The greater abundance of gulls causes them to compete with other, rarer species for nesting sites. Such impacts, however are highly localized and are compounded by the impacts of the "trash fish" dumped by trawlers at sea that provide another major source of food for some seabirds, particularly gulls. The research sponsored by the project has also provided baselines on human disturbance associated with the large increases in visitors to rookeries. At present, however, these direct human impacts are small and far less damaging than in the past when birds and mammals were harvested in very large numbers.

The projects major investment in research and baseline documentation has provided a scientific foundation for management. It has also drawn together the research community within the three provinces and has provided them with a shared perspective on the relative importance of the threats to biodiversity and the actions that need to be taken to manage these forces effectively.

3.3 Collaboration With Local, National and International Entities

The Fundacion is to be commended for an open and inclusive style that has actively sought out the participation of collaborators in a diversity of institutions. As is appropriate, the biggest effort has been made with the staff of the relevant offices in provincial and municipal government, with local universities and with national agencies with offices in Patagonia. For example, when the project began an analysis of issues in the Rio Negro area it first assembled all those with interest and capabilities in the topics of biodiversity conservation and the impacts of pollution, fisheries and tourism. Once a consensus had been reached on the management issues and the priorities for a research phase designed to document baseline conditions, the project provided funds to enable local participants to conduct elements of the work. Additional workshops and training sessions were scheduled in response to the needs that had been identified together. This responsive and adaptive approach proved to be highly effective in building support for the project and credibility for the

information collected and the conclusions drawn. For example while techniques for estimating populations of some birds presented few problems a series of four workshops were found to be necessary to develop an approach for estimating the dolphin population and providing the necessary training.

In the case of urban pollution, the coordinator undertook a series of coastwide trips that served the dual purpose of gathering baseline data and raising awareness through slide shows and discussions with municipal officials, at schools and in some cases at public meetings. In this case the scope of the discussion was not limited to biodiversity conservation, but the broader implications of water pollution and improper solid waste disposal were discussed. In the coal mining town of Rio Turbio a major issue are the problems posed by polluted water being used by displaced miners that are attempting to make a living from agriculture. The Coordinator worked with the municipality and the would-be farmers to analyze the problems and consider the options for mitigating measures.

At the national level collaborative relationships are restricted to agencies with responsibilities for the topics addressed by the project. The national fisheries agency, which is responsible for the rapidly expanding offshore fisheries have expressed little interest in the project. Some contacts have been made at the technical level, however, with researchers at the Mar del Plata laboratory. The project has had a very close and productive relationship with the Centro Nacional Patagonico of CONICET. The Center has historically had a close relationship with the Fundacion. Several members of the Fundacion's Board of Directors are employed by the Center and several members of the project's staff are also Center employees. A significant portion of the Government of Argentina match for the project has been provided by the Center.

The Fundacion and the GEF project are a result of the long standing collaboration between Patagonian scientists and the New York Wildlife Conservation Society. The Society, through Dr. Bill Conway has been the principle collaborator in all phases of the GEF project and has brought to the project international contacts and experience.

3.4 Public Education and Public Involvement in the Planning Process

An educational program was implemented for teachers of 5th grade to 12th grade in 19 Patagonian towns. The goal was to create capacity and awareness of coastal issues. Recognizing that Patagonia is a single ecosystem, the topics addressed by the educational program addressed both terrestrial and coastal marine issues. A strategic decision was made to focus efforts on teachers and to develop with them the necessary curricula. A second strategic decision was to let the teachers themselves identify the issues and topics that are important. The three most important issues that teachers identified were trash, desertification, and water (quality and quantity). Over a period of three years, four FPN staff members held some thirty teacher-training courses in the three provinces. In some towns follow-up courses were offered.

Other public education and community awareness efforts included:

- ¥ production of 30,000 brochures and 2,000 posters on the southern right whale

- ¥ two courses on public hearings as a tool for community participation in environmental discussions
- ¥ three newsletters were prepared and distributed to some 350 people, mostly in government
- ¥ a beach walk was organized that attracted some 4,000 volunteers. The first of its kind, the “Primer Censo Argentino de Contaminación Costera” was a census on beach litter and oiled birds. The walk received considerable attention in the media and raised national awareness of coastal issues.

The program has been based on a participatory process. Courses, workshops, meetings, and consultations, were part of the participatory process of issue analysis and data gathering on each of the four major topics addressed by the project. Local media (newspapers, radio, television) have covered the project extensively.

3.5 Strengthening of Technical Capabilities

Improving technical capacity for coastal resource management was one of the main objectives of the program. Technical courses and workshops were organized on a wide variety of topics that were selected through consultation with municipal and provincial officials and the research community.

Course topics included:

- ¥ management of coastal wildlife
- ¥ tourism
- ¥ marine bird and mammal population dynamics
- ¥ coastal zone planning
- ¥ onboard biological observation
- ¥ environmental impact assessments
- ¥ environmental education.

Most courses were a week long. Participants were mainly from government agencies. The training format varied depending on the topic and participants. Most followed a lecture format, but some were more interactive and used a problem-solving approach.

The Fundacion is cognizant of the importance of generating capacity among those individuals who it will be working with in the future, and the value in targeting those technical experts in government who are most likely to remain in their current positions.

3.6 Dissemination of Information

A complementary component of building technical capacity is information management. The beginnings of a computerized data base of information on coastal resources was developed. It was the intention to make the data readily available to all three provinces to support coastal resource management, and to create an electronic link between the Fundacion and the three provinces to allow communication and continual updating of data. Two problems appeared. First, it has not yet been technically possible to create such an electronic connection, and second, the Provinces have been slow to designate with whom the data should reside. Computers are designated for appropriate

natural resource agencies in each of the three Provinces but only one has been distributed (Chubut). The Provinces of Santa Cruz and Rio Negro have not designated which agencies should receive the data.

A more effective mechanism of information dissemination has been the trimester reports which lists information and reports available from the Fundacion. When the Fundacion receives requests for information it is provided only at the cost of a diskette or photocopies.

4. STATUS OF THE DRAFT COASTAL ZONE MANAGEMENT PLAN AND THE IMPLEMENTING FRAMEWORK

4.1 Progress Towards the Project Objectives

The Development Objective as stated in the PD calls for:

- ¥ management tools, and
- ¥ responding to the needs and interests of local communities.

Significant and substantial progress has been made on both. A number of experiments have been carried out during the three years of the project that have provided experience and techniques that can contribute to the mitigation of many of the problems to be addressed by the CZM Plan. Furthermore, the investments in education and public involvement in the issue analysis and planning process has been done in such a way as to respond to the needs and interests of the public and the institutions involved.

Progress has been uneven on the four major objectives, on the 88 activities and therefore on the achievement indicators as these are listed in the project document. Excellent progress has been made on developing a scientifically sound baseline of information on marine birds and mammals against which future trends can be estimated. Objectives for education and public involvement have likewise been met or exceeded. Together these accomplishments provide the groundwork for a CZM framework and for giving tangible expression to an incipient management process in Patagonia. However, the objectives, outcomes and indicators that apply to formalizing the management framework and advancing public policy by integrating baseline information on natural resources with the results of an analysis of the socioeconomic forces and the legal and institutional issues that must be resolved have not been achieved.

These realities are made clear by the evaluation instrument presented in Appendix D. The PD clearly calls for advancing to Step 3 (Formalization and Funding of the Program) within the three-year time frame of the project. The project is close to completing the actions that are essential to Step 2 (Program Preparation) but has not yet achieved important steps listed under output 2.2 in the PD including:

- ¥ to develop legislative proposals and regulations
- ¥ to distribute the draft CZM Plan for review and comment

¥ to submit the final draft of the plan for adoption and implementation.

Worldwide experience repeatedly demonstrates, however, that programs with the scope of this effort in Patagonia typically require at least five to six years to proceed successfully through Step 3. The project team is to be complimented on making as much progress as it has in the 36 months of this project. The project director, Guillermo Harris, has stated that he does not see how the project could have accomplished more in the time available. We concur with this assessment. If, however, the project had been provided training and technical assistance on the policy process during the three years of project implementation, it might have been possible to have made greater progress on the structuring and formalization of the CZM framework.

4.2 Scope and Content of the Plan

We were provided with a copy of the Plan de Manejo de la Zona Costera Patagonica, dated July 1996. The comments that follow are based on an assessment of that document. The document as it stands is a remarkably clearly written and well organized document that captures much of what has been learned through the project. The July draft, however, only contains some of the essential features of a management plan that is conceived as the basis for an initial phase of implementation.

The document begins with two clear and forceful goals that restate the fundamental ideas contained in the development objective of the PD. The document is structured in three sections.

- (1) The Conceptual Framework
- (2) Management Actions
- (3) Appendices

The first section begins with a lucid statement of the key resource management issues that are addressed by the plan. It then goes on to describe the three principal themes developed by the document: coastal biodiversity, sustainable use and zoning as it applies to diversity protection. The bulk of this initial section is devoted to what can be termed “findings of fact” on the five topics that have been addressed by the project.:

- ¥ the condition of marine bird and mammal populations
- ¥ public education
- ¥ tourism
- ¥ fisheries
- ¥ marine pollution.

While the findings on these five topics present an informative and useful synthesis of current knowledge on these topics, the style in which this information is presented varies from one section to another. For example, the text on education and tourism is organized as a series of bulletized points arranged under strengths, weaknesses, opportunities and threats, while information on fisheries provides a brief discussion of the status and issues posed by the different forms by which fishing and mariculture is taking place.

Part 2, the proposed actions, is also organized differently according to the topic. By far the greatest level of detail is devoted to sections on the management of marine birds and mammals and sections on each of the reserves. The remaining four topics together receive less attention-32 pages as opposed to 37-than the text on biodiversity. The text on each of the five topics is organized under a series of objectives. The text under each objective is in a question and answer format that first poses "how" and then "what will be accomplished" if those actions are taken.

The text as presented is at the status of an advanced first draft that can provide a solid basis for the process of negotiation and refinement that should accompany the formalization of such a document. Thus, the text leaves blank the numerical qualification of important actions. For example, "the number of visitors permitted onto the reserve will be limited to x."

The major gaps in this draft are:

- ¥ a description of the institutional framework for coastal management and how it will function
- ¥ a statement of policies for each of the major topics, and
- ¥ the identification of those specific actions that would be undertaken during an initial phase of implementation.

The objectives for each topic could, and in the opinion of these reviewers should, be rephrased as statements of policy. It will require considerable thought and negotiation to decide upon what actions could be taken during an initial period of implementation-say three to six years.

It will be important during the finalization of this initial draft that a balance is maintained among the actions selected for implementation for each of the topics. It is disturbing to note that the current draft of Section 2 does not include a chapter on education. This is a serious oversight that should be corrected. Continuing investments in education will lie at the heart of the long-term sustainability of this program.

Section 3 calls for a listing of technical documents and protected areas and a summary of the analysis of the existing legislation and institutional arrangements for coastal management. An institutional analysis does not appear in the current draft and the single technical report on this essential topic does not provide the information required for drafting such a section.

4.3 Framework for Intra and Interprovincial Coastal Management

It is essential to place the progress that has been made by the project on the planning phase of a first generation program in the context of the recent history of Argentina and Patagonia. A period of military dictatorship during which some 30,000 citizens "disappeared" came to a close in 1984. During that period the participatory democratic process central to most forms of effective coastal management, and activism on environmental issues was not countenanced by the authorities. Only in 1994 were amendments to the Argentine Constitution adopted that provide for: (1) the right to a healthy environment for human development (Article 24) and (2) a mandate for the provinces to formulate policies and regulations to guide development and conservation (Article 75). The amended Constitution implies that the federal government will provide the provinces with a base of

funding for such activities. Thus the preconditions for formalized frameworks for CZM only came into existence during the project and the most basic procedures of a participatory democracy-such as public hearings on major development proposals-had to be tested and demonstrated as an effective means for opening up the decision making and management process. Only after these preconditions were in place has it been feasible to consider formalizing a coastal management process.

Within this context the project has made some notable advances. In 1992, before the formal start of the project, the FPN contacted an NGO based in Buenos Aires, Fundacion Ambiente y Recursos Naturales (FARN), whose mission is to promote participatory and transparent approaches to resource management. FARN worked with the project to initiate public hearings in the municipality of Madryn. These have proved to be both popular and useful and now occur at a rate of 5 to 10 a year. Other municipalities in Patagonia have observed the process and are adopting it.

Members of the FPN subsequently participated in a municipal convention that produced a "Carta Organica" that sets forth the procedures by which the town is administered. One feature of these administrative procedures is the requirement of Environmental Impact Statements on new development proposals and a public hearing on each. The project has also worked to encourage the formation of informal working groups organized by town officials that include representatives from the research community, the church and the private sector that discuss issues of local importance. These have proved to be useful. For example, one group was formed to address the problems caused by the dumping of garbage from fishing vessels and ships moored in the bay. The solution was to purchase a garbage scow and to require that all wastes are placed in it and then taken to the town dump. In 1996 the scow collected 400 tons of solid waste that would otherwise have been dumped in to the bay directly adjacent to the bathing beach that is the major focus of the booming tourist trade of this town.

Both the evaluative instrument and the statements of the project staff make it clear that the formalized institutional framework for coastal management - even when limited to the topic of biodiversity conservation - is at the early stages of design in Patagonia. Although the PD calls for the creation of both provincial councils and an interprovincial council neither of these yet exist. At the national level CZM legislation is being discussed. Guillermo Harris, the FPN President, was invited to address the Senate Committee considering this legislation. He discovered, however, that the committee was focused on the restoration of the coastline and estuaries of Buenos Aires and had not yet considered the proactive actions that characterize the CZM initiative in Patagonia.

A report on the "normative and regulatory aspects" of CZM has been prepared through a contract with FARN. This document provides a review of the existing policies and regulations that apply to the four major topics addressed by the project both at the national level and within the frameworks developed thus far by the legislatures and administrative offices of each of the three provinces. The report appears to be a careful inventory of the relevant policies and regulations. The report identifies the gaps and overlaps in jurisdiction and comments of the enforcement problems. However, the analysis does not directly address the implications of the existing legal and institutional framework for a CZM initiative in Patagonia and is of limited usefulness to preparing the Patagonia CZM Plan. It does not include a section of conclusions or recommendations for how the project should embark upon the process of formalizing a CZM framework for Patagonia.

The PD called for the formulation of "general and specific legal recommendations" to be developed by the implementing agencies during the second half of the project that would then be submitted to the respective provincial legislatures for the updating and improving of current laws. These steps have not been taken.

The issue of how to design an institutional framework has been discussed at length at the three annual workshops and at technical meetings. The new national Constitution gave the provinces the authority to manage renewable resource within their boundaries and out to the mean high water mark along the coast. The consensus reached at the first of the annual high level workshops reconfirmed the strategy set forth in the PD, namely that the project would facilitate the creation of a Provincial CZM Committee in each province and convene joint meetings of the three Committees. These would begin as ad-hoc bodies that would subsequently become formalized into permanent structures. The conclusion reached at the first annual workshop was that the committees should be formed in Year 2 and formalized in Year 3. The provincial committees, it was suggested, would be responsible for developing policy, and would approve a CZM Plan for each province. The critical details of whether such councils would be coordinating bodies or possess authority to review, modify, reject or approve specified development proposals, conduct impact assessments and develop and adopt its own plans remain to be proposed and negotiated. Presumably the agreed upon design would be formalized in a law adopted by each provincial legislature. An interprovincial council would presumably be a coordinating body that would meet - perhaps once a year -to discuss interprovincial issues, share experience on lessons learned and join forces on activities of common interest.

The creation of such formalized CZM frameworks is now viewed as one of the major steps to be taken during the proposed second phase. The proposal drafted by the Foundation, however, is somewhat vague on how this process would proceed and on the actions that would be taken to assure that the prospects for a positive outcome are maximized in an unavoidably complex and charged process of interagency negotiation that would presumably culminate in legislative campaigns in each province.

4.4 Securing Long Term Financing

Since the CZM Plan has not yet progressed to the design of a formalized institutional framework and the actions proposed by the plan have not been sorted into an initial work plan, it is not yet possible to estimate the annual costs that the sustained implementation of a CZM program for Patagonia would entail.

The sustained financing for coastal management in developed nations invariably is provided primarily by the national government. Such financing is currently unlikely in Argentina but this should be seen as an important long term goal for the program. Such government funding could and should be supplemented by taxes and fees that are extracted from those that benefit from the services that the CZM Program provides. These include those who visit the reserves. At present fees are collected by the tourism departments that manage the reserves at the rate of \$1 for Patagonian residents and \$5 for all others for each visit to each reserve. These funds go to a national account and there is at present no "feedback loop" to the reserve system. Modifying the existing system and how

the funds collected are allocated is likely to be difficult. In Costa Rica a small portion of a tax on hotel and restaurant charges has supported that country's coastal management program. Such an arrangement could be considered in Patagonia.

The Fundacion is not self-supporting, but has benefited from donations from local and foreign businesses, NGOs and individuals. One donation provided for the purchase of the Foundation's offices and another for a vehicle. The salaries of the Foundation's Director and portions of some of the staff are paid by WCS.

4.5 Readiness for an Initial Implementation Phase

The evaluative instrument presented in Appendix D suggests that the program is ready for an initial phase of full-scale implementation after the plan has been formally approved and funded. A second phase of funding will need to begin with the negotiation and refinement of a management plan that at present has been shared only within the FPN-WCS project team. This places the project at a recognizable and very critical juncture in its evolution. The process of completing the draft document and filling the gaps identified above and then negotiating the contents with the Commissions and/or other relevant authorities may be expected to consume considerable time and energy. It may be possible to complete this process for Chubut in the first year of a second phase. If the Chubut process proceeds successfully, it may then be possible to make similar advances in the remaining three provinces within the second and third year of a follow-on project.

A second immediate priority is to make progress on generating the funding for sustained progress on the program. Several sources of funding have been identified:

- ¥ federal government funds in support of the offices of provincial government
- ¥ user fees charged at reserves and potentially levied in the form of taxes on tourism and other activities that rely upon the qualities of the ecosystem
- ¥ a second phase of GEF funding
- ¥ funds from the proposed World Bank loan program directed at the issues addressed by the CZM Plan
- ¥ the proposed Patagonia Conservation Trust
- ¥ continued support from the WCS
- ¥ additional donations in support of the FPN from both in-country and foreign benefactors.

Preparation of a coherent long-term funding strategy will require a considerable effort that will probably require some external technical assistance.

The work that needs to be done to formalize and fund the CZM program for Patagonia does not imply that substantial progress on the initial implementation of the policies and actions in the draft plan should not concur concurrently. It is in fact essential that the formalization process be accompanied by actions that build experience in the implementation of elements of the plan. This will bolster confidence within the public, the institutions involved and within the FPN project team. Discussions with the coordinators of the five topic areas makes it clear that much thought has already been given to identifying which ideas are ripe for implementation.

5. RECOMMENDATIONS FOR THE CONSOLIDATION AND IMPLEMENTATION OF THE PATAGONIA COASTAL ZONE MANAGEMENT PLAN

5.1 Priorities and Structure for Phase 2

As the Patagonia coastal management initiative matures, the top priority is to create and activate the management framework by which biodiversity may be protected and the development process in the region is steered towards sustainable forms of ecosystem use. During and immediately following this step of formalization it will be essential to begin implementing elements of the CZM Plan so that lived experience informs the refinement and expanding scope of effective public policy. The third priority is to identify and secure the sources of funding that can support the continued development of the program. A number of activities will need to be undertaken in support of these three priorities. They have already been identified and discussed by the project team in Patagonia and are outlined in the concept paper prepared by the UNDP/GEF program. This section groups similar clusters of work.

A. Formally Enact the CZM Framework for Patagonia

(1) Establish the Provincial CZM Commissions. The first priority for the program is to formally create the CZM management structure that was first suggested in the 1993 PD and was reaffirmed at the first annual CZM workshop the following year. Discussions are currently underway between the FPN and the Minister of Production of Chubut Province that may result in a formal commitment from that Province's Governor to create a CZM Commission for Chubut. We recommend that the program first focus attention on launching a CZM Commission for Chubut and then, beginning in year 2 or 3 of the second phase of the project, to work to create similar commissions in the other three provinces of Patagonia - including Tierra del Fuego. The experience gained in Chubut would inform the design, and the selection of initial activities undertaken by the Commissions of the other provinces. It may be desirable to initiate other commissions more quickly. Such decisions should be made in consultation with the parties involved.

Since the details of the design of a Provincial CZM Commission have not yet been developed, and since world experience demonstrates that the details of institutional design are critical to the success and efficiency of a CZM program, the process by which an institutional design for Patagonia is developed will be very important. Those that participated in past project workshops should be given the opportunity to contribute to this next critical step. For example, a meeting or workshop on the design of the Chubut Commission could be called by the Governor. This would affirm support for CZM from the highest provincial authority. Those attending the meeting could review the strengths and weaknesses of CZM structures adopted by other nations and /or provinces. This would provide the participants with a range of options. It should be expected that the resulting design could feature:

- ¥ a small Commission at the Ministerial level
- ¥ a secretariat administered by the FPN and composed largely of the same team that implemented Phase 1

- ¥ procedures that ensure sustained public involvement in the further planning and decision-making process.

The major challenge will be to define the roles and responsibilities of the Commission, as they relate to the existing provincial agencies and the proposed FPN Secretariat. The Commission's primary responsibility should be to negotiate the policies that will shape the implementation of the program, and set priorities for annual work plans. The policies should be designed to strike a balance between development and conservation. It may be appropriate for the Commission to assume decision-making powers for specified categories of decisions, and/or to serve as an appeals board for decisions made by the provincial line agencies. This would require action by the provincial legislature. An alternative is for the Commission to serve primarily as a coordinating body. The role of the Secretariat would be to develop options for policy and to draft management plans for specific issues and sites.

Assuming that the Commissions have a level of authority, coastal management policies and plans would be submitted to it by the Secretariat for approval, modification or rejection. The Secretariat would also:

- ¥ continue its excellent work in public education,
- ¥ organize Commission-sponsored events and programs, and
- ¥ manage continuing activities in applied research and monitoring.

The provincial level agencies are becoming more involved in resource management and allocation activities and already recognize the benefits of working within the context of CZM Plans and structured governance process. Their workload will increase as the provinces develop. This is likely to create a greater demand for the services of the Secretariat. The responsibility of these provincial offices, however, should remain focused on oversight of the preparation of Environmental Impact Assessments, decision making on permit applications, enforcement and selected extension activities such as those already underway in support of the inshore fisheries that are administered by provincial governments.

(2) Initiate An Inter-Provincial Assembly. Since there are a number of topics, particularly those involving fisheries and oil pollution, that require collaborative action at the regional scale, the practice of annual events that draw together representatives of four provinces with selected federal government agencies should be continued in Phase 2. In the next phase, however, the transition should be made from workshops designed to familiarize the participants with the management issues and thinking through hypothetical management problems offered as training exercises, to a more formalized body that could be named the Annual Interprovincial Assembly. The Assembly could analyze selected management issues and, where appropriate, recommending guidelines or policies that direct the development and conservation of the Patagonia region as a whole. The Assembly should also identify topics where interprovincial agreements are needed and provide an impetus for their formalization. Another major purpose of the Assembly could be to provide a forum for the sharing of experience - including the examination of experience from other countries that may be relevant to the resolution of issues in Patagonia.

(3) Completion and Formal Adoption of Provincial CZM Plans. The July 1996 draft of the Plan de Manejo de la Zona Costera Patagonica has many, but not all, of the essential ingredients of the document that is needed to guide the conservation and further development in Patagonia. The major gaps in this draft are:

- ¥ a description of the institutional framework for management and how it will function,
- ¥ a statement of policies for each of the major topics addressed, and
- ¥ sections that follow each group of actions that identify what specified priorities will be undertaken during an initial phase and develop a timeline for their implementation (perhaps for the first three years).

Such specifics will need to be negotiated with the Commissions and/or Provincial Assembly with opportunities for public input and participation. The framing of policy statements will be particularly critical since these will define the broad objectives for each of the sectors addressed by the Plan and the process by which decisions will be made. The participatory management process and the “transparency” of the program will need to be defined in brief, but carefully crafted statements of policy.

Most of the issues addressed by the plan are local in expression and will need to be addressed by the individual provinces. An important decision will be whether the provincial Commissions should operate from the same single document or whether separate but complementary plans for each province should be prepared. From a pragmatic implementation perspective, the latter is probably the better option and will reinforce local “ownership” of CZM in each of the four provinces. Provincial CZM Plans should not only address issues from a narrow provincial perspective but should recognize and incorporate feature region-wide management initiatives. Thus, each provincial level CZM Plan should make reference to such region-wide initiatives as (1) a network of marine and terrestrial protected areas and multiple use reserves and (2) a coordinated oil pollution detection and response program. Such region-wide management initiatives could be negotiated by the proposed Regional Assembly and will probably require the support of central government.

Completion of the CZM plan or plans can be undertaken only after the provincial councils are in place. The framing of statements of policy and the selection of priorities for an initial period of implementation must be decided through a close collaboration between the commissions and the FPN Secretariat, and should be accompanied by an appropriate process of public review and comment. This stage of formalization of the plan will be the most critical period in the project. It needs to be very carefully planned and will place the Secretariat at the hub of activities in which it has little experience. It will be useful to involve FARN in this process and to supplement their expertise in participatory public process with external technical assistance in the design and negotiation of public policy.

(4) Securing Funding for the Sustained Implementation of the CZM Program. This is the second major challenge that must be addressed during the formalization stage of a first generation CZM program. The concept of a Patagonia Conservation Trust needs to be developed. This will require designing the objectives and structure of the fund, specifying the target amounts of money that are required and the sources from which they might be obtained as well as the administrative and

operational procedures that would govern use of the fund. As outlined in Section 4.4, a funding strategy, however, should draw together all available income sources into a coherent, sustainable package that may include:

- ¥ the proposed Trust Fund,
- ¥ the Government of Argentina,
- ¥ funds in support of provincial government,
- ¥ a second phase of GEF funding,
- ¥ elements of a potential World Bank loan program,
- ¥ user fees for reserves, and
- ¥ impact fees on some forms of development.

B. Initial Demonstrations of CZM Plan Implementation

World experience repeatedly demonstrates that the most critical juncture in a first generation CZM program is the transition between a phase devoted primarily to planning and research to an initial phase of implementation. The best strategy is to gain experience in the realities of implementation that can shape the planning process and thereby to avoid a clear separation between the two phases. Therefore, as suggested by the Concept Papers for Phase 2 prepared by the FPN, and the GEF/UNDP, the program should move swiftly to:

- ¥ negotiate an operational management plan for one of the biodiversity reserves in Chubut as a first step towards an operating network of marine and terrestrial protected areas and multiple use preserves,
- ¥ select a set of actions that build on the experience gained in inshore fisheries (within provincial jurisdiction) and begin to build similar linkages between the CZM program and the offshore fleet that operates on the Patagonia shelf within Argentina's EEZ,
- ¥ implement key recommendations in the draft CZM Plan that address solid waste and sewage treatment and disposal and toxic waste issues,
- ¥ address the crucial issues identified as the causes of chronic oil pollution, i.e., tanker loading procedures, ballast water handling and the travel lanes followed by tankers,
- ¥ expand and reinforce the public education program that will be essential to building support for the implementation of CZM policies and actions, and
- ¥ increase the program's efforts in conflict resolution on issues raised by the interactions among the sectors addressed by the Plan.

Actions on these priorities, if they were undertaken by the coastal Commissions, would greatly broaden political support for the program. If the proposed World Bank loan moves forward, major benefits could accrue to the provincial Commissions if they became responsible for the administration of funds made available for addressing land-based contamination. This would reinforce the principle that CZM programs address both conservation and development priorities.

C. Continue Monitoring Trends in Biodiversity and Development

Now that a well-documented baseline is in place on the four major topics addressed during Phase One, it will be essential to sustain a monitoring program that will document trends in:

- ¥ marine birds and mammals
- ¥ urban contamination
- ¥ oil pollution
- ¥ nearshore fisheries
- ¥ tourism.

We recommend that such information be used to (1) inform future priorities for action, further planning and policy making, (2) bolster public awareness of the condition of the Patagonia ecosystem and (3) nourish the school education programs. The phase 2 program should consider producing annual *State of the Patagonian Coast Reports*. These could be tied to activities such as the highly successful September 1995 beach walk. Each issue could feature detailed treatment of a different major management. Since disaggregated data is of limited usefulness to resource managers and the coastal Commissions, an emphasis on disseminating periodic analyses of trends may prove to be more useful than the computerized database that has so far been the “end product” of information dissemination.

D. Additional Policy-Relevant Research

The two major topics that require significant new investments in research should be directed at:

- ¥ the impacts of offshore fisheries, and
- ¥ the actions that can reduce oil pollution at sea.

The success of the observer program in building a positive relationship and an information base on inshore fisheries should be applied to the much more significant issues posed by the operations of offshore fleets. There is as yet no information on the impacts of offshore fisheries on marine birds and mammals or on the magnitude and potential impacts of by-catch. Since it is likely that the competition between fisheries and the biodiversity that the CZM Program is designed to protect is probably the primarily long-term threat to Patagonia’s marine birds and mammals, better information on fisheries is a top priority. Such information can also be the basis for progress towards an effective management plan for the fishery resources of the Patagonian Shelf. This, however, is primarily the responsibility of federal agencies of government based in Buenos Aires.

The oil pollution problem presents a different set of challenges. Here the greatest need is not for sophisticated scientific analysis but rather for the application of simple technologies and practices governing how oil is loaded onto tankers, the routes taken by tankers along the coast, and how ballast water is managed.

E. Continued Public Education

Sustained progress towards more sustainable forms of development in Patagonia will remain directly tied to concepts and information on the condition of ecosystems within Patagonia society. The FPN has initiated a school education program that has heightened awareness amongst school teachers and begun the process of developing curricula. The continuation and expansion of this program should be viewed as a top priority for Phase 2.

The school program should continue to be complemented by public awareness and public involvement activities. As an initial implementation phase of the program gets underway, the program will need to increase its efforts to inform and engage the public in the process by which decisions affecting the allocation and use of Patagonia's natural resources are made.

F. Capacity Building and Technical Assistance

(1) The WCS has played an important role in nurturing the FPN and the GEF project. The WCS, through its Director, Dr. William Conway, should continue in its role as long-term advisor to the project during a second phase. The WCS is a trusted partner with long experience in Patagonia and good contacts both within central government and the provinces of Patagonia. It may be appropriate to consider an advisory role for the WCS Director to the provincial Commissions.

(2) Training in Coastal Management Practice for FPN Secretariat Coordinators and Provincial CZM Commissioners. All those interviewed during the evaluation in Patagonia, both within the FPN and elsewhere stated repeatedly that the project was engaged in work that had not been previously attempted in Argentina and that the process was one of discovery. Those involved are unaware of CZM experience in other nations and, since the great majority of the team assembled for phase 1 by the FPN are natural scientists, there is very little awareness within the existing team of management practice and the process by which public policy is negotiated. Those involved in Phase 2 would benefit from exposure to CZM experience elsewhere and in particular to options for the design of management frameworks and the process by which CZM programs adapt and evolve. A capacity building component could therefore address such topics as the following:

- ¥ estimating and communicating the impacts of ecological and socioeconomic trends
- ¥ issues and options for the institutional design of a coastal management program
- ¥ impacts, management issues and management techniques for such activities as mariculture, tourism, shorefront construction, habitat degradation and water pollution
- ¥ situation analysis techniques
- ¥ linking management initiatives at the local and national level
- ¥ promoting a learning-based approach to coastal management
- ¥ fostering private-public sector partnerships.

Capacity building sessions could be scheduled to immediately proceed or follow the annual meetings of the proposed Patagonia Assembly.

(3) The design and activation of the proposed Patagonia Conservation Trust Fund will also require specialized technical assistance. This should be the second focus for external technical assistance during the next phase of the program.

5.2 Conclusion

The Patagonia coastal management initiative is to be commended for having made remarkable progress over the three-year period of the GEF project. Both the technical capacity and the political will is in place that are the essential preconditions for (1) formalizing the institutional structures for a sustainable program, and (2) beginning to implement the many actions required to balance

conservation and development along Patagonia's coast. The GEF project has been executed with efficiency and technical excellence and gives this initiative the potential for being a model for other regions of Latin America. If a follow-up project does not materialize, the investments made to date will be jeopardized and the unique biodiversity of Patagonia will be far more vulnerable in the decades to come.