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SUBIC BAY PROTECTED AREAS MANAGEMENT PLAN

EXECUTIVE SUMMARY

1.0 INTRODUCTION

In 1992, shortly after the US Navy vacated its base at Subic, the Subic Bay Freeport Zone (SBFZ) was designated under Republic Act 7227. The subsequently formed Subic Bay Metropolitan Authority (SBMA) was set the challenging task of balancing the economic development of the SBFZ with the protection of its valuable natural resources. In recognition of the significant natural resources within the SBFZ, the act creating the SBFZ specified an Ecology Center whose most pivotal mandate was the protection of these ecological resources. The subsequent establishment of the Subic Forest Watershed Reserve provided the nucleus for identifying a proposed protected area. Consequently, in 1999 the SBMA commissioned the Subic Bay Protected Area Management Plan (SBPAMP) project, employing funds received from the Japan Bank of International Cooperation (JBIC). This project proceeded through to 2001 and resulted in the identification of the Subic Bay Protected Area (SBPA), and preparation of the supporting documentation and reports to support establishment and implementation.

The SBPAMP project had four principal components:

- preparation of an inventory of the resources of Subic Bay and creation of a land-resource information system (LRIS) database,
- preparation of a management manual for designated terrestrial and marine protected areas, including coastal and buffer zone management plans,
- preparation of guidelines for the protection of flora and fauna outside the protected area, and
- development of a demonstration livelihood program for various upland, lowland and coastal communities as part of the overall solutions to successful protected area and natural resource management.

The resultant Subic Bay Protected Area Management Plan (SBPAMP) is comprised of eight volumes, comprising the seven-volume Protected Area Management Plan and an Executive Summary volume. This Executive Summary provides a brief overview of the SBPAMP and deals with the Management Plan component of the SBPAMP. This summary provides a structural map of the SBPAMP document, followed by brief descriptions of the major elements of each volume.

2.0 THE STRUCTURE OF THE SBPAMP

The SBPAMP was prepared in accordance with the National Integrated Protected Areas System (NIPAS) Act (RA No. 7586), and is comprised of the following volumes:

- Volume 1: Introduction and Area Ecological Profile
- Volume 2: Management Plan
- Volume 3: Zoning Guidelines
- Volume 4: Programs and Projects
- Volume 5: Budget and Financing Plan
- Volume 6: Monitoring and Enforcement Plan
- Volume 7: Alternative Livelihoods

An explanation of the content of each volume is as follows:

Volume 1 begins with an explanation of the origins of the Protected Area, and why it has come about. The large areas of forest, undeveloped beaches, and marine areas protected by the U. S. Navy until 1992 were recognized as valuable resources to be protected when the Subic Bay Freeport Zone was established. The Ecology Center was established to preserve and protect these natural systems and to develop a plan for their protection. The SBPAMP project, resulting in this plan, was initiated to accomplish this.

The general approach used to develop the plan was based on a value-based decision-making structure, in recognition that management decisions are based on values. Stakeholder participation was a basis element of the approach, and special attention was paid to involving the indigenous Aeta and development interests within the SBFZ. The planning approach was used to configure the area with concentric zones of protection so that the most protected zones were surrounded by zones of increasing relaxed restrictions. Profiles of each of the major elements of the study area include:

- physical environment;
- biological environment;
- social, economic and cultural context; and
- institutions (administrative context) and stakeholders.

Each of these presents information on the study area, and draw attention to those aspects that are most relevant to the establishment of the protected area. A summary of the issues, constraints and opportunities is included.

Volume 2 describes the Subic Bay Protected Area, its location, composition, rationale for its establishment, and the strategies and institutional aspect involved. Competing interests, regional influences (institutional, economic) have been taken into account throughout the planning process. The overall classification and the location of the management zones is based on information on the physical, biological, and socio-economic conditions of the area developed during resource inventories. The strategies provided cover natural resource, stakeholder, community, and institutional matters. Strategy objectives, background and recommended action are provided. The volume finishes with an in depth explanation of the administrative options available to the PAMB and a recommended course of action.

Volume 3 provides the statement of objectives and guiding ‘regulations’ for managing the SBPA. The focus is on permitted and prohibited activities for each management zone and sub-zone. Performance criteria for various permitted uses are given. Guidance on management emphasis, management objectives, management tasks, and management activities is also provided. This information is provided in mainly table format, and is intended for ease of use by both PAMB management staff, and by stakeholders.

Volume 4 sets out the many programs and projects that the PAMB will need to pursue in the establishment and ongoing management of the SBPA. Some will be required as part of establishment, or shortly after. Others are programs to be undertaken in due course, or when funding allows. Each strategy is presented in approximately the same format: objectives, schedule for implementation and prioritization, and project profile (including indicative cost).

Volume 5 deals with the budget and financing plan, which covers two principal areas. First, it explores the investment potential of the SBPA and identifies the potential multipliers in the regional economy. This establishes that the economic and financial benefits of the SBPA to the local economy are significant. Second, the volume presents the financial costs of both establishment (capital costs and set-up costs) and ongoing operations (operational costs over the first 1 to 5 years, and thereafter. The advice provided is that the predicted total costs of the PAMB/SBPA will be approximately equivalent to 1.5% the current total operational costs of the SBMA.

Volume 6 is the monitoring and enforcement plan. This begins with a framework for establishing a monitoring system. Some important theory of monitoring approaches and procedures is provided. The monitoring program itself covers the areas of:

- marine (physical and biological parameters)
- terrestrial (physical and biological parameters)
- socio-economic indicators (demographics, economic, visitor)

Advice is then given on the establishment of a ‘management information database’ for the SBPA. The volume then addresses the enforcement action plan. This provides advice on surveillance, rangers and patrolling, which are all vital aspects of enforcement. Enforcement principles and procedures are given, with the advice that early in the formation of the PAMB, specific standard operational procedures will need to be established in the context of the final legal framework adopted for the SBPA, and with advice of other enforcement agencies of government.

Volume 7 describes the issues associated with community development and the need for alternatively livelihood strategies. The area is then described in terms of upland, lowland, and coastal communities and drawing out the issues relevant to each. This is followed by an explanation of the ‘livelihood framework plan’, giving goals, specific objectives, methodologies and the strategy and activities approach. The volume then presents the programs and projects that make up the plan. These are discussed in terms of the communities to which they apply. Details are provided down to budgets, time frames, participants and beneficiaries. The next major chapter deals with the Action Plan for Development of an IGP/Livelihood Model Community. This includes overall

strategy, and specific strategies and activities. The volume concludes with advice and recommendations on proposed organizational mechanisms.

3.0 VISION STATEMENT AND MISSION

The Vision Statement for the SBPA was formulated and endorsed through public workshops and is presented in Volume 2. It is therefore the Vision of the regional community and stakeholders. It reads as follows:

“Healthy ecosystems conserved and enhanced to provide the full complement of human use and ecological values at levels that are sustainable for current and future generations: planned and managed with stakeholders involvement”

A Mission Statement supports the Vision Statement, as follows:

“Ensure ongoing custodianship over the natural resources and ecosystem of the Protected Area, to ensure that the rain forest and marine ecosystem is preserved intact, in perpetuity, for the benefit of all futures generations. In so doing the SBPAMP will only allow such activities, uses/facilities and changes to the Protected Area that are compatible with the prime directive of ecosystem/habitat protection and that are sustainable without loss of, or impact on, any portion/aspect of the natural environment of the Protected Area. The SBPAMP will also endeavor to ensure the educational, scientific and other natural ecosystem related values of the park are promoted locally, nationally and internationally, for the benefits of global society and international biodiversity conservation.”

These statements give strong guidance to the overall approach to be taken to the future management of the SBPA. In particular, the vision and mission will assist the achievement of numerous goals for the SBPA. These include the following:

- protection and maintenance of a healthy ecosystem that is sustainable and that continues to support good water quality, fertile and stable soils, with rich habitat and biodiversity;
- sustaining the marine and terrestrial ecosystems and realizing their direct benefits for wider human use and economic prosperity, through appropriate activities and establishing alternative livelihoods that protect rather than impact upon the natural system;
- involve the wider community and stakeholders with the ongoing planning and management of the SBPA, including the indigenous peoples communities and commercial business sector alike; and
- plan and manage the SBPA in times frames of not less than 50 years.

4.0 ISSUES, THREATS AND OPPORTUNITIES

There are many issues, threats and opportunities associated with the successful implementation of the PAMP. These are presented in Volume 1. These include the need to recognize and protect the high biodiversity of the rainforest systems of the Philippines, and Subic in particular, and to recognize that the SBPAMP is concerned with a vital portion of the remaining forest cover that once cover Luzon. Another is the degree of fragmentation of remaining rainforest and marine ecosystems, and the need to protect remnant areas through consolidation of areas wherever possible and practical. There are also the extensive rehabilitation needs to reinstate a variety of specialized habitat types (mangroves, bamboo groves, coral reefs, sea grass meadows, rivers and streams) that add to the diversity of the natural system. In addition, there are socio-economic issues. These include access to appropriate funding for management purposes, the interests and rights of differing stakeholders, and development pressure that can pose both threats and support/opportunity.

Inevitably many of these issues translate into either threats or opportunities. The **threats** to the SBPA can be listed under the headings of physical (e.g. destruction), demographic (e.g. impacts of population pressure), institutional (e.g. inertia and poor government), political (e.g. impact of competing interests), economic (e.g. lack of funds, speculative development), and law and order (e.g. corruption, criminal activities).

Opportunities are, however, significant. These fall under the headings of biophysical (e.g. the benefits of sustained ecosystem and high environmental quality), and socio-economic (e.g. attraction of investment, economic-multiplier of a tourism/eco-tourism resource, sustainable livelihood practices, community pride and confidence). In total the opportunities are that a successful SBPA will not only derive direct revenue to the regional economy, but also be an important attraction to investors in the SBFZ.

5.0 A FRAMEWORK OF THE SBPA

To succeed in justifying and promoting the SBPA, a **conceptual framework** was required to make the idea work and guide plan development. This is a vital part of the SBPA. Using NIPAS guidelines, the PAMP project team developed a framework based on the principle of an inner ecosystem 'core', surrounded by concentric circles of various management zones, each based on differing ecosystem characteristics, environmental values and degree of human influence. This is conceptually the SBPA, extending over both terrestrial and marine environments. The SBPA is surrounded, in turn, by an additional concentric Buffer Zone.

However, the SBPA and PAMP differ from other protected areas in certain ways. Firstly, the team recognized that in the Subic situation there is unique and complex jurisdictional, administrative and land use setting. Secondly, the connection of the SBPA to the surrounding marine environment and surface drainage catchments requires that

environmental management of the wider region must be addressed for the SBPA to really successful. The framework accommodates this, and also recognizes that successful management of the SBPA must include both traditional protected area management, and the application of many other tools of administration, policy and control further afield in the region external to the SBPA.

It is important to note that the SBPA/PAMP framework sees this wider area of influence as being cooperative and participatory, and driven by mutual interest, incentive and voluntary agreements between independent authorities and stakeholder bodies.

The attached figures illustrate the functional continuum of SBPA management zones to the outer buffer and the influence of the wide regional land use and economic activity, and the range of administrative, policy and planning mechanisms that should be considered.

6.0 RESOURCE INVENTORIES AND IDENTIFICATION OF SBPA MANAGEMENT ZONES

The identification of the SBPA boundaries and zones is based on comprehensive knowledge of the natural resources of Subic Bay, combined with a systematic process of identifying different management zones based on many selection criteria.

The findings of the resource inventories are contained in 15 volumes. This information is the basis to assessment of ecosystem values and food web linkages within the forest and marine environment. This information, together with consideration of physical, functional, social, institutional, economic, legal criteria, to assist map and aerial photo interpretation, led to the mapping of management zone boundaries.

The outcome, which was presented and validated during the stakeholder workshops, resulted in the adoption of the SBPA management zones as shown in the following table. The table also indicates the comparison with traditional NIPAS zone categories.

Table 1. SBPA Management Plan Zones

SUBIC BAY PAMP ZONES	SUBIC BAY PAMP SUB-ZONES	6.1.1.1 NIPAS ZONES (by comparison)
Core Ecological (terrestrial, marine)		<i>Strict Protection</i>
Sustainable Use (terrestrial, marine)	Turtle nesting beach Forest Ecosystem Corridor	<i>Sustainable Use</i>
Restoration (terrestrial, marine)		<i>Restoration</i>
Habitat Protection (terrestrial, marine)		<i>Habitat Management</i>
Multiple-use		<i>Multiple-Use</i>
Buffer (terrestrial, marine)		<i>Buffer</i>

(not applicable)		<i>Cultural</i>
Recreation (terrestrial, marine)	Beach Swimming Special Sites	<i>Recreational</i>
Special Use	Vegetation protection Park infrastructure and administration	<i>Special Use</i>
		<i>Other</i>

A description of the zones, discussed in detail in volume 2, is as follows.

Core Ecological Zone – Terrestrial (CEZ-T)

The CEZ-T extends over the most remote and higher elevation terrain in the eastern portion of the PA. Much of the southern, eastern and northern eastern directs abuts the boundary of the Bataan Natural Park. The configuration of the zone adjacent to Bataan Natural Park, in addition to the high ecological values and rugged remoteness of the area, are principal reasons for the designation of the zone. It is the most restricted zone in terms of human use.

Core Ecological Zone – Marine (CEZ-M)

The CEZ-M extends westward from Camayan Point and Binanga Point to the immediate west of the old US Naval magazine storage area, to include Chiquita Island and the southern coastal fringe of Grande Island. The designated area includes coral reef and biologically productive habitat associated with shallow coastal marine environment. Sub-sets of the CEZ-M include the Hidden Beach between Camayan Point and Binanga Point, and the approaches (immediate near-shore zone) in the vicinity of the turtle-nesting beach on the north side of Camayan Point.

Sustainable Use Zone - Terrestrial (SUZ-T)

The SUZ-T extends over the major portion of the remaining terrestrial forest environment lying between the CEZ-T to the east and the foreshore of Subic Bay to the west. The SUZ-T also extends (wraps) around the edge of the CEZ-T and creates a buffer of high conservation and low usage. The SUZ-T includes the remaining intact forest environment running down from the higher inland slopes down to the foreshore. This zone extends around several areas of intense development and small nodes of infrastructure and land use activity, as does the forest ecosystem itself. The SUZ-T is critical in landscape and scenic terms, providing the major visible forest backdrop to the SBFZ.

The SUZ-T also features a further sub-zone defined as ‘Forest Ecosystem Corridor’. The corridors represent an extension of the core environment of the PA (the CEZ) and both illustrate and reinforce the concept of functional and biological linkage within the ecosystem, from the ridge tops to the marine environment.

Sustainable Use Zone – Marine (SUZ-M)

The SUZ-M extends over the ‘outer’ portions of the marine part of the SBPA on either side of the CEZ-M, and in the vicinity of Nagcaban Point. The SUZ-M provides a buffer to zones featuring more important habitat value. It includes open water areas with less critical habitat values where higher levels of sustainable activity can occur.

Restoration Zone – Terrestrial and Marine (RZ-T) (RZ-M)

The RZ-T includes a number of locations with either partially or extensively degraded/modified environments, but that owing to either their location or the habitat type involved, have a high priority for restoration. The areas include an extensive re-forestation area in the vicinity of the Pastolan community, mangrove communities on the foreshore, and portions of the former naval magazines. A number of non-specific restoration zones in the south of the CEZ-T are also identified.

Habitat Protection Zone – Terrestrial (HPZ-T)

The HPZ-T extends over the important mangrove habitat areas within the PA. These are ‘primary producer’ ecosystems of great interest and scientific value. In addition, they are important habitats for a range of fauna (terrestrial and aquatic), and as such represent a vital ecosystem linkage between the terrestrial and marine environments. An additional nominated HPZ-T is the bat roost area, which has significance as a habitat of international importance within the SBPA. The HPZ-T zone also specifically identifies and covers the major watercourses that extend through the SUZ-T.

Habitat Protection Zone – Marine (HPZ-M)

The HPZ-M covers an extensive area of marine ecosystem in the Ilanin and Triboa Bay location. This area could be considered a CEZ-M, however due to the existence of foreshore developments and existing activity nodes the total restriction of a CEZ-M is impractical. Hence, a priority is placed on marine habitat protection. Due to the partial embayments and shallow waters this portion of the marine environment is not particularly well flushed and is therefore potentially vulnerable to the effects of pollution entering the marine system. This is particularly important in this location, due to the integrity of the unique remnant coastal landscape; which forms a reasonably well contained (i.e. discrete) visual catchment of the forested ocean foreshore. It is of heritage significance to the Philippines.

Recreation Zone – Terrestrial (REZ-T)

Within the SBPA there are both existing recreation/tourism developments as well as formerly modified sites with excellent potential to provide sites for appropriate recreational development. It is important to recognize both the legitimacy of existing appropriate recreational activities within the SBPA and to enable the provision of additional sites suitable for eco-tourism and other nature based recreational activities/developments. The RZ-T zones include the naval magazine sites, the Golf course and equestrian center/club at Binictican, and two small ‘industrial’ sites. It also includes a specific node in the Hill 394 location. This is the cleared summit of Hill 394, which is identified as an eco-tourism development node allowing the potential for acceptable visitor ‘penetration’ into what is otherwise a restricted access zone.

Recreation Zone – Marine (REZ-M)

Marine environments can attract highly impacting motorized water sports and recreational activities. The REZ-M is designated to provide an area for such high impacting pursuits where there will be little or no impact on other users of the environment, or the marine habitats themselves. The location of the REZ-M in the vicinity of the airport further out into the open waters of Olongapo Bay/Subic Bay is located to accommodate ‘open water’ marine recreational activities.

Multiple Use Zone (MUZ)

The MUZ is principally confined to two locations in the northern and eastern portion of the SBPA, and which cover areas of largely cleared, open country with varying vegetation cover (remnant vegetation cover, particularly along streamlines and larger watercourses). In particular the larger MUZ covers an area identified for ‘multiple use’ in the Pastolan Aeta strategy plan. The intent is to designate appropriate areas that have been subjected to change and are supporting a variety of land use activities, to recognize the need to accommodate such activity, but within a consistent framework of SBPA control and management.

Special Use Zone (SPZ)

A dilemma was presented by the existence of intense and conflicting land uses. Ideally they would be placed outside the SBPA, and more appropriately occur within a buffer zone, as for example is the case with the airport and Subic Port developments (e.g. the proposed container terminal). However, because the natural processes and important environments of value (e.g. mangroves, rivers/streams) extend around and beyond some other of these land use developments (e.g. Binictican residential area, Cubi tourist area), it was considered essential for their inclusion within the SBPA.

The SPZ is therefore designated to cover the major areas of ‘non-conforming’ land use that exist within the designated SBPA outer boundary. The zone effectively separates out the industrial park, some foreshore commercial land use activities, hospital complex, residential and tourist accommodation areas, etc. The purpose of the SPZ is to alienate these activities and land uses from the SBPA, but designate them to a zone that allows some level of control over them to ensure they have the lowest impact possible upon SBPA values.

7.0 ZONING GUIDELINES

To effect control through the designated management zones requires guidelines to direct management activity and the control of human use activities. This advice is provided in Volume 3, in the form of zoning guidelines. The zoning tables provide advice on the appropriate management approach for each zone. This includes advice under the following headings:

1. management emphasis;
2. management objectives;
3. management tasks; and
4. management activities.

In addition, the tables identify permitted and prohibited activities in each zone. This is essential advice and guidance to direct the SBPA management activities. In most instances the statement of permitted and prohibited activities is supported with information on necessary ‘performance criteria’ or ‘site design guidelines’.

The zoning guidelines therefore represent principal advice to the PAMB in guiding management, human use, and proposed activities within the SBPA.

8.0 MANAGEMENT STRATEGIES

The purpose of the management zones is to provide a zonation system to coordinate overall management of the physical resource. However, to implement the management of the SBPA requires many actions at many levels. This includes management strategies to direct subsequent programs and actions.

Volume 2, Chapter 6, outlines the main management strategies. These fall under the headings as follows:

Resource and ecological management strategies

1. Balancing resource protection and development
 - Forest ecosystem protection
 - Maine environment protection
 - Protective buffers
2. Strategy on corporate commitment to balanced development
3. Restoration and rehabilitation of degraded environments
4. Research and monitoring

Stakeholder and community involvement strategies

1. Community based resource management
2. Establishment of non-destructive livelihood and investment alternatives
3. Information, education and development communication
4. Participatory planning and management

Organizational management strategies

1. Capability building
2. Institutionalization of PA management systems
3. Financial resource mobilization
4. Traffic management

9.0 PROGRAMS AND PROJECTS

As stated above the management strategies lead to numerous programs and projects for implementation by the PAMB. These are presented in Volume 4 of the SBPAMP. The programs and projects are presented in common format providing summary advice on

basic objectives, program content and project parameters. The headings used are as follows:

- Project name
- Type
- Objectives
- Description
- Participants and beneficiaries
- Responsible organization for implementation
- Cost and time-frame

The projects and programs will require further planning and project design before execution, and this further step is seen as vital parts of the establishment and implementation phases. Detailed action plans will follow from various programs and projects. Establishment of the overall PAMB organization will also be required. Hence some projects, especially those to do with administration and organization, will occur early on while others, particularly those associated with aspects of stakeholder involvement and alternative livelihoods, will be scheduled to occur over time.

10.0 MANAGEMENT STRUCTURES AND INSTITUTIONAL ARRANGEMENTS

One of the most complex aspects of the SBPAMP study and establishment of a PAMB has been to do with institutional options for establishing a management structure under Philippines law.

The management options for the Subic Bay protected area was derived from two scenarios: one, that the protected area is placed under the NIPAS law, and two, that the protected area is placed outside the coverage of the NIPAS law. A third possible option emerges from the assumption that the SBPA is an exception to the DENR responsibility under Section 15 of the NIPAS law. This latter option is endorsed by the TWG and has been adopted by the SBMA Board of Directors on September 7, 2001.

In the spirit of the SBPA being treated as an exception, SBMA also feels justified in deviating from the DENR guidelines in as far as the management body and the funding scheme are concerned. **Regarding the management body for the protected area, SBMA Board has opted to act as one.** The need for broad representation from all identified stakeholders as contemplated in the NIPAS law will be achieved through the creation of a SBPA Policy Advisory Committee. Details of this management structure are discussed further in Section 8.5.2 of Volume 2. On the matter of funding scheme, again, in the spirit of its being an exception, all revenues accruing to the protected area shall be retained and administered by the SBMA. Details on this scheme are taken up in Volume 5 of the SBPAMP report.

11.0 BUDGET AND FINANCING PLAN

The SBPAMP requires a budget and financing plan that will provide for the realistic and practical operation of the SBPA and PAMB. Explicit in this is recognition that the SBPA must be conceived of as a 'economic entity'; in other words, the financial position of the SBPA must be secured for it to succeed. This volume presents the overall establishment (capital) costs for the SBPA/PAMB, and the operational costs. This includes the financing implications of the various programs and projects identified in Volume 4.

However, the budget and financing plan, presented in Volume 5, also presents information explaining the overall economic benefits of the SBPA to the Subic regional economy. Information and estimates are presented to explain effect of economic multipliers into the regional economy. The clear message is, that if the SBPA is successfully implemented, extremely significant and sustained economic/revenue benefits to the SBMA and regional economy can be anticipated. The figures demonstrate that investment in the SBPA could prove to be one, if not the most, important 'investment' to be made in the Subic Freeport Zone. The ongoing operational costs of the SBPA/PAMB (not including revenue gains and multipliers) are estimated, at this stage, to be approximately 1.5% of the current total operational costs of the SBMA. This is not a high figure considering the potential gains.

The value of the annual consumer surplus for nature-based tourism in Subic Bay area is estimated to be in the vicinity of Php 1.0 billion (US \$19 million) based on 1995-2000 tourism statistics. Taking into account a relatively low tourism expenditure impact multiplier (of 1.03), the potential yield for substantial financial resources to the economy is extremely significant.

There are two options for financing SBPA. One option recommends the establishment of a Subic Bay Heritage Fund (SBHF) that will operate to cover direct project funding (also channeling grants and loan funds), and land banking activities. The SBHF will absorb substantial amounts of money from local and international sources and release them as reliable and sustainable cash flows, in perpetuity. Identified potential funding sources included:

- Shares in revenues from revenue-generating sources in the SBFZ
- Establishment of a trust fund
- Infrastructure loan packages
- And debt-conversion instruments for development, ecotourism, endowments, education, nature protection, and research.

The plan also provides for an Environmental Advantage Fund (for public and private partnerships, etc) and a Financial Advantage Fund (to serve as a long-term source of finance for conservation and sustainable development). A variety of other fiscal generating and management arrangements are also recommended.

Another implementation option is to treat the management of the Protection Area as a special project of the SBMA. As a special project under the Ecology Center, it will be given annual appropriations and funding by the SBMA, thus assuring the regular flow of funds. Estimated financial requirements to implement proposed development projects

including park administration, research and development, forest and marine resource management, monitoring, and livelihood strategies are:

Year 1:	91,500,000 Php (Philippine pesos)
Year 2:	67,300,000 Php
Year 3:	69,800,000 Php
Year 4:	33,500,000 Php
Year 5:	33,500,000 Php

A detailed breakdown of these estimated costs is provided in section 3 of Volume 5. As an SBMA special project, it is envisioned that the project activities will be better synchronized with the other SBMA projects and activities.

Aside from regular SBMA funding, the Protection Area Management may also receive grant funds. Grant funds may be channeled to SBMA specifically for the special project, with grant agreements to be entered into between the donor agency and SBMA.

In a regular meeting of the SBMA Board on September 7, 2001, the latter option was approved.

12.0 MONITORING AND ENFORCEMENT

A critical aspect of protected area management is monitoring and enforcement.

First, it is essential for systematic collection of information of the various ‘dynamic’ components of the SBPA in order to understand what is there (i.e. baseline surveys) or what is occurring, and what changes are taking place. This information is essential in order to be able to manage the ‘system’.

Monitoring is therefore concerned with the physical and biological parameters of both the marine and terrestrial system, and with the socio-economic dimensions of the SBPA. The former includes all aspects of the ecosystem, both geophysical (abiotic) and living (biotic – flora and fauna). The latter includes key economic (tourism investment in SBFZ, investment in the SBPA, etc) and social (demographic, visitor, tourist, stakeholder participation, etc) aspects. Much information will be quantitative, but qualitative information is also important.

Advice provided in Volume 6 includes the principles of designing and executing monitoring program; monitoring must not be prescriptive and inflexible, but should flexibly adapt to the management needs of the SBPA.

Once collected, monitoring data must be kept in a suitable ‘management information database’ that allows efficient storage and retrieval. This database will be part of the integrated information management and communications system of the SBPA/PAMB.

An **enforcement** action plan is recommended that addresses the key areas of effective enforcement. These include surveillance, rangers, and both physical and legal

enforcement. Volume 6 explains that enforcement is much more than a simple policing, controlling and apprehension function. It also involves various preventative techniques to modify behavior and pre-empt illicit activities. Nevertheless, in the last resort, effective control and policing, often under difficult and dangerous conditions, is an absolute necessary and requires a high level of training and operational support. The role of private sector stakeholders in enforcement is also described.

13.0 ALTERNATIVE LIVELIHOOD PLAN

The final major component to the PAMP is concerned with the development of alternative livelihoods for selective communities in the uplands, lowlands and coastal areas of the SBFZ. The communities selected are recognized to be disadvantaged and often marginalized, the outcome of which is they generally survive by exploiting the natural resources with inappropriate and ineffective practices which have high impacts on the environment, and that are seldom sustainable. In short, these communities are pressed by a need to survive and pose a high threat to the sustainability of the SBPA and environmental quality generally.

The SBPAMP therefore provides sophisticated by practical advice on programs to educate these communities, to train them and set up new livelihood ventures that are environmentally integrated, and that are economic feasible and viable. This is represents a key part of the SBPAMP, and an essential initiative.

14.0 RECOMMENDATIONS

The SBPAMP is an innovative document providing advice that is practical and effective, in order to achieve the joint objectives of protecting the internationally significant values of the Subic terrestrial and marine environment, while also greatly strengthening the future economy and investment potential of the SBFZ. It is, of necessity, not a simple documentation, because the task itself is not simple. However, properly implemented a successful SBPA will reap significant environmental, social and economic benefits to the Subic community and the Philippine nation. It is therefore essential that, having demonstrated a major commitment to proceed with the preparation of the SBPAMP, the SBMA and associated stakeholders continue on with the implementation of this internationally significant undertaking.

14.1 Tasks for PAMP Implementation

The following is a summary of the principal recommendations contained in Chapter 6 of Volume 2, which deals with the PAMP strategies. It summarizes the main actions facing the PAMB/SBMA in implementation of the SBPA. From these are derived the majority of the PAMP projects and programs presented in turn in Volume 4.

It will be necessary for the PAMB/SBMA to determine action priorities in the implementation phase, prior to the operational phase. A preliminary priority list is

provided at the end of this section. The accompanying figure (Plan Implementation) illustrates the generalized planning process and sequence of major activities associated with the strategic development and planning phases of the protected area. The figure gives context to the initiatives undertaken to date (i.e. the strategic PAMP preparation) and the large number of diverse tasks that must be undertaken in the implementation and operational phases. It also helps clarify the difference between implementation and operations.

Balancing resource protection development:

General

- SBMA, through the PAMB, Board of Directors, and all departments, should initiate the overall management tasks for the SBPA and the administration of the buffer zone, a philosophy, set of principles, policies, statutory controls and operational procedures that achieve both regional environmental protection as well as sustainable economic development, as provided for in the SBPAMP.
- The PAMB for the SBPA should immediately establish a mechanism for the Protected Area Management Division of the Ecology Center to review all proposed developments to ensure that they conform to the SBPAMP.
- The Ecology Center, with appropriate support, should initiate training program for rangers and SBMA law enforcement regarding SBPAMP restrictions and the rationale for this protection.
- The SBMA should enter into a Memorandum of Agreement with the Aeta of Pastolan for the management of lands under their joint jurisdiction.
- An enforcement plan should be developed that involves support and integration of private sector entities such as the Coast Guard Auxiliary, and the Subic Bay Chamber of Commerce, and individual locators (e.g., Ocean Adventure).

Forest Ecosystem Protection

- Identify all forest ecosystem disturbances and incorporate information into the LRIS database.
- Undertake a systematic examination of the reasons agents of forest destruction exist, investigate the possible solutions that might be applied to resolve or eliminate them.
- PAMB and SBMA develop a forest protection action plan for joint/cooperative implementation of forest ecosystem protection across the wider region.

Marine Environment Protection

- Develop environmental protection policies and management programs that treat the marine environment as an ‘open system’ and recognize that no part of the marine environment can be isolated from the wider system.
- Implement research and investigations into critical aspects of the marine environment and surface water systems in order to identify the critical aspects of the system requiring protection, and determine priorities.

- Develop controls on land use development and polluting activities in the terrestrial catchments that affect water quality entering the marine environment.
- Implement programs engaging local fishermen and coastal communities in the re-stocking, management and protection of fisheries.
- Implement community and industry educational and awareness changing programs in order to gain support for marine protection and fishery management programs.

Protective Buffers

- PAMB take specific action to consult, liaise and coordinate with all organizations and stakeholder groups having control or influence over activities within the buffers so that agreement can be reached on practical ways in which better environmental protection can be achieved.

Strategy on Corporate Commitment to Balanced Development

- PAMB take all actions necessary to support the implementation of strategic organizational change initiatives currently underway in the SBMA.
- PAMB provide advice and training to staff and management of the SBMA to improve environmental management and protection capabilities throughout the organization.
- PAMB emphasize assist in developing the capabilities of the Ecology Center as the planning and development control arm of the SBMA.

Restoration and Rehabilitation of Degraded Habitats

- Undertake a systematic identification and assessment of degraded habitats.
- Prioritize habitats for restoration/rehabilitation on the basis of habitat significance, suitability for Assisted Natural Regeneration, and cost.
- Secure budget provision to undertake restoration/regeneration activity.
- Implement restoration programs on a continuing basis.

Research and Monitoring

- Develop a comprehensive monitoring program that focuses on key ecological values and processes.
- Undertake a research program into methods for enhancing the economic value of ecological resources to the local communities.

Information, Education and Development Communication

- PAMB will, as soon as possible following establishment, prepare a comprehensive information, education and communications strategy.
- Recruit or gain access to specialist staff in the areas of public relations, science education, instructional learning, field extension and training, and fund raising.
- Recruit or gain access to specialist staff in the areas of IT, computer technology, web site design/operation, and GIS/computer graphics.

- Recruit or gain access to specialist staff in the areas of rangers, field enforcement, visitor management, crisis communications.
- Acquire and maintain equipment suitable for various aspects of developing a comprehensive information, education and communications strategy.

Establishment of Non-Destructive Livelihood and Investment Alternatives

- Establish an Investments Promotion Office, with the purpose of identifying investment opportunities and incentives to investors, encouraging interest in the investment community, and providing information, liaison and support to prospective investors.
- Develop a program of special incentives to enterprises incorporating direct community participation.
- Develop and provide information materials and marketing collaterals to promote investment opportunities.
- Undertake intensive market development of the wide range of tourist products in order to penetrate the different segments of the overall tourism market.

Community and Non-Formal Livelihood Alternatives

Upland Communities

- Strengthen and expand the regenerative approaches and activities, in particular reference to plantation and agro-forestry, reforestation, cash crop production, and orcharding.
- Limit extraction activities.
- Promote high value crops with potential for processing and value adding.
- Promote and utilize appropriate technology.
- Establish distribution and marketing centers for varied products in SBMA, Subic and Olongapo.

Lowland Communities

- Generate land-based enterprises to decrease dependency on forest resources.
- Strengthen livelihood skills of residents.

Lowland-Upland Communities

- Promote buffer zones and the existing laws for flora/fauna protection.
- Identify appropriate mediums for communication to communities, and access formal education to assist attainment of improved levels of education and employment.
- Develop scholarship and trainee-ship programs, including with special integrated programs between Aeta and international community schools (e.g. Brent School, Binictican).

Coastal Communities

- Identify non-destructive livelihood activities that are sustainable (e.g. ecotourism, community based resource management).
- Link coastal community livelihood/economic activities into the adjacent commercial centers (Olongapo and Subic).
- Develop appropriate vocational and technical skills and training programs at the SBMA, TESDA, TLRC and at other technical schools in the area.
- Forge linkages with industry and companies to capture business arrangements and sub-contracting activities.
- Strengthen the presence of NGOs and other foundations to provide support to communities.
- Support LGU livelihood projects (financial, personnel, logistic, etc)
- Establish organizational support and project mechanisms.

Community Based Resource Management

- PAMB appoint staff, initiate studies and take steps to implement CBRM programs for the benefit of the natural resource dependent communities in and around the PA.
- PAMB implement this program in conjunction with other appropriate strategies and programs (e.g. community participation, capability building, etc).

Promotion of Indigenous People's Rights

- PAMB take all reasonable action to advance the cause and interests of indigenous people, and implement the provisions of the law in connection with the granting of Ancestral Land Title to the Pastolan Aeta.
- PAMB and SBMA to undertake various actions, including dedicating appropriate finances to implement the Indigenous Peoples Development Plan, maintain consultation and dialogue, implement capability programs, formulate agreements and contracts that incorporate sustainable development and management practices.

Capability Building

- Develop strategies for capability strengthening through establishment of appropriate organizational structure and functions.
- Use appropriate techniques to establish a productive process of organizational development.
- Undertake focussed capability strengthening strategies aimed specifically at staff, equipment and procedures

Institutionalization of PA Management Procedures

- Establish a suitable organizational structure and function which provides for the core PA management activities of Design, Planning, Operations, and Administration.

- Ensure that the internal structure is compatible with the SBMA structure and functions.

Participatory Planning and Management

- Establish within the PAMB a high level stakeholder awareness, and suitable skills and mechanisms for engaging stakeholder involvement.
- Undertake stakeholder/community participation and consultation programs on a systematic basis.

Financial Resource Mobilization

Use of Resource Management Approach

- Develop and implement a resource management approach that utilizes the social and economic benefits from sustainable use of the protected areas as a powerful incentive for the community of Subic Bay to conserve the overall natural resource base of the area.
- Promote the traditions of local communities as part of the resource base of the region.
- Provide economic, institutional, biological and other technical assistance.
- Develop community-level education programs relevant to sustainability of the natural resource base of the region.
- Develop sustainable use projects with the communities of the protected area and buffer area to demonstrate successful alternative approaches.
- Assist in developing markets, and promoting access to those markets.

Fair Cost Sharing Mechanism.

- Establish a fair cost-sharing mechanism for financing proposed development project packages.

Traffic Management Strategy

- Prepare a SBPA access plan that incorporates strategic control points allowing control over both visitor and through traffic for purposes of monitoring, gate/turnstile fees, and traffic management.
- Develop a traffic circulation strategy for the SBPA.
- Prepare a long-term plan for vehicle parking, and park-and-ride multi-modal transport system for visitors to the SBPA tourist facilities.
- Prepare a long-term strategy for implementation of a ‘through traffic’ transport option based on an ecological planning approach (tunnel and bridge options).

14.2 PRIORITY IMPLEMENTATION ACTIONS

Initial Tasks

There are a series of initial tasks that should be considered early on in the operational phase. The following task list assumes that organizational, budgetary, staffing and equipment requirements are in place, or in the process of being provided. The tasks, in no particular order, are as follows.

- Receive and adopt the overall SBPAMP as the guiding instrument for establishment, implementation and ongoing management of the SBPA, and operations of the proposed PAMB.
- Adopt the Vision Statement and Mission Statement for the proposed SBPA
- Proceed with the outlined process for final plan approval and adoption as provided for under Section 7 of SBPAMP Volume 2.
- Draft MOUs with the local government organizations to secure the necessary institutional and legal frameworks for cooperation in implementing the PAMP.
- Draft an MOU with the Bataan Natural Park to secure the necessary institutional and legal frameworks for cooperation in implementing the PAMP.
- Localizing the PAMP to ensure integration of future actions with the various LGU stakeholders in the Subic Bay region.
- Signage (planning, design and installation) – evidence that the SBPA is a reality should be established in the minds of the community by use of signage. These should be installed at all road and track entrances to the SBPA and at all major visitor venues, as soon as possible.
- Boundary markers and buoys – the SBPA boundaries (outer SBPA boundary and management zone boundaries) both terrestrial and marine, must be physically/visually established. This is vital for management and enforcement purposes. Marker buoys for the marine boundary can use existing marine markers where appropriate. New markers will require specific marine engineering.
- Immediate moves to stop all unacceptable and unauthorized activities taking place in the designated SBPA. For uses or activities that are ‘conflicting’ and can be readily moved, immediate negotiations should occur to achieve early relocation.
- Validate survey of existing land uses within the SBPA and register those activities. It is vital to confirm as quickly as possible the inventory of all activities occurring, including their status and characteristics.
- A review of all management zones to determine the status and condition of each, in order to designate priorities for management action in the immediate period.
- All ‘stakeholder activities’ within the various ‘recreation’ management zones to be surveyed and documented, with intention for rapid appraisal of potential (or otherwise) for cooperative ventures, functions, and mutual interests meeting various PAMP objectives.

14.3 PRIORITIZATION OF STRATEGIES

All strategies are of equal importance in achieving the overall aims of protected area management. However, as with the initial tasks certain strategies (listed above) should be

pursued at different stages of SBPA establishment and during the operational stage. Suggested priorities for taking action are as follows.

First Priority *(at or before the commencement of the Operational Phase):*

- Capability building
- Institutionalization of PA management procedures
- Financial resource mobilization
- Promotion of Indigenous People's Rights

Second Priority *(as soon as possible after the Operational Phase has commenced and the PAMB organization has been established and consolidated)*

- Information, education and development communication
- Participatory planning and management

Third Priority *(early after the Operational Phase has commenced, and when organizational systems are in place and functioning)*

- Restoration and rehabilitation of degraded habitats
- Research and monitoring

Fourth Priority *(as funding and staff capability become available)*

- Balancing resource protection and development
- Establishment of non-destructive livelihood and investment alternatives
- Community based resource management
- Traffic management strategy

LIST OF ACRONYMS USED IN THE PAMP

A

A & D	-	Alienable and Disposable
ADB	-	Asian Development Bank
AEs	-	Assessment Endpoints
AFMA	-	Agriculture and Fisheries Modernization Act
AIT	-	Asian Institute of Tourism
ANR	-	Assisted Natural Regeneration
AO	-	Administrative Order
As	-	Arsenic

B

BCDA	-	Bases Conversion and Development Act
BCMTP	-	Broad-Based Coastal Management Training Program
BCR	-	Benefit Cost Ratio
BFAR	-	Bureau of Fisheries and Aquatic Resources
BMS	-	Business Management System
BNP	-	Bataan Natural Park
BSWM	-	Bureau of Soils and Water Management

C

CADD	-	Computer Aided Drafting and Design
CADT	-	Certificate of Ancestral Domain Title
CARL	-	Comprehensive Agrarian Reform Law
CARP	-	Comprehensive Agrarian Reform Program
CBFM	-	Community Based Forest Management
CBFMP	-	Community Based Forest Management Project
CBRM	-	Community Based Resource Management
CCFS	-	Certificate of Community Forest Stewardship
Cd	-	Cadmium
CENRO	-	Community Environment and Natural Resources Office/Officer
CEZ-M	-	Core Ecological Zone – Marine
CEZ-T	-	Core Ecological Zone – Terrestrial
CFP	-	Community Forestry Program
CFSC	-	Community of Forest Stewardship Contract
CITEM	-	Center for Innovative Technologies and Market
CITES	-	Convention on the International Trade in Endangered Species of Wild Fauna and Flora
CLUP	-	Comprehensive Land Use Plan
cm	-	Centimeter
CO	-	Community Organization
CPPAP	-	Conservation of Priority Protected Areas Project
CSC	-	Certificate of Stewardship Contract
CSEZ	-	Clark Special Economic Zone
CTD	-	Current, Tide, Depth meter

Cu - Copper

D

DA - Department of Agriculture
DA - Deputy Administrator
DA-NAFC - DA National Agriculture and Food Council
DAO - Department of Environment and Natural Resources
Administrative Order
DAR - Department of Agrarian Reform
DBP - Development Bank of the Philippines
DECS - Department of Education, Culture and Sports
DENR - Department of Environment and Natural Resources
DENR-MPC - Department of Environment and Natural Resources – Mount
Pinatubo Commission
DO - Dissolved Oxygen
DOH - Department of Health
DOJ - Department of Justice
DOST - Department of Science and Technology
DOT - Department of Tourism
DPWH - Department of Public Works and Highways
DQO - Data Quality Objectives
DSWD - Department of Social Welfare and Development
DTI - Department of Trade and Industry

E

EC - Ecology Center
ECC - Environmental Compliance Certificate
EIA - Environmental Impact Assessment
EIS - Environmental Impact Statement
ENE - East North East
ENR - Environment and Natural Resources
ESE - East South East

F

FAD - Fish Aggregating Device
FARMC - Fisheries and Aquatic Resource Management Council
FR - Forest Resource Management
FPE - Foundation for Philippine Environment
FPRDI - Forest Products Research and Development Institute

G

GAEs - General Assessment Endpoints

- GATT - General Agreement on Tariffs and Trade
- GEF - Global Environment Facility
- GIS - Geographic Information System
- GMPS - General Management Planning Strategy
- GOP - Government of the Philippines

H

- HQ - Headquarter
- Hg - Mercury
- HRD - Human Resource Development

I

- ICAIPUS - Integrated Communal Agro-Industrial Program for Upland Settlers
- ICC - Indigenous Cultural Communities
- ICM - Integrated Catchment Management
- ICMPA - Integrated Catchment Management Policy Areas
- IEC - Information, Education, Communication
- IECA - Information, Education, Communication Area
- IFARMC - Integrated Fisheries and Aquatic Resource Management Council
- IFMA - Industrial Forest Management Agreement
- IGP - Income Generating Project
- ILTER - International Long Term Ecological Research
- IPDP - Indigenous People's Development Plan
- IP - Indigenous People
- IPAF - Integrated Protected Areas Fund
- IPRA - Indigenous People's Republic Act
- IS - Institutional Strengthening
- ISF - Integrated Social Forestry
- IRR - Internal Rate of Return
- (SBMA) IRR - (SBMA) Implementing Rules and Regulations
- IUCN - International Union for the Conservation of Nature and Natural Resources

J

- JBIC - Japan Bank for International Cooperation
- JEST - Jungle Environmental Survival Training

K

- km - Kilometer

L

LES	-	Livelihood and Enterprise Section
LGC	-	Local Government Code
LGU	-	Local Government Unit
LD	-	Livelihood Development
LIVECOR	-	Livelihood Corporation of the Philippines

M

m	-	Meter
M	-	Marine
m ²	-	Square Meter
MC	-	Memorandum Circular
Meralco	-	Manila Electrical Company
Mg/L	-	Milligrams Per Liter
MIB	-	Management Information Base
MIN	-	Mango Information Network
MIS	-	Management Information System
MOA	-	Memorandum of Agreement
MO	-	Memorandum Order
MPA	-	Marine Protected Area
MPDO	-	Municipal Planning and Development Office
MPI	-	Marginal Propensity to Import
MPS	-	Marginal Propensity to Save
MR	-	Marine Resource Management
MSL	-	Mean Sea Level
m/s	-	Meter Per Second
MUZ	-	Multiple Use Zone
MW	-	Megawatt

N

NavMag	-	Naval Magazine
NCICM	-	National Course on Integrated Coastal Management
NCM	-	Normal Cubic Meter
NEDA	-	National Economic and Development Authority
NCIP	-	National Commission on Indigenous Peoples
NGO	-	Non Governmental Office
NIPAS	-	National Integrated Protected Areas System
NLUC	-	National Land Use Committee
NNE	-	North North East
NO ₂	-	Nitrogen Dioxide
NO ₃	-	Nitrogen Nitrate
NP	-	Natural Park
NPA	-	New Peoples Army
NPPF	-	National Physical Framework Plan

- NPV - Net Present Value
- NW - North West

Q

- OD - Organizational Development
- OGA - Other Government Agencies

P

- PA - Protected Area
- PA (project code) - Park Administration
- PACP - Property Acquisition and Compensation Plan
- PAD - Protected Areas Division
- PAFID - Philippine Association for Intercultural Development
- PAMB - Protected Area Management Board
- PAMO - Protected Area Management Office
- PAMP - Protected Area Management Plan
- PAS or PASu - Protected Area Superintendent
- PASA - Protected Area Suitability Assessment
- Pb - Lead
- PCARRD - Philippine Center for Agricultural Resources Research and Development
- PCG - Philippine Coast Guard
- PD - Presidential Decree
- PENRO - Provincial Environment and Natural Resources Office/Officer
- PEQD - Permitting and Environmental Quality Division
- PG - Private Group
- pH - Potential of Hydrogen, particularly referring to alkalinity or acidity of solution
- Php - Philippine Peso
- PIA - Philippine Information Agency
- PNP - Philippine National Police
- PO - People's Organization
- PPFP - Provincial Physical Framework Plan
- ppt - Parts Per Thousand

R

- RA - Republic Act
- RAP - Resettlement Action Plan
- RED - Regional Executive Director
- REZ-M - Recreation Zone – Marine
- REZ-T - Recreation Zone – Terrestrial
- RIR - Resource Inventory Report
- RM - Research and Monitoring
- RPF - Regional Physical Framework Plan
- RTZ-M - Restoration Zone – Marine

RTZ-T - Restoration Zone – Terrestrial

S

SAFDZ - Strategic Agriculture and Fisheries Development Zones
SBFZ - Subic Bay Freeport Zone
SBMA - Subic Bay Metropolitan Authority
SBME - Subic Bay Marine Exploratorium
SBNP - Subic-Bataan Natural Park
SBPA - Subic Bay Protected Area
SBPAMP - Subic Bay Protected Areas Management Plan
SBPAMPP - Subic Bay Protected Areas Management Plan Project
SDAO - Senior Deputy Administrator for Operations
SDD - Social Development Division
SIA - Social Impact Assessment
SKAP - Samahan ng Katutubong Aytas ng Pastolan
SPZ - Special Use Zone
SO₂ - Sulfur Dioxide
SOPs - Standard Operating Procedures
SUZ-M - Sustainable Use Zone – Marine
SUZ-T - Sustainable Use Zone – Terrestrial
SWFR - Subic Watershed Forest Reserve
SW - South West

T

T - Terrestrial
TA - Technical Assistance
TESDA - Technical Education and Skills Development Authority
TIM - Tourism Income Multiplier
TLRC - Technology and Livelihood Resource Center
TPI - Tourists' Propensity to Import
TWG - Technical Working Group

U

UDHA - Urban Development and Housing Act
UNDP - United Nations Development Programme
µg/NCM - Microgram Per Normal Cubic Meter
µg/m³ - Microgram Per Cubic Meter
UP - University of the Philippines
UP AIT - University of the Philippines Asian Institute of Tourism
UPLBCFNR - University of the Philippines at Los Banos – College of Forestry and Natural Resources
US - United States
USEPA - US Environmental Protection Agency
UXO - Unexploded Ordnance

W

WB - World Bank
WD - Wheel Drive
WMD - Waste Management Division
WWF - World Wildlife Fund

Z

Zn - Zinc

COMMENTS ON THE DRAFT FINAL PAMP

A. ECOLOGY CENTER

Comment 1:

Volume 1: We note several typographical and grammatical errors in the report. We suggest that it be proofread again and rechecked for sentence construction and spelling. Among those we noted are:

- p. 2-1, 3rd paragraph – state correct meaning of BCDA
- p. 2-1, 4th paragraph, last sentence – please complete hanging sentence
- p. 2-4, 2nd paragraph, 2nd sentence – change 962 to 926
- p. 3-1, 3rd paragraph, last sentence – “Philippine Biodiversity: An Assessment and Action Plan”
- p. 3-14, - please change Kalakhan to Kalaklan
- p. 3-6, 3rd paragraph, 3rd sentence – should be “Of importance”
- p. 4-8, 1st sentence – change basis to basin
- p. 4-8, 5th paragraph – please change spelling of Olongopo to Olongapo. This applies to other volumes in the report.
- p. 4-8, last paragraph – please correct symbol of μ
- p. 4-10, last paragraph – should be connected to page 4-11
- p. 4-22 – please correct spelling of Marelalec. This applies to other volumes in the report.
- p. 9-11, sect. 9.2.3 – insert “of” for the Department of Natural . . .
- p. 10-2, 2nd paragraph, 2nd sentence – please change Matagan to Matain

Response:

The final document has been carefully edited to remove all typographical and grammatical errors.

Comment 2:

Volume 1: For all the maps, please change legends:

- From PPA 926 to PP 926
- From PPA 532 to PP 532
- PAMP Proposed Protected Area to Subic Bay Proposed Protected Area

Response:

Appropriate changes have been made to the designated maps.

Comment 3: Volume 1 Page 2-4, 1st paragraph, 1st sentence: please make it western Luzon. We still have other old growth forests in Luzon like the Sierra Madre.

Response:

“western” has been added to the text, as requested.

Comment 4:

Volume 1: Page 3-2, on bullet on Presidential Proclamation 24 – please remove “and the Municipality of Subic, province of Zambales”. Subic is not in BNP.

Response:

Zambales is correct. No change has been made.

Comment 5:

Volume 1: We suggest consistency in the usage of the name of the Subic forest, i.e. Subic Watershed and Forest Reserve (SWFR) throughout the report, and not SBFR or SBWR or SWFZ. This applies to all other volumes in the whole draft final report.

Response:

The name Subic Watershed Forest Reserve has been made consistent throughout the document.

Comment 6:

Volume 1: Page 3-4, under 3.2.4 – can you please cite the specific issuances, i.e. DAO No. for each of the bulleted guidelines?

Response:

DAO numbers have been provided for bulleted items.

Comment 7:

Volume 1: Figure 4 and page 3-10 – Please update approved and proposed future developments within SBFZ

Response:

Information in this Figure was provided to us by PMO-FAPO document. An undated list of projects has been obtained from the Planning and Development Department and used to update this figure.

Comment 8:

Volume 1: Page 3-10, under 3.4.3, last sentence – please change Executive Order to Proclamation.

Response:

Appropriate change had been made on the final document.

Comment 9:

Volume 1: Page 3-16, last paragraph – can we please omit dolphins? There were sightings before but they need to be validated.

Response:

The reference to dolphins has been removed from the text.

Comment 10:

Volume 1: Page 5-1, 1st paragraph – please change the last sentence to “Moreover, . . . it is one of the last virgin stand . . . in the Philippines.

Response:

The text has been changed to more accurately reflect the status and importance of this forest.

Comment 11:

Volume 1: Page 5-1, 4th paragraph, 2nd sentence – figures are not the same with the Resource Inventory Report Vol. II on page I.

Response:

The text has been modified to correct make the figures correct and consistent.

Comment 12:

Volume 1: Page 5-1, 2nd paragraph – where is Figure 15?

Response:

Figure 15 was inadvertently omitted from the draft document and has been added to the final version of the SBPAMP.

Comment 13:

Volume 1: Page 8-1, last paragraph – please complete information

Response:

Information in this paragraph has been completed.

Comment 14:

Volume 2: Same with Volume I, we noted several typographical errors. Kindly proofread again and make corrections accordingly.

Response:

Typographical errors have been corrected in all volumes.

Comment 15:

Volume 2: Please provide appropriate figure number for the maps.

Response:

Figure numbers have been provided for all figures in final plan.

Comment 16:

Volume 2: If Core Ecological Zone–Terrestrial is a highly restricted human use/activity zone, then in Table 5 on page 5-10, we should not include controlled and supervised forest wilderness trekking under permitted use, in the same token that any type of passive recreation is prohibited in this zone.

Response:

Supervised forest trekking has been removed as a permitted activity in the Core Ecological Zone in Table 5 on page 5-10.

Comment 17:

Volume 2: Also under the same Table 5, can you please give some examples of prohibited passive and active recreations, like you did in Table 7 on p. 5-18?

Response:

Examples have been added to the table.

Comment 18:

Volume 2: Allowing catch and release fishing in the Core Ecological Zone-Marine is contradictory to its being as the most restricted human use zone and if we are pushing for ecological integrity and unaffected biodiversity in that area. In the Philippines, there is really no such thing as catch and release fishing. Once the fish is caught, it's never released.

Response:

Catch and release fishing has been removed as a permitted use in the Marine Ecological Core Zone.

Comment 19:

Volume 2: Ducks and other waterfowls take refuge and feed on mangrove areas in Ilanin Bay and Triboa Bay. On RIR Vol.V, Ms. Vergara pointed out that any human disturbance in these areas will make the wildlife transfer and take refuge to other isolated coastal plains or they may just vanish at all. This reasoning of Ms. Vergara is in direct contradiction to your proposal to allow small boats activity like dinghy and kayak in the Habitat Protection Zone-Marine.

Response:

Further evaluation of this topic by SBMA Ecology Center has resulted in a modification to permitted uses in the mangroves to accommodate small boat use and protect waterfowl nesting sites. Appropriate modifications have been made in the text.

Comment 20:

Volume 2: Page 5-29, section 5.5.8, REZ-T – how about the beach areas? They were not mentioned as part of REZ-T nor REZ-M and were not reflected on the map.

Response:

All beaches are now recognized and included on the zoning map.

Comment 21:

Volume 2: Page 5-36, Table 14 – we recommend that powerboat racing and jetskiing not be permitted in this proposed zone. We have the existing jetskiing area along the Waterfront Beach. Can we indicate this in the map although it is outside the Protected Area?

Response:

The requested change has been made to the site map (Figure 13)

Comment 22:

Volume 2: Page 5-37, Table 15 – can we include the total area for RZ-T?

Response:

Table 15 has been modified to include total.

Comment 23:

Volume 2: Page 5-42, 2nd paragraph –have we not excluded the first MUZ from the SBPA because this will be part of the Subic Gateway?

Response:

Yes. Text has been modified to reflect this change.

Comment 24:

2: Page 5-45, 1st paragraph – if SPUZ is being defined as covering land areas and sites mainly with low ecosystem function, no biodiversity and low to nil habitat value, then the bat roost, JEST tourism, Technopark, Binictican Housing, Oil tank farm, and Hospital node shall not be included under this zonation because these areas have high biodiversity and high habitat values. This can be proven by the study of Dr. Dalmacio and Mr. Caleda wherein their sampling plots covered most of these areas.

Response: Appropriate changes for clarifications have been made to the referenced text.

Comment 25:

Volume 2: Page 6-6, Table 25 – the Institutional criteria and some of the priority rankings are not the same with Table 1 on page 4-8 of this volume.

Response:

Table 1 has been modified to be consistent with Table 25.

Comment 26:

Volume 2: Page 5-60 and 5-62, 2nd paragraph and 3rd paragraph, resp. – Pastolan Aeta Community Area is inside the SBPA and shall not be on this Terrestrial Sub-Zone 2 buffer.

Response:

The text has been made.

Comment 27:

Volume 2: Page 7-17, Organizational Chart – can we please include the updated existing organizational chart instead of the 1999 IPD Report?

Response:

Updated chart has been obtained from the Ecology Center and incorporated.

Comment 28:

Volume 2: Page 7-35, Section 7.3 – can we just include only what has been approved by the SBMA Board re the management structure and financial aspect of the PAMP and not elaborate on the other options?

Response:

As agreed in subsequent discussions with SBMA, descriptions of alternatives evaluated have been reduced.

Comment 29:

Volume 2: Page 7-45, Table 28 – please include Investment Processing Dept.

Response:

This change has been made.

Comment 30:

Volume 2: Page 7-46, Figure 37 – please include Land and Asset Development Dept. under the Technical Working Group

Response:

This change has been made.

The following are the comments from our Social Development Division for this volume:
General Comments:

Comment 31:

Volume 2: The volume alone is very comprehensive. It contains overwhelming information arranged mostly in bullet forms and clouded in technical jargons that even scholars may require long hours of concentrated reading for basic comprehension. As such, it may only be accessible to researchers and technical persons with interest in the field of environmental protection. For this reason, the challenge lies in creating a more reader-friendly text for the consumption of the general public to explain all that is needed to know about the protected areas management plan. This text (it may be in the form of a single book, pamphlet, multi-media presentation, etc.) must be an interesting and attractive medium to serve as a means for "social marketing" or "popularization" of the SBPAMP among all stakeholders especially during the Plan approval and adoption process. To say the least, the information and recommendations of the Plan are so urgent and important that they must be communicated in the best form possible. Besides, a lot of misunderstanding and conflicts about the plan may be avoided if it is presented in a way stakeholders could better appreciate, easily understand and absorb. For one, an effort has to be taken to reduce the thickness of the volume to save paper (for environmental reason) and for easier handling.

Response:

The document is indeed comprehensive. The purpose of this volume is to provide detailed, specific, and unambiguous guidance for management and enforcement of the protected area management plan. The document has been reviewed and technical jargon clarified to the extent possible without losing the meaning of standard planning terminology. A step toward making this information accessible to the public has been accomplished through the provision of an Executive Summary document. As indicated

in the SBPAMP, further communication of this document to the public is a task to be addressed during the implementation phase of this project.

Specific Comments:

Comment 32:

Volume 2: (p.2-1) On Vision and Mission Statement - The Vision statement in itself is sufficient but too complex and hard to remember. The Mission statement may be encompassing but too long and difficult to understand. In our opinion, Vision and Mission statement are general statements (popularly called inspiring "battle cries") that all stakeholders must identify with. Hence, they are more often phrased in substantial but catchy and simple form.

Response:

The vision and mission statements were developed with participation of stakeholders during project workshops and agreed to by workshop participants. While the vision statement is long and complex, it has been validated by stakeholders and captures essential components of the PAMP. The mission statement derives from the vision and can be modified during the implementation phase, as appropriate.

Comment 33:

Volume 2: The figures or Maps are presented in excellent form. But most figures don't have identifying number and some don't have title. This may create confusion since in the text part, they are often referred to as "see Figure 17".

Response:

Figure numbers and titles have provided.

Comment 34:

Volume 2: Use of incomprehensible technical jargons especially in Chapters 4 to 5 may limit understanding of concepts: e.g. "concentric management zonation" (p.4-2), "due to existence of foreshore developments and existing activity nodes" (p.4-15), "non-climax habitat types" (p.5-23), "due to bay morphology and benthic contours" (p.5-26).

Response:

See response to comment 31.

Comment 35:

Volume 2: In the discussion of management zones, planned infrastructure projects within the PA as raised in the last workshop by the Planning Department are not considered.

Response:

Time constraints did not permit incorporation of modifications of the text in response to PDO comments on road maintenance and upgrading into the draft SBPAMP. These changes have been incorporated into volumes 2 and 3 the final SBPAMP document.

Comment 36:

Volume 2: (p.6-8) For better appreciation of conceptual frameworks, the 14 management principles must be rationalized and explained in relation to the identified 10 strategies for SBPA implementation and management.

Response:

Text relating principles to strategies has been added.

Comment 37:

Volume 2: In page 6-12, capability building and institutionalization of PA management systems are not mentioned as among the ten strategies. These suddenly cropped up and were discussed in the proceeding section.

Response:

Text has been modified appropriately to address this comment.

Comment 38:

Volume 2: (p. 6-37) For consistency, CADT was awarded to the Pastolan Aetas on February 2, 2001, not December 2000.

Response:

The date of award has corrected in the text.

Comment 39:

Volume 2: In the presentation of the organizational structure of Ecology (p. 7-17), SDD as a division is missing but was discussed in the previous page. (P.7-16).

Response:

SDD has been added to this figure.

Comment 40:

Volume 2: The critical part of managing the PA on a long-term basis as discussed in Chapter 5 is the management of buffer zones. These are communities surrounding the PA (or technically the CEZs and SUZs), which at present are within the program scope of SDD. A Social Fencing Program has been proposed to the World Bank and if approved shall provide development interventions to communities identified in this volume as buffer. While PAD-EC was identified as the lead implementing unit for the SBPA, roles and responsibilities over these areas has to be clarified to avoid overlapping of functions.

Response:

SDD's role has been highlighted in the text, as requested.

Comment 41:

Volume 3: Our comments are basically the same as in Volume II with regard to the allowed and prohibited uses in some of the zones.

Response:

Volume 3 has been modified to make it consistent with changes made to volume 2.

Comment 42:

Volume 3: Page 3-24, Figure 6 – can we add Grande Island and Camachile Beach area as turtle nesting sites also?

Response:

All beach areas have been identified on the zoning map and all relevant figures. See response to comment 20.

Comment 43:

Volume 3: Page 3-29, Figure 7 – no legend identification for colored items on the map.

Response:

A legend has been added to this map.

Comment 44:

Volume 3: Page 3-39, Figure 9 – there is what we call “Putol mangrove” at Triboa that also needs to be emphasized.

Response:

This mangrove area has been added to Figure 9.

Comment 45:

Volume 3: Page 3-57 - please note that not the entire beach encircling Grande Island is a good/safe area for swimming. Safe area is the beach facing the airport and Camayan Point. Beach facing Redondo Peninsula and the open sea is a dangerous area because of presence of sharks and strong waves.

Response:

The swimming zone around Grande Island has been modified, as suggested.

Comment 46:

Volume IV, Volume V, and Volume VI No objection.

No response required.

Comment 47:

Volume 7: Again, several typographical errors have been noted. Please proofread again and make appropriate corrections. As a general rule in typing, always give two spaces after every period and one space after every comma.

Response:

The final version of all volumes is being edited by a professional editor to ensure correction of all indicated errors in the review draft document.

Comment 48:

Volume 7: On pp. 3-2 and 5-1, is SFPZ the same as SBFZ? Please be consistent in using SBFZ. On p.5-2, change SCAP to SKAP.

Response:

Appropriate changes have been made on the final document.

Comment 49:

Volume 7: Page 2-5, Lowland/Upland Community – The SBMA Chairman has already an existing scholarship project entitled “Felicito C. Payumo’s Scholarship Foundation”

Response:

This information has been added to the text of the final document.

B. PLANNING AND DEVELOPMENT OFFICE

The PDO has various concerns regarding the submitted Protected Area Management Plan (PAMP) specifically in the following areas;

- a) Finance Resource Requirements and Budget
- b) Management Zones

Likewise this paper will comment on several issues that we feel need clarification in relation to the SBMA Strategic Plan. Primarily, we requested for a more time for the final submission of comments in order for the department to put everything in record.

Most of the items raised here, with the exception of the several proposals on the management zone have been adequately raised by stakeholders in the consultation

meetings. Unfortunately, we feel that it is necessary to raise them again as we feel they were not properly addressed.

Comment 50:

Finance Resource Requirements and Budget

Overall, the proposed budget package is acceptable. However, we feel that the park administration should not corner a lions share of the budget. On the contrary, more public investments should be poured into Research and Development (R and D).

Also, some Php 71Million have been allocated to the institutional strengthening program. While we present no opposition to it, we feel that a good recruitment program will lessen the need for spending Php17.1M on more technical assistance and advisory services. These items already tripled what we allotted for the R and D component. The P10 M allocation for Comprehensive Training Program on Protected Areas Management over the next five (5) years would be more than sufficient to cover the management advisory needs of the administration.

On the matter of the institutional strengthening, we feel that the more prudent action is to hire experts on a permanent basis by allocating funds directly into the personnel services than on a project basis.

Response:

The key point is that institutional strengthening occur. The SBPAMP is not intended to be prescriptive. Resolution of this concern is more appropriately addressed during implementation.

Comment 51:

Protected Areas Management Zones - Implications for Subic development planning

PDO has had the opportunity to review written text and maps entitled “Management Zones Map w/Forest Corridor,” which summarizes draft recommendations for zonal treatment of the Protected Area Management project. We have participated in the dialogue that has been encouraged between the PAMP team and the Institutional Strengthening team organized through the Subic II loan project. Within the flow of that dialogue, which has touched on many aspects of the legal, organizational, administrative, financial, and institutional implications of the prospective Subic Bay Protected Area framework, we offer the following comments on the proposed zonal treatment because that study has important implications for comprehensive planning that we are conducting in support of SBMA’s development policies and practices for the Freeport. We know that the PAMP team shares our view of the importance that the Protected Area regulatory regime, as articulated through the “management zone” structure, will have on the development of territory within the Freeport Zone.

Our comments are based primarily in the policies and objectives contained in the “Strategic Plan—2001-2005,” adopted by the SBMA Board of Directors November 24, 2000. Chapter Four of the Adopted Strategic Plan addresses “physical development” issues by stressing the need for an energized physical planning approach. This approach identifies the need for a Comprehensive Plan for the SBMA-administered portion of the Freeport as an essential first priority for land use and infrastructure decision-making. Toward this end, the Strategic Plan organizes all of the territory within the former U.S. Naval facility (plus Redondo Peninsula) into ten “districts.” Seven of these districts overlap—in whole or in part—with the area contained inside the boundary line defining the “PAMP Proposed Area.” The Strategic Plan points toward the characterization of these areas in a forthcoming “Comprehensive Plan” by summarizing the salient development characteristics of six of these districts as follows:

- ***The Subic Gateway Area.*** *The Freeport’s “downtown” should be in an optimal place for successful trade and commerce. Subic Gateway, located at one terminus of the Clark-Subic Toll Road, is such a location. This new district will serve as a focal point for future commerce and professional office development. Corresponding areas (including the Royal Subic Mall shopping center & environs) will be re-analyzed to accommodate higher density urban uses, and possibly re-planned so that office buildings take the place of vacant factory parcels within Phase 2 of the Subic Bay Industrial Park (SBIP). The Gateway is the planned location for a convention-exhibition center and complementary budget hotels. Once these anchors prove successful, the land within a 1-km circumference of the convention center can be developed with hotels, offices, and a relocated shopping mall.*

- ***The Port Area.*** *This includes both seaport (NSD, Boton wharf, etc.) along with airport areas. Both are planned to experience significant change in the next 10 years. Portions of the airport are being re-planned in favor of maritime functions. The airport campus will shrink as several hectares of land on its north side will be redeveloped for a grain seaport and up to 40 hectares of Subic Bay will be reclaimed as land for development as a new container port.*
- ***Cubi-Triboa.*** *As of Year 2000, this area is home to Upper MAU Camp and Jest facilities, along with hotel and residential developments. Cubi-Triboa is attracting modest new residential development attention--a 195-unit residential community is being designed on 2 hectares near JEST's location as of late 2000. A district-level plan for this area is required to identify a balanced residential environment at Cubi heights and investigate the possible relocation of certain facilities such as JEST and Upper MAU accommodations to other parts of the Freeport.*

- **Forest West.** *Exciting natural resort communities will be planned within the western section of Subic National Park within this district. It will be planned to accommodate resorts and tourism along the coastline of the former Naval Magazine area south of Cubi-Triboa. In addition, it appears suitable for commercial tourism developments (animal reserves, eco-tourist enterprises, and adventure tours) in its landside precincts. Up to five or six additional attractions, each requiring between two and twenty hectares of land, are foreseen as being feasible in the zone east of Ilanin Bay.*
- **Forest East.** *This area is considered forest reserve, part of the national park.*
- **Kalayaan & Binictican.** *These housing areas possess approximately 330 unoccupied housing units as of mid 2000.*

Given that the Protected Areas project was in its early stages at the time of Strategic Plan adoption, the Physical Development strategy is anticipatory, as follows:

- **Protected Areas.** *SBMA is mid-way through its “Protected Area Management Project” (PAMP) that will describe new regulatory mechanisms to identify several classifications of protected areas as well as define their boundaries. Upon completion in late 2001, PAMP will provide a regulatory “overlay” to guide SBMA’s administration of natural habitats, waterways, marine and forested areas by identifying permitted activities and defining restrictions on land development. PAMP classifications and zone boundaries are currently being discussed among Freeport governmental agencies and individual stakeholders.*

Analysis of the PAMP Recommendations

There are profound consequences involved in awarding “protected area” status to these large swaths of territory, especially as protected area zonal management categories might restrict some potential development initiatives. This is not surprising; nor need it be controversial, because a basic “guiding principle” of SBMA’s land commercialization approach is to leave natural forest, surface water, and marine areas undisturbed, by constructively retaining them in their natural states.

Avoiding disturbance to these natural areas, habitats, and ecosystem corridors means that future development opportunities must be channeled into a relatively small number of scattered sites. Development will be confined to those areas that were, for one reason or another, already historically utilized for buildings or facilities by the military. The resulting pattern of proposed land uses reserves the vast majority of Subic’s forests and fragile marine areas for conservation or parkland administration. The district land use plans now being prepared will be consistent with the PAMP plan in that the present concept of these district plans is the same as the PAMP zonal treatments over 99% of the territory.

Relating the recommended “management zones” map to these small prospective development enclaves has not been easy, because the scale of protected area planning zones is necessarily much larger and very different from the scale of land use development zones. Since the latter are much more site-specific, they are usually presented at a different, more detailed scale. To overcome this interpretive difficulty, we suggest that one of two alternative presentation approaches be reflected within the final PAMP presentation structure.

Alternative One: A written supplement describing sub-districts. Certain portions of the “Management Zones” could be detailed better in order to allow a limited number of development or tourism enclaves to be promoted by SBMA. We suggest that there are four such enclaves:

1. Within the “Subic Gateway” district, we recommend a substitute treatment for the area bounded by El Kabayo Road, Argonaut Highway, New Maritan Highway, and Old Boton Highway (designated “MP2-T2” on one PAMP zonal map). This area is recommended for classification as partly “Terrestrial Restoration” and partly for “Sustainable Use” zones. We recommend that this enclave be reclassified in its entirety as “Special Use.” First, this classification is more reflective of the areas that surround it on the east and west. More importantly, the condition of this enclave is being irretrievably altered. Maritan Hill is being leveled to provide fill for Freeport site development and as landfill for the container port project that will occupy areas beyond Cubi Point. We recommend no changes in the classification of “Habitat Protection” areas at the south, nor to the “Ecosystem Corridor” that should be preserved north of El Kabayo Road, but confine our recommendations to the areas around Maritan Hill and its adjoining areas to the east, southeast, and south. All these areas should be re-categorized “special use”; the land immediately bordering Boton River, perhaps 50-75 meters wide, may be classified “Ecosystem Corridor” to reflect the river’s function as a connector between the rainforest and Subic Bay.
2. Within “Ilanin Forest West” district, we recommend that Nabasan Wharf and the existing campus of IDESS be re-designated, the former for “Recreation” or “Special Use,” the latter for “Special Use.” Given its large man-made pier structure, there is little evidence to justify a “Ecosystem Corridor” status for Nabasan Wharf. This facility is much too substantial to demolish, and much too useful to be transformed into an ecosystem corridor. Its physical expanse is unprotective of land mammals, plants, or birds; there is neither shrubbery, soil, sand, water, nor tree cover to serve as the basis for a “corridor.”

3. Camayan Wharf, Camayan Point, and the former shooting range now designated “Hidden Beach” all lie within an area being promoted as “Ilanin Bay Resorts.” We recommend that the area bounded by Ilanin Bay, “Hidden Bay,” “Ilalim Creek,” and a line drawn directly south from the eastern boundary of the “Ocean Adventure” marine attraction be identified as a sub-zone for an additional three or four tourism (accommodations) sites.

B. Alternative Two: Designation of distinct sites to comprise developable “exceptions” within the currently recommended management zone categories. As an alternative to the just-described “sub-district” approach in the Nabasan and Camayan Wharf areas, we would urge that eight sites be designated with appropriate symbols to specifically allow exceptions for development within the “Ilanin Forest West” district. These sites would be as follows:

1. Nabasan Wharf. Site N-1. To permit vehicular parking, small boat operations for intra-park tourism transportation, convenience commercial (eating, drinking) establishments, educational, and park administration purposes.
2. Nabasan Beach. Site N-2. To permit swimming, small boat operations, convenience commercial (eating, drinking) establishments.
3. Triboa Hill (located at the sharp curve of Corregidor Highway). Site N-3. To permit tourist accommodations (hotel, resort), convenience commercial (eating, drinking), or educational purposes
4. IDESS campus. Site N-4. To permit educational, dormitory, eating, drinking, and service purposes.
5. Camayan Wharf. Site C-1. To permit vehicular pickup/drop-off, small boat operations, and ticket operations.
6. Camayan Point. Site C-2. To permit tourist accommodations (hotel, resort)
7. Miracle Beach. Site C-3. To permit vehicular parking, convenience commercial, recreation commercial purposes.
8. Hidden Beach. Site C-4. To permit tourist accommodations (hotel, resort)

Response:

Changes to Forest West, based on this comment and subsequent discussions during meetings with SBMA, have been incorporated into the final SBPAMP to accommodate access to development sites and ensure privacy/protection of these developments. Aerial trams and canopy walkways have been added as permitted uses in adjacent Sustainable Use zone. All other issues addressed in this comment have already been incorporated into the plan.

C. PASTOLAN AETAS

These are important comments of Pastolan on the completed Final Draft of the SBPAMP. Comments have been translated from the original submission.

Comment 52:

The new IPRA law protects the rights of the Pastolan Aetas, particularly in reference to the ancestral lands that cover more than one-third of the Subic Bay Protected Area. The IPRA law is not anti-development, but it provides huge consideration on protecting the forest from where the Pastolan Aetas get their livelihood. Hence, all proposed projects within the CADT should follow the “Free Prior and Informed Consent” principle.

The primary concern should be about people and building up of their capabilities because these help alleviate poverty. The full support for improving technical capabilities through scholarship programs would increase the level of skills and capabilities of the Aeta.

The Livelihood Program will provide new opportunities and livelihood for Aetas. The income from livelihood will give them incentive to improve their craft, and the assurance of continued work/source of livelihood will help them avoid over extraction of natural resources. The livelihood programs presented are (in the SBPAMP) are closer to realities and capabilities of the Aetas.

The Aetas want wholehearted participation in the development of the plan (SBPAMP) and training program and management of the PA. The participation in more in-depth/detailed action program/plan for monitoring and protection will develop the culture and sense of ownership. We look at these as the important things that the PAMB should do or focus on.

Response:

Livelihood training and scholarship programs are provided for in the SBPAMP. These are to be implemented during the implementation phase of the SBPAMP.

The participation and approval of the Aeta for developments on lands designated in their Certificate Ancestral Domain Title are addressed under the Indigenous People’s Rights Act (RA 8371), and the NIPAS Act. These acts grant the Aeta the rights of participation in the management of land and resources in these areas. The concerns of the Aeta were considered in preparing the SBPAMP.

D. SEAPORT DEPARTMENT

Comment 53:

(A) The most obvious pollutants of Subic Bay are the debris being thrown into the rivers from the towns around our bay. The subject debris is not only navigation hazards but also to marine lives and eyesores particularly to foreigners/tourists;

(B) The entire Subic Bay is slowly and surely being turned into Septic tank. If it would remain uncorrected will turn the blue water of Subic Bay into Black Sea.

In view of the above it is respectfully recommended that the entire SBMA including our neighboring towns be provided with sewage lines wherein the waste water could be recycled and not thrown directly to canals through the river into Subic Bay.

There should be a system in garbage collection, which shall be enforced strictly to each and every one of us and fellow citizen for strict compliance for the future of our children and grand-grand children as well.

Our dreams of conserving and preserving our environment is within our reach if all of us Filipinos would work together and unite all our efforts towards a common goal.

Response:

Concerns regarding the effects of pollution from communities at the upper end of Subic Bay were identified through resource inventories and workshops. Recommendations for controlling and reversing these trends in order to preserve the environment were addressed through planning for watershed management in the buffer zones and the best practice portion of the Guidelines for the Protection of Flora and Fauna Outside Protected Areas.

We agree that conserving and preserving the environment of the bay is within reach, if Filipinos unite efforts and work toward a common goal. This plan provides the framework for accomplishing this, but the participation on many stakeholders will be needed in order to successfully implement the Subic Bay Protected Area Management Plan.

E. LAND AND ASSET DEVELOPMENT DEPARTMENT

Comment 54:

Please be informed that we interpose no objection on the Final Draft Report of the Subic Bay Protected Areas Management Plan Project with respect to areas of our concern.

Response:

No response required.

F. LAW ENFORCEMENT DEPARTMENT

Comment 55:

The reviewed draft final report of PAMP requested in reference (a) is returned without comments

Response:

No response required.

G. ENGINEERING DEPARTMENT

Comment 56:

In reference to the Draft Final Subic Bay Protected Area Management Plan (PAMP), please be informed that the final draft you forwarded to us has been reviewed and no major comments were noted.

Response:

No response required.

H. SUBIC BAY CHAMBER OF COMMERCE:

Comments on the Draft Final Report, Subic Bay Protected Area Management Plan.

Comment 57:

The report reads extremely well. It has an enormous amount of material in it which is difficult to assimilate in a quick reading, but the breadth of the investigation, the structure of the reports, the indisputable logic of the conclusions and the quality of the language gives confidence that it is both complete and sound.

Response:

Comment noted and appreciated.

Comment 58:

Identities of local peoples

The only comment is that in Volume 1, in particular, when local people were referred to (local as opposed to tourists, visitors and locators etc.) it was not clear if they were Aeta or not. In many cases it was obvious from the context and by definition, but there was doubt a number of times, particularly when alternative livelihood projects were discussed.

Response:

The document has been revised to better clarify which communities are indigenous and which are not.

Comment 59:

Monitoring and Enforcement

The plan only has value if it is implemented effectively. This is a truism, but unfortunately a cynical view of the way the world works here, would predict failure. Current behavior does not offer encouragement.

Opportunities to reduce the physical pollution of the bay by solid garbage from Olongapo have been reported and illustrated in detail and instructions have been given by the Chairman to take the simple remedial action that is needed. Nothing has been done at all.

In the last year or so there have been many instances of dynamiting, cyanide poisoning, spear-fishing coral harvesting and wreck robbery in the Bay. These have been reported by private organizations and individuals, stakeholders all of them one way and another, monitoring the bay in their own time and frequently with their own boats and equipment. The incidents have been assiduously documented and photographed. These have been reported to the SBMA directly and through the newly formed Baywatch Committee. Despite instructions from the Chairman of the SBMA to his officers to take steps to police the areas and take action, nothing has been done and the destruction has continued. Reports are made regularly to the SBMA of the results of monitoring the wholly ineffective SBMA Law Enforcement marine patrols. Again there has been no change in the patrol activities – just a promise to “investigate”.

The unavoidable conclusion is that there is specific intentional resistance to making the patrols effective thereby giving the wreck robbers and illegal fishermen carte blanche to continue.

To date the Baywatch Committee, which includes SBMA Ecology, Law enforcement and other officials, members of the public, stakeholders, some of whom have been deputized to the SBMA Police, has failed to meet on at least twice as many occasions as it has met, because there has been no progress to report.

In many quarters there is suspicion bordering on certainty that there is active connivance of the law enforcers with the perpetrators of the illegal acts, who between them have significantly reduced the anthropogenic and biological assets of the bay in the last 12 months.

There is no doubt that the most difficult part of the plan will be the neutralizing of personal vested interests that seem to be endemic. It seems that the appeals to emotions and intellects to protect the resources will not easily be heard when there are offers of monetary reward for turning a blind eye.

The control of the sources of money available for management, with a genuinely independent arbiter governing its distribution, would seem to be the only valid recipe for success.

Response:

Concerns regarding enforcement and the need for implementing the plan have been voiced in workshops throughout the process of developing the SBPAMP. The Monitoring and Enforcement Plan (Volume 6) attempts to address these concerns and incorporates stakeholder involvement in enforcement and monitoring functions in support of SBMA. The need for plan implementation is recognized.