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Report No: 33759-SV

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT FROM THE
GLOBAL ENVIRONMENT FACILITY TRUST FUND

IN THE AMOUNT OF US$5.0 MILLION

TO THE

REPUBLIC OF EL SALVADOR

FOR A

PROTECTED AREAS CONSOLIDATION AND ADMINISTRATION PROJECT

October 27, 2005

Environmentally and Socially Sustainable Development
Central America Country Management Unit
Latin America and the Caribbean Region

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CURRENCY EQUIVALENTS
(Exchange Rate Effective May 31, 2005)

Currency Unit = US$

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ADESCO	Community Development Association (*Asociación del Desarrollo Comunal*)
AECI	Spanish Agency for International Cooperation (*Agencia Española de Cooperación Internacional*)
BASIM	Barra de Santiago-El Imposible
CAS	Country Assistance Strategy
CBD	Convention on Biological Diversity
CEL	Lempa River Hydroelectric Commission (*Comisión Ejecutiva Hidroeléctrica del Río Lempa)*
CENDEPESCA	Center for the Development of Fishing and Aquaculture (*Centro de Desarrollo para la Pesca y la Acuicultura)*
CEPRODE	Center for Disaster Protection (*Centro de Protección para Desastres*)
CESSA	El Salvador Cement Company (*Cemento de El Salvador*)
CNR	National Registry Center (*Centro Nacional de Registros*)
COAL	Local Advisory Council (*Consejo Asesor Local*)
CONCULTURA	National Council for Culture and Art (*Consejo Nacional para la Cultura y el Arte*)
CORSATUR	Tourism Corporation of El Salvador
CSJ	Supreme Court of Justice (*Corte Suprema de Justicia*)
DGPN	General Directorate for Natural Patrimony (*Dirección General de Patrimonio Natural*) (also Department of Natural Resources)
DO	Development Objective
EA	Environmental Analysis
EDD	Disbursement Statements (*Estados de Desembolsos*)
EMP	Environmental Management Plan
EU	European Union
FMRs	Financial Monitoring Reports
FONASA	National Environmental Services Fund (*Fondo Nacional de Servicios Ambientales*)
FONAVIPO	National Popular Housing Fund (*Fondo Nacional para la Vivienda Popular*)
FUSADES	Salvadoran Foundation for Economic Development (*Fundación Salvadoreña para el Desarrollo Económico*)
GEF	Global Environmental Facility
GEO	Global Environmental Objective
GOES	Government of El Salvador (*Gobierno de El Salvador*)
IBRD	International Bank for Reconstruction and Development
IDB	Inter-American Development Bank
IFAC	International Federation of Accountants
IGCN	National Geographic and Cadastre Institute (*Instituto Geográfico y Catastro Nacional*)
ILO	International Labor Organization
ILP	Liberty and Progress Institute (*Instituto Libertad y Progreso*)
IP	Implementation Progress
IPDP	Indigenous Peoples Development Plan
ISTA	Salvadoran Institute for Agrarian Transformation (*Instituto Salvadoreño de*

	Transformación Agraria)
ISTU	Salvadoran Institute of Tourism
IUCN	International Union for Conservation of Nature and Natural Resources
LAC	Latin America and the Caribbean Region
LAP I	Land Administration Project I (Phase I)
LAP II	Land Administration Project II (Phase II)
M&E	Monitoring and Evaluation
MAG	Ministry of Agriculture and Livestock (*Ministerio de Agricultura y Ganadería*)
MARN	Ministry of Environment and Natural Resources (*Ministerio de Medio Ambiente y Recursos Naturales*)
MBC	Mesoamerican Biological Corridor
MINTUR	Ministry of Tourism
MTR	Midterm Review
NBS	National Biodiversity Strategy
MP	Management Plan
NGO	Nongovernmental organization
NPA	Natural Protected Area
NPAS	Natural Protected Areas System (*Sistema de Áreas Naturales Protegidas*)
OP	Operational Program
OPAMSS	San Salvador Metropolitan Area Planning Office (*Oficina de Planificación del Área Metropolitana de San Salvador*)
PA	Protected Area
PACAP	Protected Areas Consolidation and Administration Project
PAES	Program to Support the National Environmental Management in El Salvador
PANAVIS	National Parks and Wildlife Service
PCU	Project Coordination Unit
PES	Payment for Environmental Services
PIP	Project Implementation Plan
PMIS	Project Management Information System
PNODT	*Plan Nacional de Ordenamiento y Desarrollo Territorial*
SIL	Specific Investment Loan
SIRyC	Property Registry and Cadastre Information System (*Sistema Informático de Registro y Catastro*)
SNET	National Land Studies Service (*Servicio Nacional de Estudios Territoriales*)
SOE	Statement of Expenditures
SP	Strategic Priority
STP	Technical Secretariat of the Presidency (*Secretaría Técnica de la Presidencia*)
TOR	Terms of reference
UACI	Institutional Procurement and Contracting Unit (*Unidad de Adquisiciones y Contrataciones Institucional,* CNR)
UAP	Project Administration Unit, LAP I (*Unidad Administradora de Proyecto*)
UCP	Project Coordination Unit, PACAP (*Unidad de Coordinación del Proyecto)*
UCP-LAP II	Project Coordination Unit, LAP II (*Unidad de Coordinación del Proyecto*)
UFI	Institutional Financial Unit of the Ministry of Environment and Natural Resources (*Unidad Financiera Institucional*)
UNDP	United Nations Development Program
UNEP	United Nations Environmental Program
UPP	LAP II Project Preparation Unit (*Unidad de Preparación del Proyecto*)
USAID	U.S. Agency for International Development
WB	World Bank

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EL SALVADOR

Protected Areas Consolidation and Administration Project

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IBRD ELS 33858, 333859, 33868, 33869

El Salvador

El Salvador: Protected Areas Consolidation and Administration Project

PROJECT APPRAISAL DOCUMENT

LATIN AMERICA AND CARIBBEAN

LCSEN

Date: October 27, 2005	Team Leader: Frederic de Dinechin
Country Director: Jane Armitage	Sectors: General Agriculture/Fisheries/ Forestry
Sector Manager/Director: Abel Mejia	Themes: Biodiversity, Environmental Policies and Institutions, Land Administration and Management, Other Environment and Natural Resources Management
Project ID: P092202	Environmental screening category: B
Lending Instrument: Specific Investment Loan	Safeguard screening category: S2

Project Financing Data

[ ] Loan [ ] Credit [X] Grant [ ] Guarantee [ ] Other: Global Environment Facility Trust Fund Grant (GEF), associated with the Second Land Administration Project (LAP II) (Loan 7278-ES)

For Loans/Credits/Others:
Total Bank financing (US$m.): 5.00
Proposed terms: SIL

Financing Plan (US$m)

Source	Local	Foreign	Total
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT	5.0	0.0	5.0
GLOBAL ENVIRONMENTAL FACILITY	4.5	0.5	5.0
GOVERNMENT OF EL SALVADOR	3.4	0.0	3.4
Total:	**12.9**	**0.5**	**13.4**

Recipient:
Government of El Salvador

Responsible Agency:
Ministry of Environment and Natural Resources (MARN)

Estimated disbursements (Bank FY/US$m)					
FY	06	07	08	09	10
Annual	1.4	1.1	1.0	0.9	0.6
Cumulative	1.4	2.5	3.5	4.4	5.0

Does the project depart from the CAS in content or other significant respects? ***Ref. PAD A.3***	[ ]Yes [X] No
Does the project require any exceptions from Bank policies? ***Ref. PAD D.7*** Have these been approved by Bank management? Is approval for any policy exception sought from the Board?	[ ]Yes [X] No [ ]Yes [ ] No [ ]Yes [X] No
Does the project include any critical risks rated "substantial" or "high"? ***Ref. PAD C.5***	[X]Yes [ ] No
Does the project meet the Regional criteria for readiness for implementation? ***Ref. PAD D.7***	[X]Yes [ ] No

Project development objective

The Project Global Environmental Objective is to conserve El Salvador's globally significant biodiversity by strengthening the national protected areas system and consolidating two priority protected areas.

Project description

The project will have three components: (a) Strengthening of the Natural Protected Areas System (NPAS); (b) Consolidation and management of two pilot protected areas; and (c) Project Administration:

Which safeguard policies are triggered, if any?

Environmental Assessment (OP/BP 4.01)
Natural Habitats (OP/BP 4.04)
Cultural Property (OPN 11.03)
Involuntary Resettlement (OP/BP 4.12)
Forests (OP/BP 4.36)

Significant, non-standard conditions, **if any**, for:

Board presentation:
N/A
Loan/credit effectiveness:
N/A
Covenants applicable to project implementation:
N/A

A. STRATEGIC CONTEXT AND RATIONALE

1. Country and Sector Issues

1. **Biodiversity Significance.** El Salvador supports a large diversity of species, comprising 1,477 vertebrate species (27 percent of which are threatened with extinction) of which 510 are birds (including 17 of the 23 species endemic to northern Central America), 140 reptiles and amphibians, and about 7,000 native plants (including more than 700 species of trees), and 800 species of butterflies—all in an area the size of Massachusetts. This high biodiversity[1] stemming from the country's unique setting—it is highly volcanic and isolated from Central America's Atlantic moist forests—persists even though El Salvador retains just 2 percent of its primary forest vegetation.

2. **Threats to Biodiversity.** The globally and regionally significant biodiversity sheltered within the Natural Protected Areas System (*Sistema de Áreas Naturales Protegidas*, NPAS) is severely threatened. El Salvador—the most densely populated country in Latin America—struggles with land-related issues, as population pressures have resulted in numerous encroachments into protected areas. These encroachments result in significant habitat destruction and deterioration, through the conversion of forests, pollution, and overexploitation of natural resources, all of which stem in part from a lack of environmental awareness. Due to unchecked habitat destruction, it is likely that some of the smaller protected areas comprising the NPAS no longer contain sufficient natural or near-natural habitats to warrant special protected status.

3. **Conservation Efforts to Date.** Notwithstanding the global, regional, and national significance of its biodiversity resources, El Salvador has the least amount of land and water area formally protected of all the countries in the Mesoamerican Biodiversity Hotspot (around 75,500 hectares [ha] or 4.6 percent of the national area).[2,3] The NPAS aims to protect these remaining areas, but struggles due to a variety of challenges, explained more thoroughly in Annex 1. The NPAS includes 118 protected areas totaling approximately 40,000 ha, as well as an additional 35,500 ha of mangrove[4] —all under the jurisdiction of the Ministry of Environment and Natural Resources (MARN). Despite the large number of protected areas (PAs), their average size is just 850 ha,[5] and virtually no PAs have any managed buffer zone, comprising only the core area.[6] Of these lands, only about 7,000 ha, or 0.3 percent, are legally declared and demarcated, and no areas are fully consolidated (demarcated, titled, and under a functioning management plan). Thus, the majority of the NPAS constitutes "paper parks," with inadequate legal framework and physical protection.

4. The lack of clear protected area boundaries is further complicated by the confusing institutional framework governing these lands. As described in Annex 1, the original PA system was created by the Ministry of Agriculture and Animal Husbandry (MAG), which had declared 47 PAs by 1976.

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[1] El Salvador is part of the Mesoamerican Biodiversity Hotspot, as identified by the Critical Ecosystem Partnership Fund.

[2] According to the *Ecosystem Profile: Southern Region, Mesoamerica* (Critical Ecosystem Partnership Fund) this is significantly behind Costa Rica (with 24 percent of the land protected), Guatemala (23 percent), Nicaragua (17 percent), Panama (17 percent), Belize (10 percent), and Honduras (8 percent).

[3] More than 1.6 percent of El Salvador's land was officially designated as protected area in the newly approved protected areas law (*Ley de Áreas Protegidas,* February 2005). These lands include all mangroves in the country, which were considered national forests outside of the protected areas system prior to the passage of the law.

[4] According to the *Wetlands Inventory* (*Inventario de Humedales*), MARN 2004.

[5] Protected areas range in size from 1.9 ha (Colomita) to 31,699 ha (Bahía de Jiquilisco).

[6] Only one park, *El Imposible*, includes a legally defined buffer zone (*área de veda*).

The 1973 forest law (*Ley Forestal*) declared mangroves—which were not considered part of the NPAS—as natural resources of the State. The agrarian reform process, begun in 1980 to enable transfer from large landowners to the poor, expropriated 411,151 ha—about 20 percent of the country—including 22,000 ha of potential PAs to the jurisdiction of the Salvadoran Institute for Agrarian Transformation (*Instituto Salvadoreño de Transformación Agraria*, ISTA). When the NPAS was first proposed in 1990, it included 118 areas under MAG's jurisdiction—despite the fact that most of those lands officially pertained to ISTA, municipalities, and private landholders, and had been selected based on unclear criteria. The first national environmental law (*Ley de Medio Ambiente*; 1998) created MARN and gave them responsibility for the NPAS. In the 2002 Forestry Law, mangrove forests passed to MARN's jurisdiction. Today, MARN remains responsible for the oversight of the entire NPAS,[7] but has legal title over only 7,072 ha. Consequently, the vast majority of the lands that theoretically could be part of the NPAS have unresolved legal status.

5. **Conservation Needs and Opportunities.** In addition to the lack of clarity regarding the physical boundaries of the NPAS, the quality and type of environmental goods and services and biodiversity resources protected are not well known, making management and prioritization difficult. Given the limited financial resources available, a refinement of NPAS National Strategy,[8] including a prioritization of efforts, is much needed. Also needed is greater stakeholder consensus around this strategy and around the broader importance of conservation.

6. MARN developed the NPAS Strategy to prioritize 15 Conservation Areas (CA) comprising most of the country's PAs, building on the biological corridor concept. The specific approach to consolidate these CAs must target the primary threats to biodiversity, including natural habitat loss and degradation (NBSAP, 2000). Moreover, the consolidation of these areas should be done with the understanding and support of a wide range of local stakeholders, the majority of whom were not initially involved in the development of the protected areas strategy.

7. Currently, MARN lacks the legal tools to adequately manage the NPAS. While MARN is legally responsible for the biodiversity within protected areas, the majority of which have human inhabitants, tested instruments for adequately consolidating those areas do not exist. In fact, El Salvador has no experience in definitively addressing human settlements in protected areas. A new Protected Areas law, approved in February 2005, represents an important step toward the consolidation and sustainable management of the country's protected areas system (see Annex 1), the regulations for which need to be developed in the near future.

8. An important legal distinction exists between mangroves[9] and Natural Protected Areas (NPAs) with regard to land rights. Both mangroves and NPAs are considered "protected areas,"[10] wherein private or public entities are allowed to carry out activities that are compatible with the area's conservation upon authorization of MARN. Mangroves, unlike NPAs, are managed as sustainable use areas,[11] wherein residents are eligible to receive land rights in the form of concessions, subject to uses defined in management plans. In NPAs, the new Law does not allow new human

[7] Today, the NPAS consists of 118 natural protected areas plus 35,500 ha of mangroves, managed under eight management categories. These include natural reserve, national park, natural monument, habitat/species management area, protected landscape or seashore, protected area with managed resources, and protection/restoration area and ecological park.

[8] *Estrategia Nacional para las Áreas Naturales Protegidas y Corredores Biologicos* (2005).

[9] As governed under the 2002 forest law and the 2005 protected areas law.

[10] Equivalent to IUCN Category II.

[11] Equivalent to IUCN Category VI.

settlements once the areas have been established as protected,[12] with the exception of the natural reserve category where no human settlements whatsoever are permitted. Thus, a methodology is needed to identify illegal and legal settlements within PAs, and to regularize the latter.

9. While MARN has the mandate and political will to take the necessary actions to consolidate the NPAS, it is severely resource constrained, both in financial and human capital terms. For example, the Director of MARN's mangrove section is the only full-time employee working on mangrove conservation in the country.

10. An additional challenge for the NPAS relates to clarifying land tenure. In all but three PAs, lands are not titled in the name of MARN,[13] but remain in legal limbo among other state agencies, municipalities and even private individuals. This lack of tenure clarity in unoccupied areas has in part led to invasions of state-owned lands (most of which are protected areas). Most of these invasions are by the rural poor, who have limited production and livelihood alternatives.

11. The Government of El Salvador's (GOES) Land Administration Program (LAP), currently entering its second phase with IBRD support, is systematically assessing land tenure nationwide. These efforts have important implications for the NPAS, as LAP's activities include extensive geographic data collection (satellite images, overflights, and so forth) and determination of land rights.

12. Despite the significant threats to the NPAS, the culmination of several events has provided a unique opportunity to address these issues. First, the protected areas law, on hold for 25 years, was passed in February 2005. This law provides MARN with the legal framework necessary to oversee these lands, and significant political capital. Second, the LAP is midway through completing the cadastre and registry of all lands in the country—which has been deemed a priority effort for the new Government. During the preparation of the second phase of the IBRD-funded project, the GOES identified the importance of resolving tenure conflicts in protected area lands, without which the LAP's efforts to address all of El Salvador's lands will fall short. The LAP's implementing agency, CNR, has taken significant efforts to involve MARN in that project, including a component for demarcation of three (as yet unidentified) protected areas. While the participation of MARN in the LAP has historically been limited by MARN's capacity, by developing a partially blended operation, GEF funds will catalyze the consolidation of the national protected areas system by exploiting the significant opportunity presented by the LAP.

2. Rationale for Bank Involvement

13. The proposed Protected Areas Consolidation and Administration Project (PACAP) evolved from the recognition that the LAP provided an important and time-limited window of opportunity for advancing MARN's biodiversity agenda. The wealth of detailed, land-related data collected for land administration activities across the country could serve as a base for advancing large-scale conservation, including consolidating protected areas and developing a strategy for addressing illegal settlements within those areas. Furthermore, the massive data collection and maintenance activities of the LAP could, through the PACAP, be linked to and formatted for MARN's information catalog and management capacity, thereby addressing key information needs for the protected areas system. Moreover, the LAP could promote MARN's agenda of legally

[12]The legal establishment of a protected area requires that it be demarcated, have secure title, and be decreed (via executive decree).

[13] There are 18 legal steps required to transfer land titles from ISTA to MARN. This complicated process has led to significant delays in consolidating many protected areas.

consolidating key conservation areas and other protected areas under the protected areas system. The GOES expressed strong interest in working with MARN, CNR (the LAP implementing agency), and the Bank to take advantage of the conservation opportunity presented by the LAP.

14. The GOES formally asked for World Bank assistance for preparation of the proposed project and sought GEF assistance in a letter sent by the Technical Secretary of the Presidency on February 16, 2005. This further corroborated the endorsement of the GEF Focal Point on September 29, 2004.

15. In addition to the unique enabling environment presented by the LAP, the GOES would greatly benefit from the World Bank's competitive advantage in the region's land issues, with over 20 years of experience in land policies and operations and US$900 million (M) invested and committed in land-related programs in Central and South America. Given the growing body of knowledge regarding the conservation significance of land administration projects, the most recent of these operations include specific environmentally focused components and/or activities. The GOES would also benefit from the World Bank's substantial experience in GEF activities, including GEF operations in the Mesoamerican Biological Corridor (MBC).

16. Finally, the World Bank has discussed the project with other donors interested in coordinating their efforts, including the IDB, the Spanish Agency for International Cooperation (AECI), and UNEP. The proposed project will build on ongoing related activities, as described in Section C.1

17. GEF support is warranted because the project would: (a) conserve globally and regionally significant biodiversity, including some critically endangered endemic species and ecosystems; (b) enhance the Salvadoran sections of the MBC, and the overall NPAS; (c) support the piloting of consolidation of two protected areas to develop a strategy for addressing key issues affecting the majority of Salvadoran protected areas; (d) capture lessons learned from the piloting exercise for application in future scaling up and replication to other parts of the country, as well as a potential model for other countries in the region; and (e) complement the GEF-supported Payment for Environmental Services Project (PES; see Annex 18). Without the GEF increment, local benefits alone have, to date, been unable to secure conservation of the protected areas system.

3. Higher-level Objectives to which the Project Contributes

18. The project directly contributes to the GOES agenda described in the *País Seguro* Program, which identifies as key, actions directed at enhancing the environment for future generations, and ensuring that national development is environmentally and socially sustainable. Specifically, this national strategy includes actions to strengthen programs aimed at restoring mangroves and sustainably managing protected areas; strengthen the institutional and legal framework for the environment sector; and increase awareness on environmental protection and natural resource use.

19. The project also directly responds to El Salvador's biodiversity priorities as per the 1999 National Strategy on Biological Diversity (NBS; GEF/UNDP/MARN). The NBS establishes as priority actions the implementation of a biodiversity information system and the consolidation of the NPAS; the redefinition of institutional responsibilities for conservation activities; and the strengthening of national, institutional, and human resource capacities in biodiversity conservation. The project also strongly supports the draft Protected Areas Strategy (2005), and the proposed National Land Use Development Plan (*Plan Nacional de Ordenamiento y Desarrollo Territorial*; PNODT 2003), which propose to create 15 CAs designed to embed the severely fragmented NPAS within a larger landscape context. Moreover, the project strongly sustains the new PA Law, which provides the basic legal framework necessary to consolidate the NPAS.

20. The new FY05–08 Country Assistance Strategy (CAS) for El Salvador, supports the three main pillars of the Government's agenda: (a) accelerating broad-based equitable growth and increasing employment; (b) improving equity by building human capital and expanding access to basic infrastructure, assets, and markets; and (c) enhancing security and reducing vulnerability. The CAS recognizes the need to consolidate the environmental sector's regulatory and legal framework and to support measures aimed at watershed recovery, reforestation, ecosystem management, and biodiversity conservation. The CAS further notes that vulnerability to natural disasters is closely linked to rural poverty and that low productivity and high population pressures have depleted natural resources, caused soil erosion and land degradation, led to loss of habitat, biodiversity, and natural forests, and exacerbated problems in water management and conservation. The project will contribute to the third objective of the CAS; by supporting the consolidation of the NPAS, along with the strengthening of its institutional and legal framework, the project will directly contribute to addressing biodiversity conservation and the sustainable use of resources, and to reducing environmental degradation and therefore vulnerability to natural disaster.

GEF Operational Program Goal

21. In the broadest sense, the project will contribute to all four GEF Operational Programs (OPs) by strengthening the Salvadoran protected area system, which includes arid and semi-arid, coastal and marine, forest, and mountain ecosystems. Through the targeted interventions that will consolidate two protected areas, the project specifically supports OP 2 (Coastal and Marine Ecosystems) and OP 3 (Forest Ecosystems). Activities in the Bahía de Jiquilisco Conservation Area will contribute to the conservation and sustainable use of El Salvador's largest extension of mangrove forests, while in the Lake Guija San Diego–La Barra Protected Area Complex the project will support the conservation and sustainable use of the freshwater biodiversity of Lake Guija, and the largest dry tropical forest area in El Salvador, an eco-region identified as bio-regionally outstanding and a high priority at a regional scale[14] (see Annex 16).

22. The project supports the objective of Strategic Priority (SP) 1 "Catalyzing Sustainability of Protected Areas" through a comprehensive intervention that will: (a) strengthen the NPAS, through updating the national PA strategy and improving the relevant legal and institutional framework, and building MARN's capacity to oversee the system; (b) improve the sustainability of the NPAS through capitalizing on the partially blended LAP II to collect and systematize environmental data, and establish a PA monitoring and evaluation system; and (c) pilot the consolidation of two representative PAs for subsequent replication throughout the NPAS.

23. By piloting the consolidation of two PAs and heavily emphasizing learning and adaptive management, the project would support SP 4 (Generation and Dissemination of Best Practices), by integrating project results into the redefinition of the National Protected Areas Policy and disseminating them at the national, regional, and global level.

Link with IBRD Loan

24. The proposed project is partially blended with the Second Land Administration Project (P086953), approved by the Board in March 2005. This US$40.2M project to the National Registry Center (CNR) is completing the cadastre and registry of all lands within El Salvador. Toward this aim, the LAP II is collecting high resolution spatial and tenure data, with direct applications to conservation

[14] *A Conservation Assessment of the Terrestrial Ecoregions of Latin America and the Caribbean*, E. Dinnerstein and others, 1995.

and protected areas management. While the LAP II will resolve tenure for all private lands, it cannot do the same for all public lands, including PAs and mangroves, because CNR does not have the mandate to do so. Thus, the LAP II will define only the gross boundaries of PAs and mangroves given the absence of defined procedures and limited capacity of MARN. Were it not for the proposed project, the significant conservation opportunity presented by the LAP would be lost.

25. The proposed project would capitalize on the opportunity provided by the LAP II, using GEF funds to enable MARN's development of a strategy to consolidate PAs and maintain the current human population distribution in those areas, limit allowable activities on critical biodiversity areas, develop a model to promote sustainable development, and participate with CNR in the delimitation of all 118 PAs and mangroves in El Salvador. Moreover, the proposed project would influence IBRD funds (LAP II) to contribute to conservation of globally, regionally, and nationally significant biodiversity, through: (a) financing the collection of detailed tenure information for PAs and mangroves in the linked registry-cadastre system (SIRyC) maintained and regularly updated by CNR, (b) targeting the LAP II to demarcate three priority PAs (determined by MARN), and (c) taking advantage of a key political moment to mainstream conservation into the broader land agenda. Moreover, the project helps secure additional CNR co-financing through ensuring their participation in delimiting all PAs and mangroves (currently outside of the scope of the LAP).

B. PROJECT DESCRIPTION

1. Lending Instrument

26. The proposed project is a grant funded by a full-sized US$5 million (M) GEF contribution. It is partially blended with the LAP II IBRD loan (P086953).

2. Project Development Objective

27. The Project Development Objective of the partially blended LAP II is to improve land tenure security and land transactions by providing efficient, equitable, and accessible land administration services, thereby facilitating better land-related investments and more productive and environmentally sustainable land use.

3. Project Global Environmental Objective and Key Indicators

28. The Project Global Environmental Objective of the PACAP is: **to conserve El Salvador's globally significant biodiversity by strengthening the national protected areas system and consolidating two priority protected areas.**

GEO outcome indicators:

- Natural protected areas system strategy improved and pilot-tested.
- Two pilot protected areas consolidated and effectively managed (Tracking tool score of at least 40 for the 35,600 ha in Bahía de Jiquilisco and 1,917 ha in Lago Guija Complex San Diego-La Barra).
- Biodiversity benefits established in at least 12,400 ha:

- For *Bahía de Jiquilisco* PA, at least 11,000 ha of mangrove or associated humid forest within the core protection zones will have negligible deforestation compared to baseline (less than 1% over 5 years).
- For the Lago Guija Complex San Diego–La Barra, at least 1,400 ha of dry tropical forest or associated riparian forest will have negligible deforestation compared to baseline (less than 1% over 5 years).

4. Project Components

29. The project will have three components: (a) Strengthening of the Natural Protected Areas System (NPAS); (b) Consolidation and management of two pilot protected areas; and (c) Project Administration. The costs of each component and subcomponent are summarized in Table 1.

Table 1. Project Costs by Component and Subcomponent and Financing (million US$)

	Total		IBRD		GEF		Government	
	US$	*%*	*US$*	*%*	*US$*	*%*	*US$*	*%*
Component 1: Strengthening of the NPAS								
1.1 Consolidation of NPAS strategy	3.2	23.9	0.7	14.0	0.5	10.5	2.0	58.8
1.2. Strengthening of legal and institutional framework	1.9	14.2	0.2	4.0	0.6	13.2	1.1	32.4
1.3. Dissemination and awareness campaign	0.3	2.1	0.0	0.0	0.3	5.7	0.0	0.0
Subtotal	**5.4**	**40.2**	**0.9**	**18.0**	**1.4**	**29.3**	**3.1**	**91.2**
Component 2: Consolidation and Management of Pilot Protected Areas								
2.1 Characterization and delimitation of pilot PAs	2.2	16.4	2.0	40.0	0.1	2.5	0.1	2.9
2.2 Legalization and regularization of pilot Pas	2.8	20.9	1.9	38.0	0.8	14.3	0.1	2.9
2.3 Management plans	2.1	15.7	0	0.0	2.0	40.8	0.1	2.9
Subtotal	**7.1**	**52.0**	**3.9**	**78.0**	**2.9**	**57.5**	**0.3**	**8.8**
Component 3: Project Administration	**0.9**	**6.7**	**0.2**	**4.2**	**0.7**	**13.1**	**0**	**0**
Total Project Costs	**13.4**		**5.0**		**5.0**		**3.4**	

Component 1: Strengthening of the National Natural Protected Areas System (US$5.4 M Total; US$1.40 M GEF)

30. The objective of this component is to strengthen the NPAS to enable long-term sustainable management. This will be achieved through the consolidation of the existing strategy for the

NPAS,[15] with the participation and inclusion of all relevant stakeholders, and through the development of an adequate institutional and legal framework for the administration and management of the NPAS. This component is divided into the following subcomponents:

1.1: Consolidation of NPAS strategy
1.2: Strengthening of the legal and institutional frameworks
1.3: Public dissemination and awareness campaign.

Key outputs of this component include: (a) completion of a rationalization study of the NPAS, (b) delimitation of at least 40 protected areas and mangroves, (c) ten-year Action Plan for consolidation of the NPAS; (d) approved regulations for the implementation of the new Protected Areas Law, (d) draft interinstitutional agreements for operating the NPAS, and (e) at least 10 percent of national population aware of new protected areas law and regulations.

Component 2: Consolidation and Management of Pilot Protected Areas (US$7.1 M Total; US$2.9 M GEF)

31. The component aims to develop, test, and finalize a methodology for the consolidation of two pilot Protected Areas, including their delimitation, demarcation, and regularization, and to develop and implement management plans for their sustainable use. The results of this component will feed into the consolidation of NPAS Strategy (Component 1). The component is divided into the following subcomponents:

2.1: Characterization and delimitation of pilot PAs
2.2: Legalization and regularization of pilot PAs
2.3: Management plans for pilot PAs.

32. Key outputs of this component include: (a) Socioeconomic study, environmental information, cadastre, and registry for each pilot protected area linked with CNR database; (b) demarcation of the pilot PAs (including number of km demarcated of external boundaries of pilot areas, and core zones); (c) percent of pilot area lands with no unresolved tenure issues; (d) ministerial decrees to establish pilot PAs published; (e) number of protected area field staff in each pilot PA.; and (f) amount of revenues raised from sustainable natural resource use concessions, visitor fees, and other potential cost-recovery mechanisms.

Component 3: Project Administration (US$0.9 M Total; US$0.7 M GEF)

33. This component will focus on project management mechanisms including project coordination, planning, and monitoring and evaluation (M&E). The M&E system will be based on the existing system developed under the LAP II to coordinate and supervise the project. The existing system will be strengthened to include key indicators to measure GEF project performance. The project will finance administrative, supervision, and M&E costs, including M&E surveys.

5. Lessons Learned and Reflected in the Project Design

34. The key lessons learned from other GEF and non-GEF projects (listed in Annex 2), were taken into consideration in the design of the proposed project. These lessons include:

[15] The existing strategy is the *Estrategia Nacional de Áreas Naturales Protegidas y Corredor Biológico* (MARN 2005).

- Lack of enabling legal and regulatory frameworks together with significant constraints in human resource skills and institutional capacity have resulted in limited sustainability of operations targeting conservation and sustainable use of biodiversity in El Salvador. Long-term effects have been further impinged upon by lack of interinstitutional coordination, poor planning, and overall ad hoc approaches with narrow sectoral and institutional focuses. Overlapping issues, jurisdictions, and impacts of sustainable ecosystem management require an adequate institutional and legal framework to guarantee the necessary interagency coordination and interaction.

- Large-scale land administration activities present an important conservation opportunity. Extensive regional experience has shown that land administration projects present an important conservation opportunity. Land projects directly contribute to conservation through the clarification of land rights, legally and physically, in and around protected areas, and the collection of environmental and geographic information. Indirectly, land projects can be powerful instruments to further the conservation agenda, through providing both reduced incentives for encroachment and occupation and a tool to help strengthen protected areas systems. Specifically, PA systems can benefit by: capitalizing on the information collected to clarify tenure, and demarcate and consolidate PAs; developing strategies based on this information to limit settlements in and near PAs, and to clarify use norms for those settlements; strengthening PA agencies through land administration activities; involving other stakeholders in decisions about those lands; and supporting conservation-friendly productive investments. Moreover, by exploiting the opportunity provided by land administration efforts, where governments must address difficult land-related issues, conservation can be included at the core of the development agenda, building on the strong political commitment to leverage scarce funds for protected areas, update land-related laws and institutions, and bring stakeholders together.

- Highly fragmented protected areas systems are difficult to efficiently manage. El Salvador's PA strategy has struggled with a highly fragmented system. Relatively small, highly threatened protected areas are less able to adequately preserve natural resources, as many threatened species require relatively large habitat expanses, linked by corridors. Additionally, fragmented areas require extensive monitoring and management, with significant budget implications. By promoting the establishment of CAs, in which PA nuclei are linked by biodiversity friendly corridors, the project aims to resolve one of the key root causes of biodiversity degradation in El Salvador.

- Private lands can support biodiversity-friendly habitat. As the GEF-supported "Promotion of Biodiversity Conservation within Coffee Landscapes" found, biodiversity-friendly agricultural production systems can be economically, environmentally and socially sustainable. By creating incentives for encouraging production systems that are compatible with conservation objectives, private lands in protected area buffer zones can contribute to biodiversity.

- Broad stakeholder inclusion is key to conservation success. Buy-in of key stakeholders is critical to protected area viability. One factor that has hindered El Salvador's PA system is the inadequate involvement of all necessary stakeholders (private and public sector, local residents, NGOs.).

6. Alternatives Considered and Reasons for Rejection

35. The main alternatives considered and rejected were:

1. No project, because the existing threats to biodiversity would continue to expand, resulting in a significant decrease in extent and quality of globally and regionally significant biodiversity.
2. A protected areas project focused only on MARN, without any link to CNR and the LAP II, because it would represent a significant missed opportunity to capitalize on the information collected, and enabling political environment created, by the LAP II.
3. A project focused on the management of individual protected areas, without efforts to consolidate the overall NPAS, because it would neither allow replicability of the lessons learned, nor promote long-term sustainability of the system.

C. IMPLEMENTATION

1. Partnership Arrangements

36. Project preparation, implementation, and sustainability depend up the establishment of a number of partnerships, the most important of which links MARN, the PA agency, and CNR, the cadastre and registry agency, beginning with the close collaboration between the PACAP preparation team and the LAP II implementation team (UAP). This partnership was formalized by a letter of understanding for preparation activities, and will be further strengthened through a legal agreement. This cooperation benefits the PACAP through co-financing provided by LAP II, collaboration with on-the-ground activities involving information collection, delimitation and demarcation of PAs, and information dissemination. In addition, this partnership benefits the LAP II, because MARN has come to a deeper understanding of the objectives and implementation mechanisms of the loan's activities, and as a result has begun to participate in areas critical to the loan's success but outside of CNR's mandate.

37. Other key partnerships established during project preparation, which should continue to flourish during implementation are: (a) coordination with the ESP[16] and Fund (Environmental Services Fund, or FONASA), managed by MARN with GEF and World Bank support, which aims to support the development of a PES system in pilot watersheds (including one of PACAP's pilot areas), and its future replication in other areas (see Annex 18); (b) coordination with the Mesoamerican Biological Corridor (MBC) project, implemented by UNDP and managed under MARN with World Bank, GTZ, WWF, and GEF support, working to consolidate El Salvador's portion of the MBC; (c) partnership with AECI, working on the Integrated Management of Mangroves and Coastal Wetlands project, which includes one of the PACAP's priority pilot areas; (d) partnerships with NGOs and Community Assocations (ADESCOs) actively working in the pilot PAs, whose participation will be critical to project success and information dissemination; and (e) partnerships with universities and research institutions, for definition of quantitative environmental baseline and related studies.

38. In addition to the LAP II, three other projects deserve special reference: Integrated Management of Trinational Montecristo Park (GEF full-sized project (FSP) under preparation/IDB), Sustainable Land Management in Watersheds Draining to the Gulf of Fonseca (GEF mid-sized project (MSP) under preparation/UNEP), and AECI's Sustainable Management of the Bahía de Jiquilisco, El Jocotal, and Los Volcanoes Protected Areas; all three projects support complementary actions in areas not selected as priority under the proposed project. The project preparation unit has

[16] The Environmental Services Project (ESP) provides incentives to landowners living in protected area buffer zones and other environmentally sensitive lands to sustainably manage their lands. The ESP and PACAP projects represent two complementary strategies to be undertaken by MARN, both of which pilot test mechanisms to support MARN's Protected Areas Strategy (2005). Specifically, these projects support MARN in the creation of 15 Conservation Areas, by addressing the nuclei (natural protected areas), through the proposed project, and the buffer zones (adjacent private lands), jointly through the ESP and the proposed project (see Annex 17).

coordinated with these three projects, only one of which (AECI) shares intervention areas.[17] Other GEF-supported projects have also been identified as relevant to the proposed projects, which are summarized in Annex 2.

2. Institutional and Implementation Arrangements (see Annex 6)

39. MARN will execute the project and have responsibility for all fiduciary aspects, monitoring and evaluation (M&E), and most technical aspects.

40. CNR will be responsible for limited technical activities (related to LAP II—delimitation, demarcation, registration), and training and capacity building for project fiduciary aspects and M&E. CNR and MARN will sign an agreement clarifying respective roles and responsibilities with regard to jointly implemented activities. No funds will pass to CNR from the project.

41. Direct implementation will be provided by a small Project Coordination Unit (*Unidad Ejecutora del Proyecto*, PCU or PCU) within MARN's Department of Natural Resources (DGNP). The PCU will ensure overall project coordination with participating agencies and the World Bank. Specifically, the PCU will execute most activities in Components 1, 2, and 3 with support from CNR through the LAP II–UCP. In particular, CNR will provide technical assistance to MARN regarding financial management and procurement, through training and advisory services.[18] At the central level, the PCU will include a project coordinator, an accountant (financial officer), a procurement officer, and an administrative assistant.

42. The project will also support the creation of two regional units to oversee field activities under Component 2. In each of the two pilot protected areas, the project will support a regional coordinator, a social specialist, and a technician, who will jointly focus on policy and strategic issues, in coordination with the PCU and MARN's DGNP.

43. The majority of staff hired by MARN for the project will be temporary. However, key functions, activities and staff will be assumed by MARN by year 4 of the project.

44. Additionally, the project will contract an NGO (or other qualified entity) to oversee operational aspects in the two pilot areas. These entities will be responsible for developing and implementing management plans and providing on-the-ground field presence.

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[17] The AECI-financed project aims to improve the management of wetlands along El Salvador's eastern Pacific coast, including the Bahía de Jiquilisco, through the development and implementation of management plans. That project strengthens national policies for wetland protection and sustainable use, toward which it has achieved the identification, registry, mapping, and measurement of 90 percent of the nation's wetlands. Specifically, in the Bahía de Jiquilisco area, the AECI project has developed a management plan for the bay's wetlands (which form part, but not all, of the pilot area included in the proposed project), and applied for official RAMSAR designation. The proposed project would work with AECI to update this management plan, including remnant humid forest patches along with the bay's wetlands, and address tenure of eligible residents. Moreover, the proposed project and the AECI Project would work together to consolidate this area through joint financing of this updated management plan: AECI would construct two park administrative offices, and finance existing park guards, while the PACAP would finance the park administrator and new park guards, and both projects would work together to support ecotourism, promote sustainable use of natural resources by local residents, and implement M&E.

[18] The arrangements to ensure adequate fiduciary capacity established within MARN during year 1 of project execution are expected to benefit the Environmental Services project, which starts in 2007 (year 2 of the proposed project). By January 2007, MARN's UFI unit, which will be jointly handling fiduciary aspects of both GEF-financed projects, would have at least one year of experience successfully handling World Bank administrative requirements.

45. Because the project supports a co-management approach for PAs, other actors, such as municipalities, community associations, including the local Protected Areas Committees (COAL), NGOs, universities, and direct beneficiaries will be involved in its implementation, especially at the local level. The project will strengthen the capacity of these entities, and MARN, to support and participate in the development and management of the NPAS. MARN will coordinate the various participating agencies by means of agreements that will become effective, to the World Bank's satisfaction, before the corresponding activities begin.

46. Given the pilot nature of the project and the importance of building multisector alliances, an advisory committee will also be formed, which will function under the coordination of MARN-DGNP. This group will include representatives from the PCU, MAG, ISTA, CNR, CONAMA, municipalities, the private sector, and a local representative from each of the pilot areas. The group, which would be convened by MARN at least once a month, would provide a strategic decision-making mechanism related to improvements to the NPAS Strategy, PA consolidation, and the results assessment for each of the pilot areas.

3. Monitoring and Evaluation of Outcomes/Results

47. M&E is central to the project objectives, because the project—a pilot—emphasizes adaptive management, by which M&E results will be used to improve project design during implementation. The project M&E system will take advantage of the newly designed automated LAP II system, which tracks expenditures and progress for both administrative (procurement, flow of funds) and technical (project performance linked to outcome indicators) aspects. The LAP II M&E system will serve as the basis for the PACAP's M&E system, which will be strengthened to include output indicators for the three project components.

48. As in the LAP II's system, the project M&E system will assure the project's efficient execution, and will be closely linked to the Results Framework. It will include a subsystem to allow project administrative and financial monitoring and to generate reports required by the World Bank's administrative, financial, and procurement sections. It will have another subsystem that will allow the generation of three types of indicators: (a) indicators for physical execution (outputs) and financial execution (inputs); (b) results indicators for each component; and (c) outcome indicators of project global environment objectives (GEO).

49. A baseline will be used for GEO outcome indicators. This will be updated in years 2.5 and 5 of the project. The primary data sources for the other indicators will be: (a) information from CNR and MARN; (b) field reports by contractors and PCU supervision reports, and those by other entities associated with the project; (c) CNR's Registry and Cadastre Information System (SIRyC); and (d) results from participatory field monitoring, undertaken by local beneficiaries and supervised by the PCU.

50. The overall responsibility for the M&E system will be with the PCU, which will oversee ongoing consolidation of data obtained from activities carried out during PACAP execution and the maintenance of the web-based system. The M&E System will comply with the financial, procurement, administrative, and monitoring and evaluation characteristics required by the World Bank and those of the Technical Secretariat of the Republic of El Salvador.

4. Sustainability and Replicability

51. The project is highly country-driven. It evolved during preparation of the LAP II, a participatory process involving extensive consultation with multisectoral stakeholders, during which it was recognized that the LAP provided a time-limited window of opportunity for advancing the

country's PA system. Following these consultations, MARN requested GEF support to work with CNR and the Bank to take advantage of the strong conservation opportunity presented by the LAP.

52. The project addresses long-term sustainability of the overall PA system and that of the individual pilot PAs. Current NPAS budgeting is not adequate, and reflects neither actual expenditures nor those necessary to address long-term challenges. The PACAP specifically addresses this issue in Component 1 through strengthening MARN's institutional capacity to plan for long-term expenditures necessary to sustain the system, evaluating alternative financing sources, and building their capacity to manage the system. Additional project activities further support MARN's institutional sustainability, such as the development of a PA M&E system linked to CNRs databases, a unified PA registry, development of partnerships with CNR and other institutions key to NPAS management, and the provision of PES incentives to private landowners. Regarding the sustainability of individual pilot PAs, the project will test mechanisms to capture alternate funding sources (such as establishing concessions for people with legal but irregular titles in or adjacent to mangroves and protected areas, charging user fees, and so forth), the specific goal of which will be to contribute to financing the recurrent costs of those areas. As in most PA systems worldwide, it is expected that the budget shortfall for individual PAs would be covered by annual appropriations, the costs of which will be evaluated during project implementation.

53. The project results will be replicable at two levels. First, at the individual PA level, the project is developing and testing a strategy to consolidate two pilot protected areas (one PA complex, including several individual PAs, and the other a mangrove complex, including mangroves and individual PAs). These pilot areas were specifically chosen to represent conditions faced by most other PAs in the NPAS (see Annex 16). Thus, the lessons learned from this effort can be applied to other PAs in the future. Second, at the system level, the project is taking the lessons learned from the two pilot areas to translate them into a national protected areas strategy, along with the required legal and institutional frameworks to enable its implementation and long-term sustainability. One of the activities supported through the project is the analysis of the resources (both human and financial) needed to implement this strategy and associated action plan, including the role of stakeholders at the local and national levels.

5. Critical Risks and Possible Controversial Aspects

Risks	Mitigation Measures	Risk Range
Institutional weakness of implementing agency.	Ongoing Bank dialogue with MARN over broad portfolio. MARN-targeted capacity building and institutional strengthening activities financed through project.	Modest
Lack of participation by key stakeholders at local level.	Design and implement intensive communication campaign, based on results from socioeconomic census. Capacity building of key stakeholder groups financed through project.	Modest
Poor coordination and lack of participation by national and local agencies and weakness of various agencies, especially municipalities, with regard to human resources and equipment.	Establish advisory committee, including representatives from MAG, ISTA, CNR, CONAMA, municipalities, the private sector, and local communities. Capacity building of COALs and ADESCOs at local level financed through project.	Modest

	Training of key agencies and institutions financed through project.	
Land tenure has been the subject of major conflict throughout the country's history (e.g., titling), and the project may lead to conflicts over land, become politicized, or be seen as an instrument that favors one or more groups to the detriment of others.	Establish an open dialogue with state sectoral institutions and with municipal offices and civil society to avoid social conflicts as much as possible and give more transparency to the process. Establish alternative conflict resolution mechanism to address local claims through project. Implement and disseminate Process Framework.	Substantial

6. Loan/Credit Conditions and Covenants

Effectiveness:

- Project's Operational Manual satisfactory to Bank
- PCU established and key staff contracted

Legal covenants:

- Interinstitutional agreement between CNR and MARN defining responsibilities of each institution in the project
- Agreements between MARN and ISTA outlining procedures for transfer of pilot area lands
- Monitoring and evaluation system operating

D. APPRAISAL SUMMARY

1. Economic and Financial Analyses

54. The project economic and financial analysis estimated that the net present value (NPV) of incremental project benefits will be US$34.9m for a 50 year-period, with a discount rate of 12 per cent. The economic internal rate of return is 19 per cent, of which 82 and 18 per cent are associated with activities in the Bahia de Jiquilisco and Lago Guija Complex San Diego-La Barra pilot areas, respectively. Costs include the direct investment through PACAP over the project lifetime, as well as pilot area office investment and recurrent costs over a 50-year period. The expected incremental economic benefits result from sustainable management of the pilot areas. Specifically, sustainable land use patterns, resulting from the introduction of management plans, will yield an increase in the quality and quantity of environmental services, thereby providing both national benefits (sustainable management of fish stocks and fuelwood, reduced agriculture-, livestock- and fishing-related soil and water contamination, and better soil conservation practices) and global benefits (carbon sequestration, biodiversity conservation).

55. Furthermore, the economic analysis examined two additional scenarios to calculate: 1) the revenue from concessions/authorizations for productive activities within the pilot areas; and, 2) the cost of relocating those currently living within the pilot areas to non-protected area lands. The estimated annual value for shrimp and salt harvesting concessions in Bahia de Jiquilisco is US$34,040. The estimated annual value for agricultural authorizations in the Lago Guija Complex San Diego-La Barra is US$5,400. Under the second scenario, the economic cost of relocating all individuals within the core nucleus and buffer zones of the two pilot areas is considered to be US$79.6m.

56. A financial analysis of MARN's Natural Protected Areas System was undertaken to assess its financial viability. The analysis includes a cash flow assessment with a projection until 2015 that includes the incremental benefits and costs associated with the NPAS consolidation. The projection based on entrance fees and concession/authorization revenue indicates that these income sources are insufficient to finance the consolidation of the NPAS. So as to explore other potential complementary income sources, the analysis includes two additional income categories: 1) direct use of land and natural resources in protected areas (residential permits, fishing and fuelwood authorizations/concessions); and 2) taxes to finance environmental services (departure tax at international airport, water consumption tax, and a hydroelectric power tax). Under scenario one (residential permits, expanded authorizations/concessions), the NPAS would yield a deficit of $340,000 in year 2015, and therefore would not yield sufficient income to make the NPAS financially sustainable. Under scenario two (additional taxes from environmental service payments), the NPAS could generate a total surplus of US$1.25m over the next ten years and consequently achieve its sustainability.

57. **Incremental Cost Analysis.** The baseline scenario provides limited support for conservation of globally significant biodiversity, with US$21.9m being spent on activities related to the proposed project's objectives. The baseline scenario, however, provides this project with an enabling environment by collecting essential geo-spatial data and strengthening the related legal and institutional frameworks. The GEF alternative scenario would capitalize on this situation, consolidating and sustainably managing two pilot areas, and strengthening the overall NPAS, thus contributing to the conservation of globally significant ecosystems and biodiversity. The total incremental project cost would be US$10m; of these funds, US$5m would come from the GEF grant to fund global benefits, and US$5m would come from the partially blended LAPII IBRD loan. Together, these projects would produce significant local and global benefits (see Annex 15).

2. Technical

58. The proposed project will consolidate and strengthen El Salvador's incipient NPAS. In so doing, it will make full use of close linkages with the recently approved LAP II to resolve land tenure issues and ensure technically sound boundary delimitation and physical demarcation of protected areas.

59. The project will improve the overall NPAS through enhancing MARN's PA Strategy. Specifically, under Component 1, the project will support: (a) broad stakeholder consultation to identify and build consensus on the importance of the NPAS; (b) a study to rationalize the system through evaluating the conservation value of all PAs in the system, recommending how MARN should prioritize efforts to consolidate the most important areas; (c) development of legal tools necessary to consolidate the system (including regulations for the newly passed PA law); and (d) a national public awareness campaign regarding the importance of biodiversity and PAs. Based on the results of these activities (and those of Component 2), the PA Strategy will be revised.

60. At the protected area level, the project will target two pilot areas for action: one mangrove (35,600 ha of mangroves and associated humid tropical forest) and one NPA (1,917 ha of tropical dry forest and associated riparian forest). Lessons learned from these two pilot areas will enable MARN to more effectively consolidate the remaining priority areas for conservation within El Salvador. Each pilot area would be consolidated through: (a) defining the external and nucleus boundaries to minimize threats (excluding towns and intensive agriculture, to the extent possible); (b) developing and implementing a participatory management plan, including conservation-based zoning; (c) pilot-testing incentives to promote conservation (see below); and (d) legally establishing the area, including physical demarcation and legal decree. Activities of local NGOs would continue under renewed co-management agreements with MARN, as would project-sponsored investments to improve the quality of protection and management.

61. Two pilot areas were chosen through a prioritization process that considered global, regional, and national biodiversity importance, probability of project success (based on existing land use, land tenure, size, participation, and other factors). The two pilot areas chosen were the Bahía de Jiquilisco Conservation Area and the Lago de Guija–San Diego–La Barra Complex (see Annex 16).

62. ***Bahía de Jiquilisco:*** This proposed Conservation Area (CA), a 63,000 ha complex of mangroves, intertidal mudflats, estuaries, barrier islands, sandy beaches, and remnant humid forest patches (totaling 35,600 ha), as well as buffer zones, extends along the Pacific coast from the mouth of the Rio Lempa to Playa El Espino. The area's biodiversity significance includes four species of nesting sea turtles (all globally threatened), the threatened Black-handed Spider Monkey (*Ateles geoffroyi*), and a large diversity of migratory birds, including abundant shorebirds and land birds. Due to its importance for migratory birds, the area has been nominated as a Ramsar Wetland Site. The mangroves and adjacent humid forest patches are bordered by intensive agriculture and several towns. The mangrove currently receives limited on-the-ground protection (from AECI), and the small remnant forest patches are supported by individual NGOs. Key threats include conversion of mangroves for housing, expansion of shrimp and salt ponds, agriculture, and tourism.

63. ***Possible Project-supported Incentives:*** In this area, the project would pilot the use of incentives such as redefining concession types to promote sustainable activities (for example, regulated fishing and shellfish harvest, controlled tourism, limited mangrove harvesting)—thereby regularizing existing residents of the mangroves and directly adjacent buffer zones under the condition that they comply with the management plan—as well as charging user fees, and so forth. Additional incentives include support for alternative income-generating activities, and a small grants program. Residents of the broader buffer zone would receive training and capacity building.

64. ***Lago de Guija–San Diego–La Barra:*** This complex of proposed natural protected areas is located in northwestern El Salvador along the Guatemalan border. It includes the proposed San Diego–La Barra National Park, comprising 1,389 ha of relatively contiguous tropical dry forest (the largest expanse in El Salvador), 517 ha of disturbed/early regeneration tropical dry forest, and 11 ha of floodplain forest with an impressive egret breeding colony, and five lakes and lagoons. The proposed project would directly address the 1,917 ha of primary and regenerating dry forest and associated floodplain forest and wetlands. The lakes and lagoons could be incorporated into the managed pilot area during project implementation

65. ***San Diego-La Barra National Park:*** The proposed park includes one of the largest expanses in Central America of Central American Tropical Dry Forest Ecoregion—an area with "Critical" conservation status (the highest ranking.)[19] This forest area is surrounded by intensive agriculture, yet still reasonably well protected by the local NGO.[20]

66. ***Lago de Guija and Laguna de Metapan:*** The larger, multiple-use proposed NPA covers several freshwater bodies, including the 3,170 ha Lago Guija and the smaller Laguna de Metapan. These lakes are of considerable biodiversity interest, harboring at least two globally threatened fish species, Mojarra Negra (*Cichlasoma guija*) and Istatagua (*C. trimaculatum*), plus numerous water birds.[21]

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[19] World Bank-WWF *Conservation Assessment of Terrestrial Ecoregions of Latin America and the Caribbean* (Dinerstein and others 1995).

[20] CEPRODE, the local NGO, has a co-management agreement with MARN but currently receives no funds from them.

[21] The effective conservation of these lakes is likely to prove very challenging (more so than the dry forest), because the environmental threats (including tilapia and other invasive fish species stocked by MAG, heavy fishing pressure from some 1,400 local people, intensive agriculture along much of the shoreline, pollution associated with agrochemical runoff and sewage

67. Key threats to the area include encroachments by farmers, agriculture-related forest fires, heavy fishing, invasive species (for example, fish), pollution from agrochemicals, and sewage. Possible *Project-supported Incentives* in this area include piloting the use of conditional titles linked to the management plan, support for alternative income-generating activities, and small grants to support conservation-friendly activities.

3. Fiduciary

68. MARN will be responsible for managing the fiduciary aspects of the project through the PCU located within MARN. Its main financial and accounting responsibilities will include: (a) maintaining accounting records, (b) processing disbursements, (c) preparing project financial statements in accordance with World Bank guidelines, (d) managing bank accounts, (e) managing financial information systems, (f) preparing and submitting quarterly Financial Monitoring Reports (FMRs), and (g) preparing and submitting withdrawal applications.

Financial

69. The financial management (FM) assessment carried out during the preparation of the ESP reviewed MARN's FM structure, experience in managing donor-funded projects, and its internal operating performance and procedures. On the basis of this assessment, the FM team concluded that overall, MARN has limited FM capacity (limited staffing and FM system) and does not have extensive experience in managing World Bank-funded projects. Therefore, an experienced financial management officer (accountant) must be hired to manage project accounting and financial reporting information. However, because MARN has demonstrated its willingness to increase its capacity and, assuming MARN carries out the proposed action plan (especially regarding staffing), it would have FM arrangements adequate to meet the Bank's minimum fiduciary requirements to manage PACAP's specific financial activities. The project is rated modest for overall risk. The action plan (in Annex 7), supervision plan, and external audit scope have been designed to manage identified risks.

70. It is proposed that: (a) a Special Account in U.S. dollars will be opened in the *Banco Central de Reserva* to specifically manage grant funds; (b) at least at the beginning, the project will use transaction-based disbursements; (c) each quarter MARN will prepare the FMRs to be submitted to the World Bank; and (d) annual project and MARN financial statements will be audited by independent auditors in accordance with International Standards on Auditing issued by the International Federation of Accountants (IFAC) and of El Salvador's *Corte de Cuentas*, in accordance with terms of reference (TORs), both acceptable to the World Bank.

Procurement

71. An assessment of MARN's capacity to implement procurement actions for the ESP recently approved by the Board of Directors concluded that because MARN has no previous experience implementing World Bank projects, the associated risk is considered high. Consequently, it is recommended that a Procurement Officer be hired as part of the PCU.

4. Social

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pollution from numerous lakeshore homes and the town of Metapan) will not be easily controlled by MARN. One of the first key decisions in delimiting the future boundaries of the NPA will be to decide whether to include (any or all of) the privately owned shoreline lands, along with the publicly owned lake surface area.

Stakeholder Involvement

72. A participatory social assessment was done in each pilot protected area to: (a) identify all key stakeholders who should participate in decision-making on project design and implementation; (b) consider the project's key stakeholders in a significant and adequate manner for the design, promotion, and execution of the project; and (c) identify the possible risks that could hinder the achievement of project objectives and make recommendations to compensate for such risks.

73. As described in Annex 10B, the assessment, based on quantitative and qualitative methods, identified project beneficiaries/stakeholders as: (a) specific focus groups such as the very poor (mostly people with un-regularized land rights, such as those without titles or concessions, former people displaced by the civil war, and peasants) and wealthy (mostly holding legal but irregular titles in areas subject to MARN's jurisdiction); (b) MARN; (c) CNR; (d) municipal offices; (e) NGOs; and (f) ADESCOs—all of which will be able to know what are the boundaries, who are the land's legal titleholders, and what are their rights with regard to land, and what are the use restrictions on those lands—and, (g) civil society—the local and national population, who will benefit from an improved PA system—and the regional and global populations who will gain from the conservation of regionally and globally significant biodiversity.

74. The project expects to mitigate and prevent adverse social impacts through: (a) emphasizing early and frequent consultation with key stakeholders at the local and national level, carrying out social promotion and education to achieve capacity building and participation; (b) strategically disseminating the project, clearly showing its objectives and scope and avoiding the creation of false expectations; (c) establishing dialogue with state sectoral institutions, municipal offices, NGOs, and ADESCOs to avoid social conflicts as much as possible; (d) developing management plans for the pilot areas with the participatory involvement of local stakeholders; (e) creating alternative conflict-resolution mechanisms at the local level to address project-related disputes; and (f) creating incentives, through the implementation of management plans.

75. In addition to the social assessment, six participatory workshops have been held. These include four national workshops,[22] bringing together over 300 key stakeholders, including national agencies, municipalities, private sector representatives, ADESCOs, NGOs, and citizens to discuss how national conservation objectives could be integrated into the systematic land regularization process, and the specific project objectives. Two additional local workshops were held (one in each pilot area), in which local stakeholders contributed to the project design (see Annex 10A).[23]

5. Environment

76. The project is designed to achieve a strengthened PA system, based on results gleaned from the consolidation of two priority protected areas. Through this outcome, the project aims to contribute to the conservation and sustainable use of regionally and globally significant biodiversity in El Salvador resulting from the rationalization and consolidation of the protected areas system.

77. The project was born in part from the results of the Environmental Assessment (EA) done for the LAP II project, which found that that project had significant positive potential impacts related to the improved management of PAs, because land administration presents a limited window of opportunity to limit population distribution in PAs, limit allowable activities on ecologically

[22] Three of these national workshops were associated with the preparation of the partially blended LAP II and are described in the PAD for that project. The fourth national workshop focused solely on the objectives of the proposed project, as described in Annex 10.

[23] The local workshop in Lago Guija was held on May 17, 2005, and the local workshop for Bahía de Jiquilisco was held on June 20, 2005.

sensitive lands, and develop a model for promoting sustainable development on those lands. This project attempts to realize those positive environmental impacts through consolidating two pilot protected areas and improving the overall management of the national protected areas system.

78. The proposed project aims at addressing the root causes of biodiversity loss in El Salvador by piloting a methodology to consolidate two priority protected areas. The project will develop and pilot-test mechanisms for the regularization of communities in and near two priority conservation areas, one mangrove (Bahía de Jiquilisco) and one inland protected areas complex (Lago Guija–San Diego–La Barra, or "Lago Guija Complex")—as long as those residents abide by use limitations established in broadly consulted management plans—as part of a long-term comprehensive and sustainable development plan for those pilot areas. This methodology will come out of a participatory process, led by MARN and involving other government agencies addressing land and natural resource issues, and civil society and the private sector. Pilot consolidation activities will address the potential conditional regularization of residents in and near PAs containing globally significant biodiversity, and will develop and implement management plans, including identifying and supporting conservation-friendly income-generation activities for those residents. By developing and testing a methodology for consolidating PAs and supporting the creation of a strategy to rationalize the PA system, successful project completion would greatly advance biodiversity conservation in El Salvador. In addition, by providing secure tenure, support for environmentally sustainable livelihood activities, and a strategy for quelling encroachment into the few remaining critical biodiversity nodes in the country, and strengthening the legal and institutional framework for natural resource management, the project contributes to the long-term protection and conservation of globally significant biodiversity.

6. Safeguard Policies

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	[X]	[ ]
Natural Habitats (OP/BP 4.04)	[X]	[ ]
Pest Management (OP 4.09)	[ ]	[X]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[X]	[ ]
Involuntary Resettlement (OP/BP 4.12)	[X]	[ ]
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	[ ]	[X]
Forests (OP/BP 4.36)	[X]	[ ]
Safety of Dams (OP/BP 4.37)	[ ]	[X]
Projects in Disputed Areas (OP/BP/GP 7.60)*	[ ]	[X]
Projects on International Waterways (OP/BP/GP 7.50)	[ ]	[X]

*By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas.

79. The project is classified as a Category B, requiring some type of EA but not a full-scale Environmental Impact Assessment. Recommendations of the project's EA, currently being finalized, will be embedded in the project design. In accordance with OP 4.01, the project EA builds on that done for the linked LAP II, which was conducted by national and international experts during 2004. Specifically, the PACAP EA consists of three studies: (a) an overall PA study developing recommendations for improving the NPAS; (b) ecological assessments of the two pilot areas; and (c) an EA of eligible project activities within the two pilot areas. The project design is fully consistent with the Bank's Natural Habitats, Forests, and Cultural Property policies (see Annex 10A for details).

80. Although no involuntary resettlement would take place under the project, there might be increased restrictions on access to natural resources for some of the people living in, or adjacent to, the project pilot areas. Consequently, a Process Framework (see Annex 10C) has been produced to

ensure that project beneficiaries receive appropriate consideration and assistance in their efforts to maintain or improve their livelihoods. Such assistance would be provided during the formulation and implementation of management plans for each pilot area.

81. In accordance with IBRD's policy on Disclosure of Information (BP 17.50), copies of the EA and Process Framework are available for viewing at MARN's office (Edificio ISTA, km 2.5 Calle a Santa Tecla, San Salvador), on MARN's website (www.marn.gob.sv), and in the Bank's InfoShop in Washington.

7. Policy Exceptions and Readiness

82. The project does not require any exception from IBRD or GEF policies. The fiduciary arrangements are in place. All key project staff and consultants are expected to be mobilized prior to project effectiveness. Adequate monitoring and evaluation capacity is already in place. This project complies with all applicable Bank policies.

Annex 1: Country and Sector or Program Background

EL SALVADOR: Protected Areas Consolidation and Administration Project

Country and Sector Issues

1. *Biodiversity Significance:* El Salvador, located in the geographical center of the Mesoamerican Biodiversity Corridor, supports an impressive diversity of species, comprising 1,477 species of vertebrates (27 percent of which are threatened with extinction), with 510 bird species (including 17 of the 23 birds endemic to northern Central America), and 140 species of reptiles and amphibians, around 7,000 native plant species (including more than 700 species of trees), and 800 species of butterflies—all in an area the size of Massachusetts. This high biodiversity—stemming from the country's unique setting, peppered with volcanoes and isolated from Central America's Atlantic moist forests—persists despite the fact that El Salvador retains just 2 percent of its primary forest and perhaps 25 percent natural vegetation (including secondary forests). El Salvador also contains one of the largest expanses of mangroves in Central America (centered around the Bahía de Jiquilisco).

2. *Threats to Biodiversity:* The globally and regionally significant biodiversity sheltered within El Salvador's protected areas system (NPAS) is severely threatened. El Salvador—the most densely populated country in Latin America—continues to struggle with land-related issues, because population pressures have resulted in numerous encroachments into protected areas. These encroachments result in significant habitat destruction and deterioration, through the conversion of forests, pollution, and overexploitation of natural resources, all of which stem in part from a lack of environmental awareness. As a result of unchecked habitat destruction, it is likely that some of the smaller protected areas comprising NPAS no longer contain sufficient natural or near-natural habitats to warrant special protected status.

3. *Protected Areas System Design and Consolidation:* El Salvador's protected area system officially includes 118 natural protected areas, totaling 39,975 ha,[24] and approximately 35,500 ha of mangrove—all under the jurisdiction of the Ministry of Environment and Natural Resources (MARN). Despite the large number of protected areas, their average size is just 850 ha, ranging from 1.9 ha (Colomita) to 31,699 ha (Bahía de Jiquilisco[25]), and virtually no areas have any legally defined buffer zones.[26] Of all the countries in the Mesoamerican Biodiversity Corridor, El Salvador has the smallest amount of area under formal protection (just 75,500 ha, representing 4.6 percent of the total country).[27,28] Of this 4.6 percent of the country subject to MARN management, only about 7,000 ha (0.3 percent of national area) are legally declared and demarcated. To date, no Salvadoran protected areas are fully consolidated (demarcated, titled, and under a functioning management plan). Thus, the vast majority of the protected area system constitutes "paper parks," with an inadequate legal framework and virtually no physical protection.

4. The system's protected areas are largely undefined, both in terms of their physical boundaries and ecological resources, making management and priorization difficult. In addition, protected areas have been traditionally managed as individual units, where conservation efforts have considered mostly a

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[24] As per GEO.

[25] According to MARN data, and considering only the area covered by mangroves (not the associated estuaries, beaches, bay, mudflats, and so forth).

[26] Only one park, El Imposible, includes a legally defined buffer zone (*área de veda*).

[27] According to the *Ecosystem Profile: Southern Region, Mesoamerica* (Critical Ecosystem Partnership Fund) this is significantly behind Costa Rica (with 24 percent of the land protected), Guatemala (23 percent), Nicaragua (17 percent), Panama (17 percent), Belize (10 percent), and Honduras (8 percent).

[28] More than 1.6 percent of El Salvador's land was officially designated as protected area in the newly approved protected areas law (*Ley de Áreas Protegidas,* February 2005). These lands include all mangroves in the country, which were considered national forests outside of the protected areas system prior to the passage of the law.

"boundary inward" approach, thus limiting the possibilities of linking these protected areas with others within the landscape.

5. Given the limited resources available for protected area management, and the need to sustainably manage biodiversity, El Salvador developed a National Plan for the management of its landscape (*Plan Nacional de Ordenamiento y Desarrollo Territorial*, PNODT, 2002). Through this Plan, 15 Conservation Units (now called Conservation Areas) were proposed to provide an ecologically sound and administratively feasible way to link protected areas, through the establishment and management of biological corridors and buffer zones. The idea of establishing 15 Conservation Areas is consistent with the need to prioritize biodiversity conservation efforts in the country. To date, management efforts considering this approach are being initiated in two Conservation Areas (Apaneca-Ilamatepec and Bahía de Jiquilisco).

6. Building on the PNODT, the "Natural Protected Areas and Biological Corridor National Strategy" was recently elaborated by MARN (2005). This strategy considers an ecosystem approach to biodiversity conservation, and sets forth clear strategic activities to strengthen the NPAS. These include (a) institutional capacity building, (b) land use and Conservation Area planning, (c) political advocacy, (d) public communication, (e) economic sustainability, (f) information management, and (g) research. This strategy seeks to address the main threats to the NPAS: habitat loss and degradation, resulting in the loss of renewable natural resources, which, in turn, diminish the quality of life of local human populations. MARN has incorporated this strategy into its work program, strengthening liaisons with NGOs and ADESCOs working in protected area management. However, there is still the need to incorporate a larger number of key stakeholders, who (directly and indirectly) have an impact on specific protected areas and on the overall NPAS.

7. *Institutional and Legal Framework:* The original protected areas system was created by the Ministry of Agriculture and Livestock (MAG), which had declared 47 NPAs by 1976. Before 1973, the mangrove forests were controlled by the local municipal authorities. With the approval that year of the Forestry Law (*Ley Forestal*), the mangrove forests were declared Natural Patrimony under the jurisdiction of MAG, and thus were protected lands. However, these forests were not managed as PAs (with park guards, management plans, and so forth), but were considered multiple use areas. In these areas, MAG, both through its Forestry (*Servicio Forestal*) and Fisheries (CENDEPESCA) services, was legally responsible for controlling the use of natural resources within mangrove ecosystems.

8. The agrarian reform process began in 1980 to facilitate transfer from large landowners to the poor, and expropriated 411,151 ha—about 20 percent of the country—including 22,000 ha of potential natural protected areas for the jurisdiction of the Salvadoran Agrarian Reform Institute (ISTA).

9. When the Salvadoran NPAS was first proposed in 1990, it included 118 areas under MAG's jurisdiction—despite the fact that most of those lands officially pertained to ISTA, municipalities, and private landholders, and had been selected based on unclear criteria. The first national environmental law (*Ley de Medio Ambiente*, 1998) created MARN and transferred to this institution the responsibility for the management of the NPAS. Today, MARN remains responsible for the oversight of more than 118 protected areas under eight management categories, plus approximately 35,000 ha of coastal mangroves, but has legal title over only 7,072 ha. Consequently, the vast majority of the lands that theoretically are part of the SANP have unresolved legal status.

10. An important legal distinction exists between mangroves (governed under the 2002 forest law and the 2005 protected areas law) and natural protected areas (NPAs) with regard to land rights. Both mangroves and NPAs are considered "protected areas,"[29] wherein private or public entities are allowed to carry out

[29] Equivalent to IUCN Category II.

activities that are compatible with the area's conservation, on authorization of MARN. Mangroves, on the other hand, are managed as sustainable use areas,[30] wherein residents are eligible to receive usufruct rights in the form of concessions, granted by MARN, subject to uses defined in management plans. In NPAs, the new law does not allow new human settlements once the areas have been established as protected, with the exception of the natural reserve category where no human settlements whatsoever are permitted. This implies the need to develop a methodology to identify illegal and legal settlements within PAs, and how to regularize the latter.

11. *Institutional Capacity for Protected Areas Management:* MARN, created in 1998, is severely resource constrained, both in financial and human capital terms. Its diverse responsibilities and small annual budget (around US$5 million) severely limit its capacity for on-site staffing of the main protected areas, and for the coordination of the broader Conservation Areas. Currently, six technical staff, mostly located in the national capital (in the Protected Areas Section of the General Directorate of Natural Patrimony, DGPN), are responsible for oversight of the entire NPAS.[31] There is also only one full-time employee (also based in San Salvador) for all of the country's mangrove ecosystems.

12. Land Tenure: An additional challenge for the NPAS relates to clarifying land tenure. In all but three protected areas comprising 7,072 ha, the system's lands are not officially titled in the name of MARN, but remain in a legal limbo among other state agencies, municipalities, and even private individuals. This lack of tenure clarity in unoccupied areas has in part led to a significant number of invasions of state-owned lands (most of which are protected areas). Most of these protected area invasions are by the rural poor, who have limited production and livelihood alternatives.

Table 1.1 Legally Protected Areas in El Salvador

	Protected Area		
	MONTECRISTO	EL IMPOSIBLE	LAGUNA EL JOCOTAL
Legal Status	Executive Decree, 1987	Executive Decree, 1989	Legislative Decree, 1996
Hectares	1,973	2,985	1,571
Location	Metapán, Santa Ana. Part of a Biosphere Reserve	San Francisco Menendez and Tacaba, Ahuachapan	El Transito, San Miguel
Biodiversity characteristics	Largest cloud forest in country, with 40% of its amphibians and 36% of reptiles in danger of extinction.	One of the richest areas of biodiversity in the country. One of the region's few protected areas of Pacific forests, containing almost 400 different tree species, more than 500 butterfly species, and 45 mammal species, most of which are threatened or endangered.	RAMSAR site since 1998. Contains some of the largest flocks of water birds in country and serves as a refuge to migratory water birds. Offers one of the last remaining habitats for *Jabiru mycteria* in the country.
Management plan	Designed and in operation, jointly created with the governments of Honduras and Guatemala under the Trifinio Plan.	Designed and implemented jointly with MARN and the NGO SalvaNatura.	Designed and implemented jointly with NGOs.
Current sources of financial support	European Union, UNESCO, Japanese International Cooperation Agency, IDB, PAES, AECI.	IUCN, SalvaNatura, CARE, AECI.	MARN, AECI, IUCN.

[30] Equivalent to IUCN Category VI.

[31] Each technician is responsible for 10 to 15 protected areas, most of which do not have on-site protection. Only one National Park (Montecristo) has an on-site Director, and five areas have a limited number of park guards.

13. The Government's Land Administration Project (LAP), currently entering its second phase with IBRD support, is systematically assessing land tenure nationwide. These efforts have important implications for the NPAS, because LAP's activities include extensive geographic data collection (through satellite images, overflights, and so forth) and determination of land rights.

14. *Enabling Environment:* Despite the significant threats to the protected area system, the culmination of several events has provided a unique opportunity to address these issues. First, MARN has recently completed several documents to strengthen the NPAS, including the (a) National Biodiversity Strategy, (b) National Land Use and Development Plan, (c) Natural Protected Areas and Biological Corridor National Strategy, (d) National Strategy for Biodiversity Monitoring and Evaluation, together with procedures, and (e) National Strategy for Co-management, with its corresponding procedures. Perhaps most important, the Natural Protected Areas Law was finally approved in 2005, thus establishing the legal framework for management of the SANP under MARN's jurisdiction (see below).

15. Furthermore, the LAP is midway through completing the cadastre and registry of all lands in the country, which has been deemed a high priority by the new Government. During the preparation of the second phase of the IBRD-funded project, the Government identified the importance of resolving tenure conflicts in protected area lands, without which the LAP's efforts to address all of El Salvador's lands will fall short. The LAP's implementing agency, CNR, has made significant effort to involve MARN in that project, including a component for demarcation of three (as yet unidentified) protected areas. By developing a partially blended operation, GEF funds will catalyze the consolidation of the national protected areas system by exploiting the significant opportunity presented by the LAP.

Summary of New Protected Areas Law

16. The new Protected Areas Law, which was approved by the Assembly on February 13, 2005 and came into force on February 24, 2005, defines the structure and configuration of the NPAS, identifying the rules for selecting, establishing, and managing the areas, both public and private, that can or should be part of it. Specifically, the objective of the law is to regulate the legalization process, administration, management, and increase of protected areas, with a view to promoting biodiversity conservation through their sustainable management for the benefit of the country's population.

17. According to the law, the protected areas will be legally established through executive decree, on the basis of their biological, technical, and legal characterization and priority, as determined through technical studies. The regulation (*Reglamento*) for the implementation of the law (which is still a work in progress) will define the required steps for establishing an area as a protected area, including its delimitation, technical categorization, and demarcation. Private properties will be eligible to be part of the Protected Areas System, as long as they are significant from a biological or historical standpoint and are managed, by the owner, in accordance with the law. The declaration of protected area will have to be recorded in the Property Registry. All protected areas will be registered in the Protected Areas Registry maintained by the Ministry of Environment.

18. The law further defines management categories, according to the objectives established for a given area and its available natural resources. These categories broadly corresponds to the IUCN protected area management categories.

19. *Responsibility for implementation.* Overall responsibility for the implementation of the law and its regulations lies with the Ministry of Environment and Natural Resources. With regard to the management of protected areas, the law identifies three levels of responsibilities: (a) a national, strategic level, under the leadership of a Protected Areas National Committee (to be created); (b) a national, operational level,

under the leadership of the Directorate General of Natural Patrimony; and (c) a local level, at which Local Advisory Committees will be the main instrument for inclusion and broad participation of the local entities and communities.

20. *Co-management approach.* To ensure its efficient and effective implementation, the law allows MARN to delegate, through executive agreement, some of the activities related to protected areas management to autonomous entities, municipalities, or NGOs legally established. Co-management and the formal participation of civil society in the management of protected areas is an important concept in El Salvador, sanctioned in the Environment Law of 1998. It takes on even greater importance considering the limited institutional capacity within the Ministry of Environment and the ongoing decentralization efforts. Indeed, since the 1990s, NGOs have been actively involved in this area, and today several of them (about 30) have been delegated the management of a protected area.

21. Management plans. The delegation of the protected area management will require the formulation and approval of a management plan for the specific area. While no new human settlements are allowed within a protected area once it has been established, the management plan will have to include, if the case occurs, specific regulations to ensure that the preexisting settlements operate in accordance with the conservation objectives set for the area. No human settlements whatsoever are permitted in the Nature Reserve category. Currently, however, a methodology to identify illegal and legal residents within PAs and the regularization of the latter does not exist.

22. No management plan has yet been implemented for mangrove forests in El Salvador, despite the fact that the country supports one of the largest expanses of mangroves in Central America (for example, Bahía de Jiquilisco).[32] The development of ecosystem-based management plans for mangroves are of paramount importance given the high population density in El Salvador's forests—at 269.6 persons/km2. El Salvador's mangroves are subject to population pressures three times higher than any other Central American country.

23. *Activities within PAs.* The management plan will also define buffer zones and regulate the productive activities therein so that they are compatible with the conservation of the area. More generally, the law allows private or public entities to carry out activities within protected areas that are compatible with the area's conservation, on authorization of the Ministry of Environment and Natural Resources. In mangrove areas, in addition to authorizations, residents are eligible to receive usufruct rights in the form of concessions, granted by MARN, subject to uses defined in management plans.

24. Biological Corridor approach. The law further allows combining the administration as a Conservation Area of those protected areas that are geographically interconnected and ecologically interdependent, thereby contributing to the conservation efforts within the Mesoamerican Biological Corridor.

Protected Area Management Case Studies

25. *Montecristo National Park:* The management of Montecristo National Park, the largest cloud forest in the country, was initiated in 1976 to prevent landslides and flooding into the City of Metapan. During the 1970s and 1980s, Montecristo was considered to be the best-managed park in the country, due to its permanent staff. A local fund was established (*Fondo de Actividades Especiales*)—replenished with entry fees, timber sales, and sales of flowers and coffee grown in certain park areas—by which the administration can generate and reinvest money for management.

[32] AECI recently completed a management plan for a portion of the Bahía de Jiquilisco, and plans to implement it in the short term.

26. Since its establishment, Montecristo has been managed by the GOES, with active participation by both MARN and the Vice-Presidency, since the area borders two other nations, Honduras and Guatemala. The park headquarters, a colonial building built in the late 1880s and refurbished with the help of CONCULTURA, serves as a tourist attraction. While several other governmental institutions participate in the management of the park, neither co-management agreements nor concessions have been granted to fund activities considered within the Park's Management Plan.

27. Montecristo National Park is located within the Guija–Montecristo Conservation Area (PNODT 2002). This 44,531 ha Conservation Area is divided into three zones: (a) high, containing Montecristo National Park, where mountain waters feed Laguna de Metapan and Lago de Guija; (b) intermediate, a densely populated area; and (c) low, representing the only dry forest in the country, containing La Barra and San Diego Protected Areas.

28. The Pilot Trifinio Project (*Proyecto Piloto Trifinio*, PPT), supported through the European Union, was initiated in 1995. One of its main goals is to establish a Trinational Biosphere Reserve, covering large extensions of land at the nexus of three countries (El Salvador, Guatemala, and Honduras), with the Park as its nucleus. PPT has promoted sustainable agriculture, integrated forestry management, water provision, health and education, and small business formation in the buffer zones, and increased the awareness of the importance of the Park.

Table 1.1: Main Successes and Shortcomings of Montecristo National Park Management

Management of Montecristo National Park	***Main Successes***	***Main Shortcomings***
	Continuous conservation efforts since 1976 Reforestation and soil conservation programs Management Plan in operation Relatively well-trained guides Establishment of a governmental fund for the management of the Park Established fire control system.	Centralized and bureaucratic process to obtain entry permits Buffer zones not effectively managed Unresolved legal situation of human settlements within the Park Lack of social development projects Insufficient funding because not all money from the governmental fund is reinvested in the Park Limited participation of key stakeholders in the Management Plan.
Linkages with other Protected Areas	***Successes***	***Shortcomings***
	Proyecto Piloto Trifinio	Non-continuous buffer zone management efforts Human activities and attitudes not congruent with sustainable management of land and resources Nonexisting interinstitutional arrangements among governmental entities to jointly administer land and resources among PAs Lack of incentives for private landowners to develop alternative and sustainable productive activities.

El Imposible National Park

El Imposible National Park is one of the largest (2,985 ha) and biodiverse PAs within the NPAS. One of the few areas of protected Pacific forests, El Imposible contains almost 400 different tree species, more than 500 butterfly species, and 30 mammal species, most of which are threatened or endangered. The National Parks and Wildlife Service (PANAVIS) began administering the park in 1976, establishing a group of park guards. Through the 1980s, its management by PANAVIS took a "boundary inward" approach, excluding the participation of other key stakeholders and the communities situated around the park, many of whom were dependent on the park's resources for at least part of their livelihoods, in the development of the park's management plan and other key decisions. This led to a number of problems that are still being grappled with today.

In 1991, as part of a strategy to decentralize and socialize the management of PAs, PANAVIS signed a co-management agreement with SalvaNATURA, a Salvadoran NGO. From this date onward, this NGO has been responsible for all management activities in the park, except for activities regarding law enforcement. A Management Plan (MP) was elaborated in 1996, and is being updated. Currently, 6 national (MARN-financed) and 15 private (SalvaNATURA-financed) park guards work in the park. SalvaNATURA thinks that at least 25 park guards are needed to adequately protect the area.

El Imposible is part of the El Imposible and Barra de Santiago Conservation Area (PNODT 2002). This 36,000 ha Conservation Area is divided into three zones: (a) high, containing El Imposible, at the

headwaters of five large rivers; (b) intermediate, the largest and most densely populated zone; and (c) low, coastal area including alluvial plains and mangrove ecosystem. In addition to El Imposible, the Conservation Area contains four other PAs located on the low zone (Barra de Santiago, Santa Rita, Zanjón El Chino, and Cara Sucia).

Several initiatives aiming at integrating the management of all the PAs within the Conservation Area have been developed since the mid-1990s, including BASIM (Barra de Santiago-El Imposible), financed by IUCN, and the Green Project (PROMESA), financed by USAID. PROMESA's approach was to strengthen biodiversity conservation within the Conservation Area, through sustainable management of the entire watershed, providing opportunities by linking natural habitats through implementing sustainable agriculture and forestry in the intermediate zone between El Imposible and Barra de Santiago.

Table 1.2: Main Successes and Shortcomings of El Imposible National Park Management

	Main Successes	***Main Shortcomings***
El Imposible National Park Management	Continuous conservation efforts since 1976 Co-management agreement signed since 1991 Management Plan in operation Novel elements of the Management Plan Excellent promotion of El Imposible in mass media Increased eco-tourism Social Development Projects in several communities executed with small grants	Sustainable Development Program of Management Plan has not been implemented Buffer zones have not been delimitated and effectively managed Unresolved legal situation of human settlements within the Park (30 families) Territorial conflicts with neighboring farms Lack of continuity of Social Development Projects Insufficient funding Limited participation of local communities and other key stakeholders in the Management Plan
	Successes	***Shortcomings***
Linkages with other PAs	PROMESA project developed over four years BASIM project under development	Non-continuous buffer zone management efforts Human activities and attitudes not congruent with the sustainable management of land and resources Nonexistent interinstitutional arrangements among governmental entities to jointly administer land and resources among PAs Lack of incentives for private landowners to develop alternative and sustainable productive activities

Annex 2: Major Related Projects Financed by the Bank and/or other Agencies

EL SALVADOR: Protected Areas Consolidation and Administration Project

Funding Agency/ Sector Issue	*Project*	*Amount*	*Latest Supervision (Form 590) Ratings (Bank-financed projects only)*	
			Implementation Progress (IP)	*Development Objective (DO)*
FINANCED BY THE WORLD BANK/GEF				
Agricultural sector reform	Agricultural Sector Reform and Investment Project (PRISA) (Project ID 7167)	$40M	S	S
Land administration	Land Administration Project (Project ID 7174)	$50M	S	S
Land administration	Second Land Administration Project (Project ID 86953)	$50M		
Biodiversity	Promotion of Biodiversity Conservation within Coffee Landscapes (GEF Mid-size Grant) (Project ID 56914)	$0.7M	S	S
Environmental services	Environmental Services Project (GEF Full-size grant; IBRD loan; Project ID 64[illegible]10)	$10M (GEF+IBRD) $600,000 (PHRD)		

FINANCED BY OTHER DEVELOPMENT AGENCIES	**AMOUNT**	**SECTOR ISSUES**
IDB Environmental management and watershed management	$30,000,000	Program to Support the National Environmental Management in El Salvador (PAES)
IDB Municipal environmental management	$348,000	Institutional and technical strengthening for municipal environmental management
IDB Sustainable development of the Lempa River	$300,000	Design of a Program for Sustainable Development of *Bajo Rio Lempa*
IDB Environmental clean-up of critical areas	$37,529,000	Institutional and technical strengthening for solid waste and air/water quality management
GEF/ UNDP Biological corridor	$694,000	Mesoamerican Biological Corridor
GEF/UNDP Biodiversity management	$423,000	Strengthening National Capacities for Biodiversity Management; National Biodiversity Strategy

GEF/UNDP Electrification based on renewable resources	$257,000	Small-scale sustainable energy sources for sustainable development
UICN Watershed management	$1,000,000	Integrated Watershed Management for a Sustainable Water Supply in Benefit of the Local Population and Ecosystems in the *El Imposible–Barra de Santiago* Geographic Unity
Government of Holland Environmental Management	$244,000	Strengthening of regional environmental management systems
AECI Protection of Natural Areas	$223,000	Support to the Management of the *Complejo Andes–Volcanes* Protected Areas
AECI Protection of Natural Areas	$1,280,000	Management of Protected Areas and Watersheds
Ramsar Agreement Conservation of Natural Areas.	$26,000	Restoration of the Natural Habitats of *Cerrón Grande* for its Conservation and Rational Use in El Salvador
USAID Participation in environmental management	$100,000	Improve civil society participation in environmental management
Government of France Atlas of Agriculture and Forest in El Salvador	$3,000	Land use information
Government of Finland Renewable Energy	$600,000	Promotion of sustainable energy for rural poor
EU Land Transfer Program	$4,500,000	Land regularization and formalization
EU Environmental Management Strengthening (FORGAES)	$9,600,000	Strengthening of local and central environmental and natural resources management
FIAES Small-scale sustainable development for conservation	$12,225,000	Support to protected areas, management of small watersheds and coastal-marine ecosystems
FONAES El Salvador Environmental Fund	$3,136,000	Conservation and protection of biodiversity, institutional strengthening and reforestation

Annex 3: Results Framework and Monitoring

EL SALVADOR: Protected Areas Consolidation and Administration Project

Global Environment Objective	Outcome Indicators	Use of Outcome Information
To conserve El Salvador's globally significant biodiversity by strengthening the national protected areas system and consolidating two priority protected areas.	Updated strategy and action plan for consolidating sustainable national protected areas system developed. Two pilot protected areas consolidated and effectively managed (Tracking tool* score of at least 40 for 35,600 ha in *Bahía de Jiquilisco* and 1,917 ha in *Lago Guija Complex San Diego–La Barra*). Biodiversity benefits established in at least 12,400 ha: o For *Bahía de Jiquilisco* PA at least 11,000 ha of mangrove or associated humid forest within the core protection zones will have negligible deforestation (less than 1% over 5 years) compared to baseline. o For the *Lago Guija Complex San Diego-La Barra* at least 1,400 ha of dry tropical forest or associated riparian forest will have negligible deforestation (less than 1% over 5 years) compared to baseline.	National protected areas system strategy approved and necessary supporting policy framework developed. Replication of PA consolidation and adaptations to existing individual PA management plans underway in other PA in the system. Dissemination of results at national, regional, and global levels.
Intermediate Results One per Component	**Results Indicators for Each Component**	**Use of Results Monitoring**
Component One: NPAS strengthened to enable long-term sustainable management through consolidation of existing strategy.	**Component One:** Completion of a prioritization study of the NPAS. Action Plan for implementation of the updated NPAS	**Component One:** YR 2: Prioritization study presented at policy workshops. YR 5: Action Plan presented to key decision-makers.

* Tracking Tool for GEF Biodiversity Strategic Priority 1.

	Delimitation of at least 40 protected areas and mangroves. Approved updated regulations for implementation of the new Protected Areas Law. Draft interinstitutional agreements for operating the NPAS. At least 10% of national population aware of new protected areas law and regulations.	YR 5: Incorporate information into protected areas registry linked with integrated cadastre and registry system (SIRyC). YR 1–4: Incorporate lessons learned from pilot sites into draft regulations. YR 3–5: Incorporate concerns of key stakeholders into agreements. YR 1–5: Update information campaign based on results.
Component Two: Two pilot areas consolidated and effectively managed.**	**Component Two:** Socioeconomic census, environmental information, mapped official boundaries, cadastre and registry for each pilot protected area collected and linked with CNR databases. Percent of pilot protected area lands with no unresolved tenure issues. Demarcation of pilot PAs (including external boundaries of pilot areas, and nuclei): number of km demarcated and % of perimeters demarcated. Executive Decrees to establish pilot PAs. Number of protected area field staff in each pilot area	**Component Two:** YR1: Inventory of all existing pilot site information made, with data gaps identified and prioritized. YR1–2: Develop plan for linking existing data to CNR database. YR 3–5: Link protected area database with SIRyC. YR 1–3: Resolve identified conflicts through Alternative Conflict Resolution (ACR) means. YR 2–4: Determine and disseminate best method for demarcation. YR 4: Publish and register Executive Decrees. YR 2–5: Improve management plans and staffing requirements based on monitoring results.

** Management plans will include zonification (including buffer zones, core zones, and so forth), types and limits of allowable uses of natural resources by zone, basic infrastructure and user fees, granting of land rights (through usufruct, concessions, conditional titles, and so forth) to eligible residents within the pilot areas, monitoring and evaluation, and co-management, where appropriate.

	Amount of revenues (in USD$) raised from sustainable natural resource use concessions, visitor fees, and other potential cost recovery mechanisms.	YR 2–5: Use results to refine NPAS Strategy and Action Plan.
Component Three: Project effectively managed, supervised, and monitored.	**Component Three:** Publication of periodic Project reports (FMRs, semestral reports, and annual work plan available). Regular performance and impact monitoring reports produced and disseminated in accordance with annual work plan schedule. MTR available and transmitted to the Bank.	**Component Three:** YR 1–5: Improve project design based on monitoring results. YR 2–5: Assess performance of PCU staff and modify staffing if needed. YR 2–5: Annual budget review to adjust work plan.

Arrangements for Results Monitoring

		Target Values					Data Collection and Reporting		
Outcome Indicators	**Baseline**	**YR1**	**YR2**	**YR3**	**YR4**	**YR5**	**Frequency and Reports**	**Data Collection Instruments**	**Responsibility for Data Collection**
Updated strategy and action plan for consolidating national protected areas system developed.	Preliminary strategy developed in nonconsultative manner	1 Public workshop held	X	Rationalization Study consulted	Preliminary action plan consulted	Strategy updated based on project results	Yearly monitoring report	M&E reports	MARN-PCU
Two pilot protected areas consolidated and effectively managed (Tracking tool score of at least 40 for the 35,600 ha in Bahía de Jiquilisco and 1,917 ha in Lago Guija Complex San Diego–La Barra).	See Tracking Tool	X	X	X	X	Tracking tools results of at least 40	Tracking tool updated YR 2.5 and YR5	M&E reports, tracking tool	MARN-PCU, Co-management entities
Biodiversity benefits established in at least 12,400 ha:									
o For *Bahía de Jiquilisco* PA at least 11,000 ha of mangrove or associated humid forest within the core protection zones will have negligible deforestation (less than 1% over 5 years) compared to baseline.	To be established in YR1	X	X	X	X	No loss of target habitats	Yearly monitoring report	M&E reports	MARN-PCU
o For the *Lago Guija Complex San Diego–La Barra* at least 1,400 ha of dry tropical forest or associated riparian forest will have negligible deforestation (less than 1% over 5 years) compared to baseline.	To be established in YR 1	X	X	X	X	No loss of target habitats	Yearly monitoring report	M&E reports	MARN-PCU
Results Indicators for Each Component	**Baseline**	**YR1**	**YR2**	**YR3**	**YR4**	**YR5**	**Frequency and Reports**	**Data Collection Instruments**	**Responsibility for Data Collection**

Component One: Completion of a rationalization study of the NPAS.	NPAS consists of 118 protected areas and mangroves	TORs finalized, consultant contracted	Draft rationalization study completed and presented	Rationalization study consulted	NPAS strategy recommend-ations include rationalization study findings	Updated NPAS Strategy and Action Plan for 2010–2020	Quarterly/Semi/Annual progress reporting; data reviewed by WB supervision	Supervision reports	MARN-PCU
Action Plan for implementation of updated NPAS.	Preliminary Action Plan exists.	Preliminary Action Plan input to policy dialogue	Policy dialogue and workshops held	Draft Action Plan consulted	Updated Action Plan presented to key decision makers	Updated Action Plan agreed by key stakeholders	Quarterly/Semi/Annual progress reporting	Supervision reports	MARN-PCU; WB
Delimitation of at least 40 protected areas and mangroves.	Determined in YR 1	MARN-CNR develop work plan for delimitation	At least 5 protected areas delimited	At least 10 protected areas delimited	At least 20 protected areas delimited	At least 40 protected areas delimited and incorporated into protected areas registry linked with SIRyC	Quarterly/Semi/Annual progress reporting, midterm review, data reviewed by WB supervision and implementation completion report	Supervision reports	MARN-PCU; WB
Approved regulations for the implementation of the new Protected Areas Law.	Preliminary draft regulations	X	X	Revised draft regulations based on pilot results	Revised draft regulations consulted	Draft regulations approved and in effect	Quarterly/Semi/Annual progress reporting	Supervision reports	MARN-PCU; CNR
Draft interinstitutional agreements for operating the NPAS.	No clear roles and responsibilities identified	Consultation with key institutions	Proposed institutional framework	X	Roles and responsibilities clarified	Draft agreements consulted and agreed	Quarterly/Semi/Annual progress reporting	Supervision reports	MARN-PCU
At least 10% of national population aware of new protected areas law and regulations.	Determined during YR 1	Consultation strategy developed, information campaign underway	Consultations underway, campaign revised based on results	Results from consultations used to improve NPAS strategy and action plan	Best practices disseminated nationally and internationally	NPAS Strategy and Action Plan approved by key participants	Quarterly/Semi/Annual progress reporting, midterm review, data reviewed by WB supervision and implementation completion report	Supervision reports	MARN-PCU
Component Two: Socioeconomic census, environmental information, mapped official boundaries, cadastre and registry for each pilot protected area collected and linked with	Cadastre and registry information for individual PAs in Lago Guija linked with SIRyC; partial demarcation of	Inventory of all existing pilot site information made, with data gaps identified and prioritized; cadastre information	Existing data linked to CNR database; cadastre information updated for Bahía de Jiquilisco	Protected areas database linked with SIRyC	X	X	Quarterly progress reporting; midterm review, data reviewed by WB supervision and implementation completion report	Supervision reports	MARN-CNR-PCU; WB

CNR databases.	nuclei at Lago Guija	updated for Lago Guija							
Demarcation of pilot PAs (including # of km demarcated of external boundaries of pilot areas, and nuclei).	No km demarcated	Lago Guija delimited, identified conflicts being resolved	Jiquilisco delimited; identified conflicts being resolved: Lago Guija demarcation begins.	Jiqulisco demarcation begins;	Lago Guija demarcation completed.	Nuclei and internal zones delimited in both areas	Quarterly progress reporting; midterm review, data reviewed by WB supervision and implementation completion report	Supervision reports	MARN-PCU, CNR; WB
Percent of pilot area lands with no unresolved tenure issues.	To be established in YR 1.	Tenure studies underway in both areas	Proposed mechanism for resolving tenure in both areas.	Tenure being resolved in both areas	Tenure being resolved in both areas	Tenure being resolved in both areas	Quarterly progress reporting; midterm review, data reviewed by WB supervision and implementation completion report	Supervision reports	MARN-PCU, CNR
Ministerial resolutions to establish pilot PAs.	PAs not legally established	X	Tenure conflicts being resolved	Legalization of pilot areas underway	Legalization of pilot areas completed	Pilot areas legalized and registered	Quarterly progress reporting, midterm review, implementation completion report	Supervision reports, MTR	MARN-PCU; CNR, WB
Number of protected area field staff in each pilot PA	To be established in YR 1.	X	Adequacy of number evaluated and revised, if necessary.	Adequacy of number evaluated and revised, if necessary.	Adequacy of number evaluated and revised, if necessary.	Adequacy of number evaluated and revised, if necessary.	Quarterly progress reporting; midterm review, data reviewed by WB supervision and implementation completion report	Supervision reports, MTR	MARN-PCU, ADESCOs, NGOs; co-management entities
Amount of revenues raised from sustainable natural resource use concessions, visitor fees, and other potential cost-recovery mechanisms.	To be established in YR1	X	Information presented during policy dialogue in Subcompoment 1.1.	X	Information used in updating Action Plan for NPAS	Information used in updating Action Plan for NPAS	Quarterly progress reporting, midterm review, implementation completion report	Supervision reports, MTR	MARN-PCU, ADESCOs, NGOs; co-management entities
Component Three:									
Publication of periodic Project reports (FMRs, semestral reports, and annual work plan available).	0	X	X	X	X	X	Quarterly/Semi/Annual progress reporting	Supervision reports	MARN-PCU, WB
Regular performance and	0	X	X	X	X	X	Semi-Annual	Supervision	MARN-PCU

impact monitoring reports produced and disseminated in accordance with annual work plan schedule. MTR available and transmitted to the Bank.	0	X	X	X	X	X	monitoring reports MTR report	reports MTR	MARN-PCU, WB

Annex 4: Detailed Project Description

EL SALVADOR: Protected Areas Consolidation and Administration Project

1. The Project Development Objective of the partially blended LAP II is to improve land tenure security and land transactions by providing efficient, equitable, and accessible land administration services, thereby facilitating better land-related investments and more productive and environmentally sustainable land use.

2. The Project Global Environmental Objective for the proposed project is: **To conserve El Salvador's globally significant biodiversity by strengthening the national protected areas system and consolidating two priority protected areas.**

3. The envisioned project global environment outcome indicators are:

- Updated strategy and action plan for consolidating sustainable national protected areas system developed.
- Two pilot protected areas consolidated and effectively managed (tracking tool score of at least 40 for the 35,600 ha in Bahía de Jiquilisco and 1,917 ha in Lago Guija Complex San Diego-La Barra).
- Biodiversity benefits established in at least 12,400 ha:
  - For Bahía de Jiquilisco PA, at least 11,000 ha of mangrove or associated humid forest within the core protection zones will have negligible (less than 1% over 5 years) deforestation compared to baseline.
  - For the Lago Guija Complex San Diego-La Barra, at least 1,400 ha of dry tropical forest or associated riparian forest will have negligible deforestation (less than 1% over 5 years) compared to baseline.

Project Overview and Components

4. The proposed project—a pilot—would develop and pilot-test mechanisms for the regularization of communities in and near two priority pilot protected areas—as long as those residents abide by use limitations established in broadly consulted management plans—as part of long-term comprehensive and sustainable development plans for those pilot areas. The results of the pilot activities would be used to update and strengthen the national protected areas system (NPAS). The project is a priority of the Government of El Salvador and the El Salvador Ministry of Environment and Natural Resources (MARN).

Component 1: Strengthening of the National Protected Areas System (NPAS) *(US$5.4 M Total; US$1.40 M GEF)*

5. The objective of this component is to strengthen the NPAS to enable long-term sustainable management and use of biodiversity resources, using an ecosystem approach. This will be achieved through the improvement and consolidation of the existing strategy for the System,[33] with the participation and inclusion of all relevant stakeholders, including the private sector. The strengthening of the system will be further achieved through improvements to the institutional and legal framework for its administration and management.

[33] The existing strategy is the *Estrategia Nacional de Áreas Naturales Protegidas y Corredor Biológico* (MARN 2005).

1.1: Consolidation of NPAS Strategy

6. The aim of this subcomponent is to improve and consolidate the existing NPAS strategy through data collection (targeting existing data gaps), prioritization of efforts, and broad stakeholder consultation and consensus building.

7. This subcomponent will build on the National Protected Areas Strategy (*Estrategia Nacional de Áreas Naturales Protegidas y Corredor Biológico*; MARN 2005), which aims to contextualize the existing fragmented NPAS into a landscape-based management framework, using the concept of Conservation Areas. This Strategy has to date not been broadly consulted with key stakeholders, including public and private sector institutions, and the general population.

8. Toward this aim, MARN will undertake a rationalization and prioritization study of all 118 areas, including mangroves, currently included in the NPAS. This study will include a rapid ecological assessment of all such areas and their surroundings, an evaluation of the institutions and other entities (NGOs, ADESCOs, etc.) currently involved in the management of those areas, and recommend where to focus efforts to consolidate and manage a system, including the areas supporting the most important biodiversity.

9. Results of the prioritization study, along with results obtained from project preparatory studies (including recommendations for improving the institutional oversight and economic viability of the NPAS) and results from project implementation in the pilot areas, and the existing Strategy, will be discussed as part of a broad "policy dialogue" with key stakeholders regarding the NPAS. The consultations, which will comprise workshops, meetings, and roundtable discussions, will be held in San Salvador and in at least three department capitals. Key stakeholders include representatives of MARN, CNR, MAG, ISTU, ISTA, CONCULTURA, CENDEPESCA, NGOs, and ADESCOs participating in the co-management of protected areas (PAs), municipalities, the academic sector (and museums), the private sector, and the general public, as well as the CONANP (the National Council on Protected Areas), which has yet to be formed. Based on the results of the workshops, MARN will develop a 10-year Action Plan for implementation of the NPAS (working from the Preliminary Action Plan prepared during project preparation and included as Attachment 1 below), including responsible parties, time frame, and costs.

10. In addition, as part of this component, MARN will participate in the delimitation (e.g. the field-based determination of gross boundaries) of protected areas and mangroves, currently being undertaken by CNR in LAP II areas. Furthermore, this subcomponent will finance MARN's participation in the delimitation of remaining priority protected areas and mangroves in the LAP I area.

11. Key outputs of this subcomponent include: (a) completion of a prioritization study of the NPAS; (b) an Action Plan for implementation of the updated NPAS; and, (c) delimitation of at least 40 protected areas and mangroves.

1.2: Strengthening of the Legal and Institutional Framework

12. The aim of this subcomponent is to identify gaps in, and propose solutions to, the legal and institutional framework for consolidating the NPAS, and to strengthen MARN so it has the capacity to effectively manage the consolidated system.

13. Building on results of the legal, institutional, economic, and NPAS analyses conducted during project preparation, and results of project implementation, this subcomponent will develop specific tools and recommendations necessary to adapt the laws and institutions governing the protected areas system. Specifically, with regard to the institutional framework, recommendations for streamlining institutional oversight of the NPAS will be developed and implemented when possible, to avoid the existing duplication of efforts (for example, ISTU and MARN with parallel responsibilities in distinct areas) and bottlenecks (for example, reducing the 18 necessary steps for transferring title for protected areas from ISTA to MARN). Likewise, key responsibilities will be proposed for all vital institutions and entities (for example, NGOs) working in or near protected areas to facilitate their management, and MARN will establish *convenios* with key institutions and entities to formalize these roles.

14. Similarly, the legal framework for protected areas will be improved through several activities. First, based on results of subcomponents 1.1 and 2.2 (see below), MARN will develop a proposal for improving identified legislative gaps regarding the consolidation of the NPAS, including all forests, mangroves, conservation areas, protected areas, and other ecosystems of interest. Second, MARN will work to draft the norms and procedures necessary to enable the granting of use rights (such as concessions and authorizations) to, and to recognize and allow the presence (through conditional "marginalized" titles or other legal instruments that would recognize the presence of those people within the protected areas) therein of, eligible residents in protected areas. Third, building on project results, MARN will develop updated regulations for the new Protected Areas Law. Fourth, MARN, with the support of CNR, will develop the legal tools necessary to facilitate the creation of a unified protected areas registry linked to CNR's property registry. Last, MARN will lead a proposal for developing an alternative conflict resolution mechanism for issues related to the management of protected areas.

15. Key outputs of this subcomponent include: (a) approved regulations for the implementation of the new Protected Areas Law, and, (b) draft interinstitutional agreements for operating the NPAS.

1.3: Public Dissemination and Awareness Campaign

16. The objective of this subcomponent is to design and carry out a public dissemination and awareness campaign to: (a) promote an understanding of the importance of biodiversity conservation, the NPAS, and its sustainable use; (b) make people aware of the new protected areas law and other regulations regarding the conservation and use of protected areas; and, (c) publicize the goals and results of the proposed project, at the local and international level, thereby facilitating the application of identified best practices.

17. This campaign, which will be developed prior to project effectiveness, builds on lessons learned from the implementation of the LAP. The campaign's specific message and methods will be adjusted to the various target audiences, at the local (Pilot Areas and other PAs where the project could be replicated) and national levels. At the local level, the campaign will be implemented by a two private entities (such as NGOs; one for each pilot area). At the national level, the campaign will be undertaken by a firm, working with representatives of MARN and ISTU. The goals and results of the project will be further shared at the international level through participation in relevant workshops and conferences.

18. Key outputs of this subcomponent include: at least 10 percent of national population aware of new protected areas law and regulation.

2: Consolidation and Management of Pilot Protected Areas (US$7.1 M Total; US$2.9 M GEF)

19. The objective of this component is to consolidate two pilot areas through the development, testing, and finalization of a methodology. For the purposes of the project, protected area consolidation includes the delimitation and physical demarcation of the pilot areas, regularization of eligible residents through the granting of authorizations for their land use and the issuance of appropriate legal instruments to recognize and allow their presence in the pilot protected areas, the development and implementation of participatory management plans, and co-management. The results of this component will be used for the consolidation of the overall protected areas system included in Component One.

2.1: Characterization and Delimitation of Pilot Protected Areas

20. The aim of this subcomponent is to characterize and delimit the proposed pilot areas, through the collection, systematization, and analysis of physical, ecological, socioeconomic, cadastral, spatial, and legal data.

21. Under LAP II, CNR will undertake activities related to collection and analysis of cartographic and cadastral data. Specific activities include: (a) the preparation of basic cartography and digital mapping for cadastre surveys in Bahía de Jiquilisco (this was already done for the Lago Guija Complex under the LAP I); (b) verification of rights and delimitation of properties in both pilot areas; and (c) transfer of registry data to SIRyC, linking them with cadastre data.

22. MARN will be responsible for compiling, updating, and organizing existing data regarding ecological and biological resources, socioeconomic activities, land use, and existing infrastructure. Specific activities include: (a) preparation of a detailed socioeconomic study; (b) analysis of existing environmental and land use data (including concessions) and identification of information gaps; (c) studies to fill the identified environmental data gaps; and, (d) linking the existing, MARN-managed Environmental Information System (*Sistema de Información Ambiental*) and Protected Areas Registry (*Registro de Áreas Protegidas*) with CNR's geographic information systems and SIRyC, where relevant. MARN will also use the land tenure, socio-economic, biological and other information to choose and delimit on a map (with precise geographic coordinates) the official boundaries of each pilot protected area. In all cases, these boundaries will be determined emphasizing two key criteria, enabling

MARN to focus on sustainable management of biodiversity: 1) conservation of existing important biodiversity; and, 2) minimization of conflicts.

23. Key outputs of this subcomponent include: socioeconomic census, environmental information, mapped official boundaries, cadastre, and registry for each pilot protected area collected and linked with CNR databases.

2.2: Legalization and Demarcation of Pilot Protected Areas

24. The aim of this subcomponent is to complete the steps necessary to legally declare (through Ministerial Resolutions) both pilot areas as protected areas.

25. MARN will be responsible for overseeing all activities related to the legal declaration of the pilot areas. Specifically, MARN will: (a) resolve conflicts related to boundary properties; (b) secure title to the pilot area lands, through coordination with ISTA and possibly local municipalities; (c) physically demarcate the pilot area boundaries (including buffer and core zones), with the support and participation of local municipalities and communities; (d) oversee alternative conflict resolution mechanisms; and (e) draft and approve ministerial resolutions legalizing the pilot areas.

26. CNR, through the LAP II, will provide the following services: (a) technical assistance for the demarcation of the pilot area boundaries; and (b) registry of the declaration of the pilot areas in the name of MARN in the SIRyC.

27. Key outputs of this subcomponent include: (a) demarcation of pilot PAs (including number of km demarcated of external boundaries of pilot areas, and core zones); (b) percent of pilot area lands with no unresolved tenure issues; and, (c) ministerial resolutions to establish pilot PAs.

2.3: Management Plans for Pilot Protected Areas

28. The aim of this subcomponent is to develop and implement comprehensive management plans for the buffer and core zones of two pilot protected areas.

29. For each pilot area, MARN, through the contracting of NGOs (or other suitable entities), will be responsible for overseeing the updating and improvement of existing management plans to reflect new information and all lands included within pilot area boundaries. Specifically, in close collaboration with local stakeholders (e.g., ADESCOs, COALs, NGOS, private sector, cooperatives, municipalities, and final beneficiaries), management plans will be revised to more effectively guide the conservation and sustainable development and use of pilot protected areas. These plans will include zoning (including buffer zones, differential use zones, and so forth); types and limits of allowable uses of natural resources by zone (building upon results of a study of possible sustainable activities in each pilot area), basic infrastructure, and user fees; granting of land rights (through usufruct, concessions, authorizations, conditional titles, and so forth) to eligible residents within the pilot areas; monitoring and evaluation; and co-management, when appropriate. During the updating of the management plan, MARN would be responsible for ensuring both they and the NGO (or other entity contracted) provides a local presence through hiring both key staff and, in the case of the NGO, park guards.

30. In the case of concessions for sustainable natural resource use (such as ecotourism, fishing, and extraction of non-timber forest products) in mangrove areas, the 2005 Protected Areas Law requires one of two options: 1) that concessionaires make payments to the Ministry of Finance, which would require an inter-ministerial agreement between MARN and the Ministry of Finance to make these new concessions feasible in the Jiquilisco Pilot Area; or 2) that a Special Activities Fund (*Fondo de Actividades Especiales)* be established by MARN for Jiquilisco.

31. MARN, COALs, ADESCOs, co-management NGOs, and local municipalities would jointly be responsible for implementing an alternative conflict resolution mechanism to address project-related grievances, according to the agreed framework developed under Component 1.2. The specific joint responsibilities would be set forth in an agreement (*convenio)* between MARN and the institutions involved. Implementation of this activity would involve the hiring of one or more consultants to prepare mediation procedures and help train local mediators.

32. While the project would not result in the involuntary resettlement of any people, there might be increased restrictions in access to natural resources for some of the people living in, or adjacent to, the project pilot areas. Consequently, MARN would be responsible for implementing the project's Process Framework (see Annex 10C) to ensure that project beneficiaries receive appropriate consideration and assistance in their efforts to maintain or improve their livelihoods. Such assistance would be provided during the formulation and implementation of management plans for each pilot area.

33. Once finalized, MARN, through the contracting of NGOs (or other suitable entities), would be responsible for implementing the management plans in key core areas through agreements with local actors (e.g., municipalities, NGOs, ADESCOs, and/or other organizations interested in participating in co-management). Financing of co-managed activities would be developed jointly through MARN and the interested entity. These co-managed activities are expected to include, among others, small civil works (such as park guard stations, observation platforms, boat ramps, and nature trails), field equipment, and local-level protected area promotion. In addition to these activities, MARN will provide small grants to support local communities in conservation-compatible activities, including demonstration projects.

34. The key output of this subcomponent is: (a) number of protected area field staff in each pilot PA.; and (b) amount of revenues raised from sustainable natural resource use concessions, visitor fees, and other potential cost-recovery mechanisms.

Component 3: Project Administration (US$0.9M Total; $0.7M GEF)

35. The objective of this subcomponent is overall management of the proposed project including monitoring and evaluation (M&E).

36. MARN will be responsible for project administration mechanisms including planning and M&E. The M&E system will be based on the existing M&E system—developed by CNR under LAP II—to conduct overall project coordination and supervision. This system will be modified and strengthened to include key indicators to measure GEF project performance. The activities will also include necessary audit services.

Attachment 1
El Salvador
Preliminary Action Plan

Contributions of the "Consolidation of Natural Protected Areas and Land Administration Project- PACAP" to the Long-Term (10 Year) Vision of the Natural Protected Areas System (NPAS)

Sustainability Dimension	***Accomplishments and needs identified in the preparation phase***	***Expected Outputs (this project)***	***Long-Term Strategic Goals and Targets***
Policy and Legal Framework	• Draft strategy for protected areas and national biological corridor not implemented • Over 90% of proposed protected areas lack clear legal framework or title transfer from ISTA and MINTUR to MARN • El Salvador has ratified RAMSAR but has only one area listed under that convention • National Protected Areas Law was approved, thus establishing the legal framework to consolidate the NPAS	• Coherent legal and institutional framework proposed for the management of the NPAS and for addressing problems of illegal settlements • Updated regulations for Protected Area Law • Re-focus and prioritization of NPAS areas • NPAS policy updated based on broad stakeholder consensus and results of prioritization study • Long-term Action Plan for NPAS developed and consulted • Policy regarding tenure and use claims in mangrove areas tested in pilot areas	• Full set of supportive and coherent legal framework for the Protected Area System approved by Congress • New protected area policy, including strategy for incorporating private lands as buffer zones, approved by key stakeholders • Strengthened participation in regional and global conservation conventions • Cross-sectoral legislation compatible with protected area legislation, particularly regarding improved responsibilities between ISTA, MINTUR and MARN • Process of transferring all protected areas affected by agrarian reform from ISTA to MARN completed,

		• Laws and regulations enacted creating all proposed protected areas in two pilot areas, including the transfer of those lands from ISTA to MARN	with all areas legally established with clear legal limits and tenure issues resolved • Clear laws and policies in place nationwide in place regarding land use and access claims for all protected areas including mangroves.
Institutional Issues	• Weaknesses in institutional framework for NPAS management identified • Proposed institution framework for NPAS • Lack of adequate institutional structure and capacity for MARN remains a serious issue • Minimum staff and equipment at MARN central level • Multiple institutions with responsibilities for management of protected areas • More than 65% of (26,000 out of 40,000 ha) areas without any on-site protection or management • Co-management agreements in	• Clear institutional roles and responsibilities for protected areas management have been identified and are accepted by key institutions • Redefinition of MARN's role in management of SANP • National Natural Protected Area Council (CONANP) with expanded membership, including Ministry of Tourism, and clear operating rules • At least two regional offices and two regional conservation areas operational for decentralized PA management covering each of 2 pilot areas • Strategy for decentralization and consolidation of protected areas	• Autonomous PA agency created with clear legal framework and mandate and adequately funded and staffed • Decentralized management fully operational through conservation area system and small number of regional offices • Administrative and operational procedures functioning effectively • NGOs, ADESCOS, universities, municipalities, and private enterprises actively participating in managing areas as measured by number of cooperative agreements

	place for some areas with a limited number of NGOs and ADESCOs, but clear framework lacking and limited involvement of municipalities, universities and private sector • Highly centralized management system	system finalized • Legal declaration of the two pilot areas • Improved institutional structures and co-management agreements approved and fully functioning at two pilot areas	
Financial Sustainability	• Strong support through short-term external funding sources (at project level) for PA management (FIAES, FONAES, Green Project, etc.) but no long term sustainable funding mechanism in place for recurrent costs, capital improvements or resolving tenure and occupation issues and limited revenue generation through entrance fees or environmental service charges	• Long-term funding strategy developed • Concession mechanisms developed	• Investment needs are fully covered • One-hundred percent of recurrent management costs covered by user fees, environmental service charges and endowment revenue • Diversified funding base established (Treasury, Trust Fund, Fee Mechanisms, Environmental Service Charges)
Management Effectiveness and Biological Impact	• Initial prioritization for conservation of 30 protected areas out of the 118 total • Management plans exist for 9 out of the 30 protected areas considered by MARN as priority	• Management plans updated and implemented in the two pilot areas, including monitoring • The PAs in the two pilot areas increase effectiveness by at least 30% as measured	• Adequate effectiveness in 100% of the areas as measured via scorecards • Full ecoregional representation through creation of new areas and re-categorization and expansion of existing ones, and strengthening of

	• Biodiversity information updated for 9 out of 30 priority protected areas • Limited public use or interpretive and recreation infrastructure at most parks and overly restricted policies that restrict public use and support	by protected areas tracking tool • Updated biodiversity databases (MARN - SIA) are updated for the two pilot areas • Creation of a unified protected areas registry based upon SIRyc • Most of 118 protected areas in country delimited • Two pilot areas demarcated • Updated and approved long term management plans, annual operational plans, and decentralized operational funding in place for pilot areas • Improved visitation levels at pilot areas due to investment in basic public use infrastructure: trails, signage, kiosks, picnic and swimming areas, campgrounds, boat launches, private guides and concession development	corridor and buffer zone management surrounding and linking key areas • Biological monitoring in 80% of the system • Public use infrastructure greatly enhanced and national trail system linking major P.A.s across country established • All protected areas in country demarcated and included in SIRyC

Public-Private Partnerships, Civil Society Participation, and Awareness	• Limited participation of key stakeholders in 90% of the protected areas • COAL, local committees still not operational • Considerable involvement by some NGOs and ADESCOs in some protected areas, but limited involvement by for-profit sector, universities, municipalities • Extremely limited public use of PA system due to restrictive access policies and limited infrastructure • Public education campaigns prepared but not implemented • Weak public awareness and support of protected areas systems need and importance of conservation remains a concern	• Local management committees in place for two pilot areas • National PA awareness campaign and pilot regional campaigns around 2 pilot areas implemented • Campaign for the dissemination of lessons learned and best practices at national and international level developed and implemented	• Increased public awareness and support for PAs as measured by opinion polls. • Local management committees operational in 100% of areas • Devolution of control and ownership over smallest and least nationally important PAs to municipalities and intermunicipality groups underway • Involvement of for-profit sector and universities in protected areas management

Annex 5: Project Costs

EL SALVADOR: Protected Areas Consolidation and Administration Project

Components Project Cost Summary
(US$'000)

Component/Subcomponent		Local	Foreign	Total
1. Strengthening of the National Protected Areas System (NPAS)				
1.1. Consolidation of NPAS Strategy		439.2	40.8	480.0
1.2. Strengthening of legal and institutional framework		405.9	209.1	615.0
1.3. Public dissemination and awareness campaign		229.5	25.5	255.0
	Subtotal	**1,074.6**	**275.4**	**1,350.0**
2. Consolidation and Management of Pilot Protected Areas				
2.1. Characterization and delimitation of pilot PAs		103.5	11.5	115.0
2.2. Legalization and regularization of pilot PAs		605.0	68.9	673.9
2.3. Management Plans for Pilots PAs		1,785.3	64.1	1,849.4
	Subtotal	**2,493.8**	**144.5**	**2,638.3**
3. Project Administration		**567.3**	**35.5**	**602.8**
Total BASELINE COSTS		**4,135.7**	**455.4**	**4,591.1**
Physical Contingencies		150.0	22.8	172.8
Price Contingencies		221.0	15.1	236.1
	Total PROJECT COSTS	**4,506.7**	**493.3**	**5,000.0**

Annex 6: Implementation Arrangements

EL SALVADOR: Protected Areas Consolidation and Administration Project

The Ministry of Environment and Natural Resources (MARN), the agency responsible for the national Natural Protected Areas System (NPAS), will be the Project executing agency, with responsibility for overall management, supervision, coordination, technical and fiduciary control, and monitoring and evaluation of the grant. Direct implementation will be provided by a small Project Implementation Unit (PCU or PCU) within MARN's Department of Natural Resources (DGPN).

The project is partially blended with the second phase of the IBRD-funded Land Administration Project (LAP II), fully implemented by the National Registry Center (CNR), a financially sustainable, administratively autonomous agency responsible for the successful implementation of the LAP's first phase (LAP I). For the proposed project, CNR will participate in technical activities in Components 1 and 2 related with delimitation and demarcation of overall pilot areas and parcels included therein, and cadastre and registry, and rights verification. In addition, the project will capitalize on CNR's experience, because CNR will provide technical assistance to MARN regarding financial management and procurement, through targeted training and advisory services, related to Component 3. An agreement between MARN and CNR will define the specific roles and responsibilities of both institutions for Project execution.

Institutional Analysis

Ministry of Environment and Natural Resources. MARN was created by Presidential Decree No. 27 of May 16, 1997, published in the Official Gazette No. 88, Volume 335, on the same date. Its responsibilities and functions are to formulate, plan, and execute environmental and natural resources policies and legislation; promote active participation by all sectors in the sustainable use of natural resources and the environment; and collaborate with the Ministry of Foreign Relations in handling issues of international cooperation related to the environment and natural resources. MARN has the authority to enter into legal contracts, including the creation of sinking and trust funds. The Ministry is headed by a Minister, Vice Minister, Executive Director, and three General Directors. MARN is divided into three departments: Natural Resources, Citizen Participation, and Environmental Management. As of December 2004, MARN had 220 staff.

Activities of the three departments are:

1. Natural Resources. Enhancement, management, and protection of El Salvador's natural resources. The department is divided into four divisions: Physical Resources, Biological Resources, Mangrove Systems, and Protected Areas.
2. Citizen Participation. Facilitating links among civil society, municipalities, autonomous institutions and NGOs, and governmental organizations to conserve the environment and promote sustainable development. The department is divided into three divisions: Environmental Education, Gender, and Environmental Complaints.
3. Environmental Management. Environmental evaluations and monitoring of the Agreements and Protocol Units and the environmental information system. This department has one division, Environmental Evaluation.

Ministry of Agriculture and Livestock (MAG). The Ministry for Agriculture and Livestock was created by Executive Decree No. 234 of October 14, 1946, published in Official Gazette No. 134, Volume 141, subsequently modified by Decree No. 517 of the Revolutionary Council on February 28, 1950, published

in the Official Gazette No. 49, Volume 148 of March 1, 1950. It directs, coordinates, and controls execution of government activities related to agriculture, forestry, fishing, and livestock. MAG has 1,877 staff and is headed by a Minister, Vice Minister, and Presidential Commissioner for Agriculture. It includes four advisory offices (Policy and Strategy, Agricultural Planning, Legal Counsel, and Internal Audits) and five centralized operational directorates (Plant and Animal Health; Forest, Watershed, and Irrigation Management; Fishing and Aquaculture; Agricultural Economics; and Agribusiness).

Activities of the four advisory offices are:

1. The Policy and Strategy Office develops and implements sector policies and strategies based on national and international macro- and microeconomic trends in agriculture, forestry, and fishing.
2. The Agricultural Planning Office carries out institutional planning, advises the various offices of MAG on the planning, formulation, and implementation of projects and institutional development, and conducts monitoring and oversight of the proposed objectives and goals.
3. The Legal Counsel's Office advises the Minister, Vice Minister, and other ministry officers as needed.
4. The Internal Audit Office exercises internal control of the Ministry's administrative, financial, and management systems.

Center for the Development of Fishing (CENDEPESCA). The Center, part of MAG, is responsible for developing and implementing policies for the promotion of fishing and aquiculture, including catch regulations.

Ministry of Tourism (MINTUR/ISTU/CORSATUR). The objective of MINTUR is to promote El Salvador as a tourist destination through establishing the regulatory framework and juridical security for tourist-related industries operating in the territory. MINTUR is directly supported by the following agencies:

- The Tourism Corporation of El Salvador (CORSATUR), an autonomous agency created in 1996 responsible for coordinating all sectors (private and public), involved in the promotion of tourism. Working with MARN, CORSATUR has developed a Strategic Plan for the Sustainable Development of Ecotourism in El Salvador, which aims to promote tourism activities through environmental education activities directed to improve the quality of life of the communities living in tourist areas while protecting biodiversity within the NPAS.

- The Salvadoran Institute of Tourism (ISTU), a public entity created in 1961 responsible for administering and conserving the State's patrimony important for tourism, including artistic and historical aspects, and for developing and conserving tourism attractions.

National Council for Culture and Art (CONCULTURA). This council, created in 1990 as a decentralized agency operating under the Ministry of Education, is responsible for the conservation and promotion of art and culture in El Salvador. In particular, it is responsible for the conservation of El Salvador's archeological areas, the administration of which is important for the development of the NPAS.

Salvadoran Institute for Agrarian Transformation (ISTA). ISTA is responsible for overseeing El Salvador's agrarian reform process and for transferring to MARN all lands, still in its name, which form part of the NPAS. This process, started in 1999, is based on Legislative Decree 719 (article 30) and Executive Decree 103 (article 50), both issued in 1996, which describe the procedure for transferring such lands to MARN, the agency identified as responsible for the protected areas management in the Environment Law.

National Registry Center (CNR). CNR, created in 1994, is the agency responsible for maintaining and providing official information on intellectual, commercial, and land property. It maintains cadastral and legal information on all land parcels in the country. Through the LAP I and II, it is updating this tenure information throughout the country.

Municipalities. Local municipalities are responsible for the overall political and administrative management of their territory, including the sustainable management of natural resources and related services.

Nongovernmental Organizations. The goals and structure of NGOs vary according to their founding charters. They are associations or foundations that do not seek to directly profit their members, founders, or managers. They are authorized by the Interior Ministry, facilitated by the "Law on Nonprofit Associations and Foundations" contained in Legislative Decree N° 894 and its respective regulations. They may act at the national, regional, municipal, or local levels. There have been 5,464 NGOs registered in El Salvador since 1934. MARN has identified 70 NGOs that work in the environmental field and 26 that have specific activities in the potential project area.

Universities. El Salvador's universities are regulated by the Law on Higher Education contained in Legislative Decree N° 522 and by the Ministry of Education through the National Directorate on Higher Education. This is a special system that contains the general principles for organization and operation of the National University and for private universities and official and private technical institutes. This framework encompasses three functions: teaching, scientific research, and social outreach. El Salvador currently has a national university, 26 private universities, 6 specialized institutes, and 9 technical institutes. In 2001 there were 1,589 students registered in six recognized major courses of study in the fields of agriculture and environment.

Agricultural Associations and Cooperatives. These are special organizations governed by regulations contained in the Special Law on Agricultural Associations in Legislative Decree No. 221, which grants the Ministry of Agriculture and Livestock authority to provide legal, administrative, and financial advice for creating agricultural associations and cooperatives to develop and conduct activities related to land ownership for the benefit of their members. They are legal entities administered by a Board of Directors that is elected by a general assembly of the members. Their activities are determined and regulated by their charters.

Community Associations. Community Associations (ADESCOs) are based on a declaration of interest by a group of at least 25 citizens establishing a purpose for the association. Legal standing or recognition is granted by the municipality through the mayor or an authorized representative, which allows the association to raise funds and execute agricultural, infrastructure, tourism, environmental, and other types of projects. These activities are governed by the statutes creating the association, which include stipulations defining the type of organization, its area of operation, formation of its board of directors, and their rights, responsibilities, and obligations.

Implementation Arrangements

The Project would finance the creation of a central PCU within MARN's Department of Natural Resources (DGPN) that would be responsible for overall Project coordination. The PCU will include a central and two regional offices. The central PCU will comprise four staff members: a project coordinator, administrative assistant, financial management officer (accountant) and procurement officer (see Figure 6.1). The project coordinator will be responsible for overall project implementation, as well as focusing on policy issues, with an emphasis on the activities in Component 1. The accountant and

procurement officers will report to the project coordinator, but will be physically located for the first year of project implementation in CNR's administrative unit (UACI), after which they will move to MARN's Institutional Financial Unit (UFI). CNR will then continue to provide technical assistance to MARN regarding financial management, procurement, and monitoring and evaluation as needed during the life of the project. The central PCU is meant to be temporary and all its relevant functions and activities to be assumed by MARN starting in year 5 of the project.

Two regional units will be created, operating out of regional offices, established by the project (one each in the Guija and Jiquilisco pilot areas), which will serve as MARN's local headquarters. Each office will comprise three (in the case of Guija) or four (in Jiquilisco) key staff: a regional coordinator, a social specialist, a protected area specialist, and, in the case of Jiquilisco, a local development specialist. The office staff will focus on overseeing implementation of Component 2, ensuring policy development in the pilot areas adequately protects both important biodiversity and local communities. Specifically, the regional coordinators will be responsible for the overall management of the component, including oversight of other entities responsible for project implementation, as well as overseeing policy dialogue between local stakeholders and MARN. The social specialists will be responsible for overseeing outreach and communication with local stakeholders, overseeing implementation of the Process Framework, promoting conflict resolution mechanisms and overseeing the allocation of land rights and resource use within the pilot areas. In Jiquilisco only, a local development specialist will support the social specialist, through coordination of social development activities and supporting outreach and communication with local stakeholders. The protected areas management specialists will be responsible for overseeing the delimitation and demarcation of the pilot areas, acting as a liason with local NGOs responsible for management plans, and monitoring and evaluation. MARN has developed a transition plan outlining how key project-funded technical staff would be absorbed by the management structure of the two pilot protected areas following project completion. Such technical staff would then likely be funded through proceeds of the management plan (for example, user fees, concessions, and so forth).

In addition to the regional PCU, local entities including NGOs (or other capable entities), ADESCOs and municipalities will be responsible for implementation of parts of Component 2. The development and supervision of management plan implementation and much of the on-the-ground presence will be the responsibility of NGOs, under MARN's oversight. Management plan implementation will be the joint responsibility of MARN, NGOs, ADESCOs and municipalities under terms set forth in legal agreements or contracts.

Given the pilot nature of the project and the importance of building multisector alliances, an advisory committee will also be formed, which will function under the coordination of MARN's DGNP. This group will include representatives from the PCU, CNR, MAG, ISTA, CONAMA, municipalities, the private sector, and a local representative from each of the pilot areas. The consultative group, which would be convened by MARN at least once a month, would support the project through providing a strategic advisory mechanism with regard to the development of a strategy for PA consolidation, a methodology for its implementation, and the results assessment for each of the pilot areas.

Internal Coordination:

To ensure MARN has sufficient capacity to manage the Project, during the first year of execution, the PCU will be structured jointly with the LAP II project unit (LAP II UCP, housed within CNR) as follows:

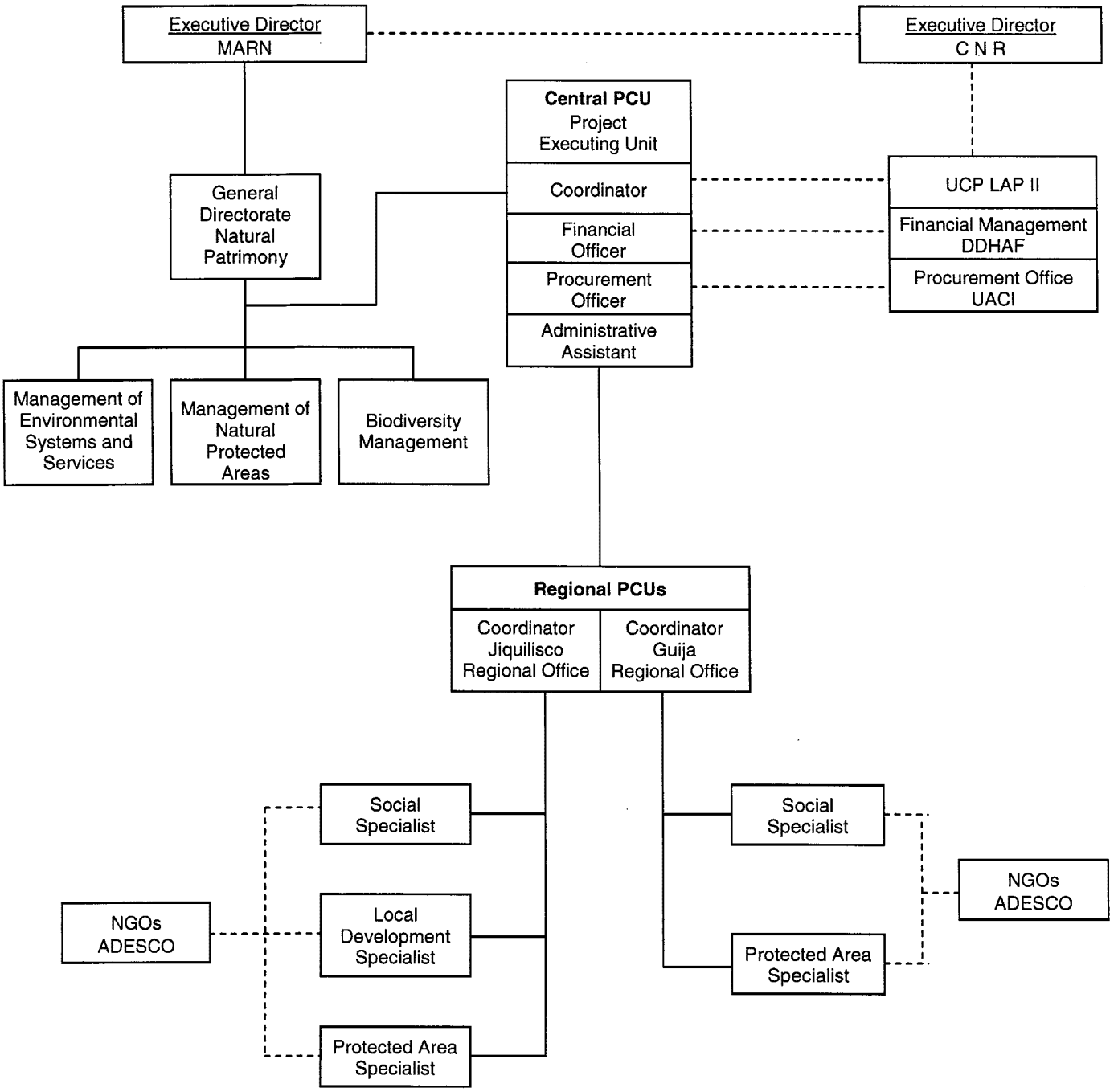
1. Procurement: Physically located within CNR–UACI. After one year of project implementation, this function will move to MARN's UFI department.

2. Financial management: Physically located within CNR–*Departamento de Desarrollo Humano, Administración y Finanzas* (DDHAF). After one year of project implementation, this function will move to MARN's UFI department.

Coordination with Participating Agencies:

For the implementation of technical activities, cooperation agreements will be signed between MARN/PCU and the other participating agencies. Specifically, for those activities, in Components 1 and 2, relating to the implementation of LAP II—delimitation/demarcation/registration, and training and capacity building for project fiduciary aspects, and monitoring and evaluation, an agreement will be signed by CNR and MARN, clarifying respective roles and responsibilities. Similarly, an agreement will be signed by MARN/PCU and the COALs, NGOs, ADESCOs, and municipalities that will participate in the local execution of Component 2 activities, specifically the implementation of management plans. Finally, MARN/PCU and ISTA will sign an agreement setting forth the process for transferring to MARN those ISTA-owned lands identified as potential protected areas.

PACAP Organizational Chart



Annex 7: Financial Management and Disbursement Arrangements

EL SALVADOR: Protected Areas Consolidation and Administration Project

Summary Conclusion of Financial Management Assessment

1. On the basis of the assessments performed, the financial management team presents the following conclusions:

1. The executing agency, MARN, will be responsible for managing the fiduciary aspects of the proposed project, through a Project Coordination Unit (PCU), located within MARN.

2. Overall, MARN has limited capacity with respect to financial management (limited staffing and financial management system) and does not have extensive experience in managing projects financed by the World Bank. Thus the need to hire an Accountant for the management of accounting and financial reporting information of the proposed project, with appropriate experience.

3. Assuming that MARN carries out the proposed action plan presented in this assessment, especially with regard to staffing, it would have in place adequate financial management arrangements that meet the Bank's minimum fiduciary requirements to manage the specific financial activities of the proposed project.

2. **Standard requirements/agreements.** It was agreed (a) that the project will use transaction-based disbursements; (b) that each quarter MARN-PCU will prepare the Financial Monitoring Reports (FMRs) to be submitted to the World Bank; (c) that annual project financial statements will be audited in accordance with International Standards on Auditing issued by the International Federation of Accountants (IFAC), by independent auditors and in accordance with terms of reference (TORs) acceptable to the World Bank; and (d) that, during the implementation of the project, CNR will continue to provide technical assistance to MARN with respect to financial management, including training and physical space for the procurement officer and financial management officer (accountant) during the first year of implementation.

3. **Implementing Arrangements.** The executing agency for the proposed project will be MARN ("Ministerio de Medio Ambiente y Recursos Naturales"). Project implementation will be carried out by MARN through a Project Coordination Unit (PCU), located within MARN's Department of Natural Resources (Dirección General de Patrimonio Natural—DGPN). MARN will have overall financial and accounting responsibility for the proposed project, including (a) maintenance of accounting records, (b) processing disbursements, (c) preparation of project financial statements in accordance with World Bank guidelines, (d) management of bank accounts, (e) management of financial information systems, (f) preparation and submission of quarterly Financial Monitoring Reports (FMRs), and (g) preparation and submission of withdrawal applications.

4. **Staffing.** As indicated above, MARN will create a PCU to manage the proposed project. At a minimum, the staff of the PCU should include a project coordinator, an administrative assistant, a procurement officer and a financial management officer/accountant with sufficient experience working with projects financed by international agencies or donors. The procurement officer and the financial management officer (accountant) would report to the project coordinator but be located within the UACI and the UFI, respectively (MARN's central procurement and financial units). Additionally, for each of the two pilot areas, the project will contract an area director, a

social specialist, and an operations specialist to oversee the implementation of the management plans.

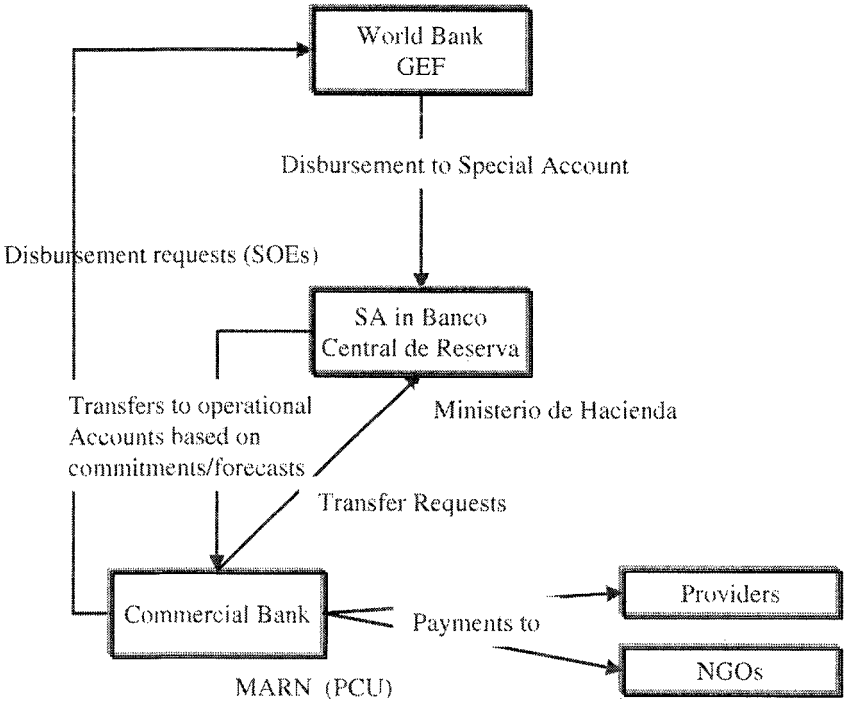
Flow of Funds

5. Project funds will be managed by the executing agency (MARN), with fund transfers from Treasury (DGT) utilizing the same mechanism used by local funds.

6. Under this mechanism, a Special Account in U.S. dollars will be established by the Treasury (Ministerio de Hacienda) at the borrower's request in Banco Central de Reserva. After the declaration of effectiveness, the World Bank will, upon MARN's request, make an authorized allocation to the Special Account. Replenishments of the Special Accounts will be made using a traditional disbursement method (transaction-based procedures, monthly submission of Statements of Expenditures (SOEs); see flow of funds diagram below).

7. MARN will also open a separate operating account in a commercial bank to facilitate local payments. Transfers to the operating accounts would be made from the Special Account, on the basis of requests prepared by MARN, supported by commitments.

Flow of Funds for the Project



Accounting and Reporting

8. ***Segregation of Duties.*** MARN's organizational structure and established procedures support an adequate segregation of procurement, payment, and recording activities. The authorization to execute a transaction will be the main responsibility of the Project Coordinator and/or Technical Officers. Procurement activities will be the main responsibility of the procurement officer. And, the recording of the transaction will be the main responsibility of the Accountant.

9. ***Budgeting.*** A budget will be prepared at the beginning of each year. The borrower will be responsible for compiling a comprehensive budget for the project. Typically, the annual budget would include:

- An annual work plan classified by major goals/objectives, including physical and financial programs.
- A budget (broken down at least quarterly) specifying detailed expenditures by major component, category, and source of funds.

10. ***Payment and Operation of Bank Accounts.*** MARN will be responsible for project disbursement to vendors. The process is expected to be as follows:

- The Project Coordinator and Procurement Officer review the invoice (generally against a PO or contract) and review necessary approvals from the Technical Officers.
- The approved invoice and payment request is received by the Accountant for processing.
- The Accountant reviews the information and prepares a check request.
- The check request is submitted to Treasury for processing (including authorized signatures).
- Once the authorized signatures have been obtained, the check is delivered to the vendor.
- Documentation is filed appropriately and transaction recorded into the computerized accounting system.

11. Bank account reconciliations will be prepared at MARN, through the project financial unit, on a monthly basis.

12. ***Information Technology (IT) Systems.*** Project funds will be captured in the integrated financial management system (SAFI) used by MARN. However, given the need for the aggregation of information from SAFI on a component basis (for financial monitoring to the Bank) and preparing withdrawal applications on the basis of disbursement categories, the PCU will implement a basic financial system. The system should include a module for procurement and physical monitoring. MARN is in the process of designing such a system, which will be implemented prior to the effectiveness of the project. The PCU will also implement a periodic reconciliation process between the information in SAFI and in the project financial management system.

13. ***Safeguard over assets.*** Assets acquired using project funds will be in the custody of the respective organizations. The borrower will use the existing fixed asset system to keep a detailed subsidiary ledger (asset register) of equipment acquired. The amounts in the register will be reconciled monthly against the respective account balances. And, at least one annual physical inspection of the assets will be undertaken by PCU staff, preferable with the participation of external auditors.

*14. **Implementation of management plans.*** Subcomponent 2.3 will finance the updating and implementation of management plans in the two pilot protected areas. These activities will be through agreements with local actors, such as NGOs, ADESCOs, and/or other interested organizations. These agreement/contracts would be entered on the basis of, among other things, the organization's eligibility, formal cost estimates, and the defined outcome or delivery of end product. Payments to local actors/organizations will be made based on the contract provision, including a reasonable advance (if applicable) and tranches connected to physical progress. The agreement/contract template, including procurement and record keeping responsibilities of the recipient will be part of the project operational manual.

15. ***Internal Audit.*** MARN has an internal audit department, which generally does not audit internationally funded projects, as they are audited instead by external independent auditors. For this project, the use of external independent auditors will contribute to ensuring that the resources are used for the purpose intended.

16. ***External Audit.*** The audit policy of the World Bank, as documented in "Guidelines: Annual financial reporting and auditing for World bank-financed projects" will be applicable to the project. This means that a single audit opinion covering: (a) project financial statements, (b) special account statements, and (c) adequacy of supporting documentation maintained by MARN in respect of expenditures claimed for reimbursement via SOE procedures and eligibility of such expenditures for financing under the respective Grant Agreement, will be required.

17. In addition to the audit opinion, the auditors will have to present the management letter, covering: (a) weaknesses noted by the auditors in the internal control systems of the project, (b) cases of application of inappropriate accounting policies and practices, (c) issues regarding general compliance with broad covenants, and (d) any other matters that the auditors considers should be brought to the attention of the borrower.

18. The project coordinator will be responsible for ensuring the external audits are undertaken, ensuring the recommendations of the auditors are complied with, and sending the results of annual and final financial audits to the Bank within at least six months of the end of the fiscal year and project close. During the first two year of project implementation, the auditors will be required to perform semi-annual reviews and submit semi-annual audit reports to the Bank. The cost of these audits will be financed with project resources.

19. ***Reporting.*** The MARN-PCU will be responsible for producing the Financial Monitoring Reports (FMRs) on a quarterly basis to be submitted to the Bank, only for monitoring purposes at the beginning and possibly for disbursement purposes, once the system has been tested. FMRs will include a narrative outlining the major project achievements for the quarter, the project's sources and uses of funds, a report presenting expenditures by subcomponent, a physical progress report, a procurement report and a procurement table. FMRs should be submitted to the Bank no later than 45 days after the end of the reporting period.

20. The annual financial statements will include the project's sources and uses of funds, a report presenting expenditure by subcomponent, the schedule of SOEs presented during the year and a reconciliation of the Special Account. These reports will be prepared by the borrower and made available to the auditors after the end of the fiscal year.

21. ***Disbursement Arrangements.*** Withdrawal from the grant will made, at least at the beginning, using transaction-based disbursement procedures. Once the preparation of required reports has been established and reviewed by the Bank's team, the disbursement method could be changed to

report-based procedures (based on the submission of FMRs). Under the transaction-based disbursement method, the SOE thresholds would be consistent with the procurement prior review thresholds. All supporting documentation for payments using SOE procedures and other payments in general for Project activities will be retained by MARN for audit purposes and made available for the Bank's supervision.

Financial Management Action Plan

	Action	Product/Indicador	Responsable	Deadline
1	Financial Monitoring Reports	Finalize the FMR format	MARN	Negotiations
2	External auditors contract process	Finalize audit TORs	MARN	Effectiveness
3	Fiduciary Staffing	Finalize TORs for key financial staff involved in the Project	MARN	Negotiations
4	Operations Manual Preparation	Operational Manual approved and ready for implementation	MARN	Effectiveness
5	IT system available	Implementation of simple financial management system to allow reporting of Project activities to World Bank	MARN	Effectiveness
6	Staffing of PCU	Contracts signed for key staff involved in project	MARN	Effectiveness
7	External auditors contract process	Contract signed	MARN	3 months after effectiveness

22. **Supervision Plan**. During project implementation, the Bank will review the project's financial management arrangements in two principal ways: (a) reviewing the project's quarterly financial management reports, MARN-PCU's periodic financial information, annual audited financial statements, and the auditor's management letter; and (b) during the Bank's missions, review the project's financial management arrangements to ensure compliance with Bank requirements. Accredited financial management officers will assist in the supervision process.

Allocation of Grant Proceeds (US$ million)

Expenditure Category	Amount	Financing Percentage
1. Goods, Works, Consultant Services, Training,[1] Non-Consultant Services,[2] and Operating Costs	2.0	100%
2. Goods, Works, Consultant Services, Training,[1] Non-Consultant Services,[2] and Operating Costs	2.8	100%
3. Unallocated	0.2	---
Total Financing	**5.0**	

1. Training includes training-related expenses different from consultants for workshops, seminars, and study tours. The loan would finance travel, subsistence, and per diems to trainers and trainees, registration fees, logistical expenses for organization of training events, and training materials.
2. Non-consultant services include demarcation activities.
3. Operating costs include operation and maintenance of vehicles and equipment, travel and subsistence of MARN and CNR officials for supervision of all field activities (demarcation, supervision of management plan implementation, delimitation, etc.).

Annex 8: Procurement Arrangements

EL SALVADOR: Protected Areas Consolidation and Administration Project

A. General

1. Procurement for the proposed project would be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" dated May 2004, "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, and the provisions stipulated in the Legal Agreement. The various items under different expenditure categories are described in general below. For each contract to be financed by the Loan/Credit, the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame are agreed between the Borrower and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

2. **Procurement of Works:** Works under this project will be procured using the Bank's Standard Bidding Documents (SBD) for all ICB and SBD agreed with the Bank for NCB and shopping. All SBDs will be included in the Operations Manual.

3. **Procurement of Goods:** Goods procured under this project will include vehicles, computers, printers, office equipment, communication equipment, GPS, furniture, hardware and software for photogrammetric, boat w/outboard motor, telephones, radios, and so forth. To the extent possible contracts will be grouped in bidding packages of more than US$250,000 and procured following International Competitive Bidding (ICB) procedures using Bank-issued Standard Bidding Documents. Contracts with values below this threshold per contract may be procured using National Competitive Bidding (NCB) procedures with standard bidding documents agreed by the Bank. Contracts for goods that cannot be grouped in larger bidding packages and estimated to cost below US$50,000 per contract may be procured using Shopping (National and International) procedures based on a model Request for Quotations (RfQ) satisfactory to the Bank.

4. **Procurement of Non-Consulting Services:** Technical services under the project amount to approximately US$460,000. These include demarcation of national protected areas. A decision has been made to prepare customized documents for this area by adapting the Procurement of Works, smaller contracts, standard documents, and the draft services (non-consulting) document to the peculiarities of land projects. Work is underway and it is expected that before effectiveness, the project will have an approved document in this area. Contracts for Technical Services estimated to cost US$1 million or more will be procured following ICB procedures. Contracts estimated to cost between US$100,000 and US$1 million may be procured following NCB procedures. Contracts estimated to cost below US$100,000 may be procured under lump-sum fixed contracts awarded on the basis of quotations obtained from three qualified domestic contractors in response to a written Request for Quotations agreed with the Bank. Non-Consulting Services other than Technical Services also include training activities such as workshops, and so forth.

5. **Selection of Consultants:** Consulting services from firms and individuals required for the project include impact evaluation studies, diagnostics, financial and procurement audits, advisory services from individual consultants, supervision, PCU staff, and so forth.

6. **Operational Costs:** Operational costs have been identified in the procurement plan. These costs have been reviewed and found acceptable to the Bank.

7. The procurement procedures and SBDs to be used for each procurement method, as well as model contracts for works and goods procured, are presented in the Project's Operations Manual.

Prior Review Thresholds

Expenditure Category	*Contract Value Threshold* [a] *(US$ thousands)*	*Procurement Method*	*Contracts Subject to Prior Review*
Goods	>250	ICB	All (tender documents and evaluation reports)
	250≥ <50	NCB	All (tender documents and evaluation reports)
	≤ 50	Shopping	First two each calendar year (request for quotations and evaluation reports) All contracts above US$25,000
Works	>1,000	ICB	All (tender documents and evaluation reports)
	150≥ <1,000	NCB	All (tender documents and evaluation reports)
	≤150	Shopping	First two each calendar year (request for quotations evaluation reports) All contracts above US$25,000
Non-consulting services (incl. training)	>150	ICB	All contracts above US$25,000
	150≥ <25	NCB	
	≤ 25	Shopping	
Non-consulting services (Technical Services)	>1,000	ICB	All contracts above US$100,000
	100≥ <1,000	NCB	First two contracts each calendar year
	≤ 100	Shopping	First two contracts each calendar year
Consulting (firms) [a]	>100	QCBS	Whole process for each contract above $50,000 and all single source contracts
	100≥ <50	QCBS/LCS/CQ	
	≤ 50	LCS/CQ	
Consulting (individual) [a]		Section V in the Guidelines	All cases above US$25,000 and all single-source contracts
Direct contracting			All cases regardless of the amounts involved
Agreements			All cases regardless of the amounts involved All cases identified for prior review in the procurement plan All cases not included in the procurement plan, regardless of the amounts involved All terms of reference for which Bank no objection is required All processes that, due to their complexity or nature, the task manager decides must have the Bank's no objection

a. Thresholds for consulting include the sum of the original contract and all extensions.

Note: The project will include no expenditures for works

2. The thresholds will be reviewed when the PCU gains experience in Bank's rules and regulations. All single-source selection of goods and works, regardless of the amount of the contract, will be subject to prior review by the Bank.

B. Assessment of the Agency's Capacity to Implement Procurement

3. Procurement activities will be carried out by the Ministry of Environment and Natural Resources (MARN) through a Project Coordination Unit (PCU), located within MARN. Although the PCU will be responsible for coordinating the activities of the project, it has been decided that to promote institutional strengthening the procurement function will be integrated within the organizational structure of MARN. The project's procurement officer will be integrated within the procurement unit of MARN (UACI), with a direct link to the PCU. The Project Operations Manual will include, in addition to the procurement procedures, the SBDs to be used for each procurement method, as well as model contracts for works and goods procured.

4. A full assessment of the capacity of MARN to implement procurement actions for the project was carried out by Luis Prada, World Bank Procurement Officer, on September 2004 for the National Environmental project for which MARN is the implementing agency. For the proposed project, a desk review of the capacity of MARN to implement procurement actions for the project has been carried out. The review included the organizational structure for implementing the project, the volume and complexity of procurement actions for the new project as well as the new arrangements by which the procurement function is being integrated into MARN's relevant central procurement unit (UFI). Although MARN has no previous experience implementing World Bank projects, considering that procurement under this project is neither complex nor complicated, except for the technical services, it has been decided that the PCU will carry out all procurement actions. In the case of Technical Services and during the initial stages of project implementation, CNR which is implementing the Land Administration project (LAP II) and has extensive experience with World Bank procurement rules, regulations and procedures, will assist the PCU in MARN during the critical stages of the procurement process.

5. The overall project risk for procurement is high.

C. Procurement Plan

6. The Borrower has finalized a Procurement Plan for project implementation that provides the basis for the procurement methods. This plan was agreed between the Borrower and the Project Team during appraisal and is available in the project files. It will also be available in the project's database and in the Bank's external website. The Procurement Plan will be updated in agreement with the Project Team annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

D. Frequency of Procurement Supervision

7. In addition to the prior review supervision to be carried out from Bank offices, since the overall risk assessment has been rated as HIGH, it is recommended that procurement supervision should take place every six months during the first year of the project and once a year thereafter and to reassess the capacity of the PCU to carry out procurement after one year in order to review the prior review thresholds.

E. Action Plan

8. The following actions are recommended to address major weaknesses identified by the Bank and to increase the capacity of MARN and the PCU in particular for implementing procurement:

Procurement Cycle Management: The Procurement Plan will be finalized and approved prior to negotiations. Completion of the Operations Manual is a condition of effectiveness. Standard bidding documents for all procurement methods must be prepared for use by the project and should be based on the Bank's SBDs in the case of NCB. SBDs for Requests for Quotations for Goods and Works have to be prepared and approved by the Bank and included in the Operations Manual. During project launch, the PCU staff concerned should be trained in the use and application of the SBDs. A system for monitoring procurement must be implemented prior to effectiveness. Increased supervision by the Bank is recommended during the initial stages of project implementation. Since Contract Administration is considered a weak area in the project, close supervision and monitoring is recommended.

9. **Organization and Functions:** It has been agreed that a procurement officer with relevant Bank procurement experience will be hired prior to effectiveness. Although this person will be physically in the UACI, he will respond to the project coordinator. Since internal manuals and instructions do not exist, priority should be given to preparing the Operations Manual. This is a condition for effectiveness.

10. **Support and Control Systems:** Since no auditing procedures are in place, the audit requirements must be established in coordination with financial management. Technical and administrative controls must be established, implemented and included in the Operations Manual. MARN must immediately enforce the fraud and corruption provisions in the Bank guidelines and SBDs. Anticorruption clauses must be included in all bidding documents.

11. **Record Keeping:** Proper record keeping will have to be ensured and a check list included in each file to permit verification that all relevant information is included. As the volume of procurement increases, it will be necessary to define a physical area to keep all records and files of the procurement processes under the project.

12. **Staffing:** The PCU will be strengthened with the hiring of a dedicated procurement officer with relevant experience in Bank procurement. It is recommended that to the extent possible, training courses in Spanish be identified for the procurement officer to attend. Although this person will be physically in the UACI during year one, and in the UFI during years two through five, he will respond to the project coordinator.

Attachment 1

Details of the Procurement Arrangement Involving International Competition

1. Goods, Works, and Non-consulting Services

(a) List of contract Packages that will be procured following ICB and direct contracting:

1	2	3	4	5	6	7	8	9
Ref. No.	**Contract (Description)**	**Estimated Cost**	**Procure-ment Method**	**P-Q**	**Domestic Preference (yes/no)**	**Review by Bank (Prior / Post)**	**Expected Bid-Opening Date**	**Comments**
	None							

(b) ICB Contracts estimated to cost above US$150,000 per contract and all direct contracting will be subject to prior review by the Bank.

2. Consulting Services

(a) List of Consulting Assignments with short-list of international firms.

1	2	3	4	5	6	
Ref. No.	**Description of Assignment**	**Estimated Cost**	**Selection Method**	**Review by Bank (Prior / Post)**	**Expected Proposals Submission Date**	**Comments**
	None					

(b) Consultancy services estimated to cost above US$50,000 per contract for firms, US$25,000 for individuals, and single-source selection of consultants (firms and individuals) regardless of the contract amounts will be subject to prior review by the Bank.

(c) **Short lists composed entirely of national consultants:** Short lists of consultants for services estimated to cost less than US$200,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

Annex 9: Economic and Financial Analysis

EL SALVADOR:

PROTECTED AREAS CONSOLIDATION AND LAND ADMINISTRATION PROJECT

1. An economic and financial analysis was conducted to estimate the net incremental economic benefits of the Protected Areas Consolidation and Administration project (PACAP) and assess the financial sustainability of the consolidation of MARN's Natural Protected Areas System (NPAS). The project's objective is to conserve El Salvador's globally significant biodiversity by strengthening the NPAS and consolidating two priority protected areas under different conservation categories, including: (i) the Bahia de Jiquilisco mangrove forest; and (ii) the dry tropical forest of the Lago Guija Complex San Diego-La Barra (SDLB)

Economic Analysis

2. A cost/benefit analysis undertaken to assess the project's economic impacts estimated that the net present value (NPV) of incremental project benefits will be US$34.9m for a 50 year-period or US$0.7m per year with a discount rate of 12 per cent. Of these, it is expected that 82 per cent of the benefits will be derived from activities in the Jiquilisco pilot area and 18 per cent from activities in the SDLB. The costs include the direct investment through PACAP over the life of the project and the investment and recurrent costs of the office in each of the pilot areas over a 50-year period. The economic internal rate of return is 19 per cent.

3. The expected incremental economic benefits come from the introduction of sustainable management of the pilot areas, including the core zones and surrounding buffer areas. Sustainable land use patterns, resulting from the introduction of management plans for these areas, will yield: (i) a reduction in environmental degradation; and (ii) an increase in the quality and quantity of environmental services, thereby providing both national benefits (e.g. reduced agriculture-, livestock- and fishing-related soil and water contamination, better soil conservation practices, and sustainable management of fish stocks) and global benefits (e.g. increased biodiversity conservation and carbon sequestration).

4. The analysis was done for a 50-year period, as most of the project's benefits are expected to be long-term in nature. The analysis further compared "with" and "without" project situations to determine the project's incremental benefits. Furthermore, two additional scenarios were examined to calculate: 1) the revenue from concessions/authorizations for productive activities within the pilot areas; and, 2) the cost of relocating those currently living within the pilot areas to non-protected area lands. The following table summarizes the incremental economic benefits for each activity, which are explained in the following section.

Project-related Incremental Economic Benefits in Project Pilot Areas

Pilot Area	Activity	Expected Value (US$m) over 50 years)	Expected Value (US$m/)/Year	Expected Value (US$m) per Hectare
Jiquilisco	Carbon sequestration[1]	37.3	0.7	38.4
	Carbon sequestration[2]	7.5	0.1	7.7
	Sustainable traditional and industrial fishing production	53.8	1.1	55.3
	Sustainable production of fuel wood	0.7	0.01	0.7
	Sustainable management of aquifers	0.2	0.0	n.a.
	Total Jiquilisco[3]	62.2	1.2	
SDLB	Carbon sequestration[1]	18.6	0.4	208
	Carbon sequestration[2]	4.8	0.1	54
	Sustainable traditional fishing production	2.5	0.1	27
	Sustainable production of fuel wood	-0.1	0.0	-1.0
	Soil erosion control/adoption of sustainable agricultural methods	6.8	0.1	n.a.
	Total SDLB[3]	14.0	0.3	
	TOTAL Jiquilisco and SDLB	76.2	1.5	

[1] Value of carbon at a global level ($20/MtC)
[2] Value of carbon at a national level ($4.5/MtC)
[3] Total calculated based on global level

5. **Carbon Sequestration.** Carbon sequestration refers to long-term carbon storage in the terrestrial biosphere, underground, or the oceans thereby reducing or slowing the buildup of carbon dioxide (the principal greenhouse gas) concentration in the atmosphere. The value of carbon sequestration is calculated based on: (i) the price of US$4.5 per metric ton (MtC),[34] which is the average price for the emission-reduction rights at the individual country level; or (ii) the price of US$20 per ton,[35] which is the estimated benefit to society at the global level. Using these values, the conservation of the biosphere in the two pilot areas is expected to provide economic benefits of US$12.3m over a 50-year period using the price for emission-reduction rights (US$4.5/MtC) for carbon sequestration. This is calculated based on the loss of carbon sequestration that would occur in the absence of the project, given the assumed trends of deforestation. To estimate the deforestation rate in Jiquilisco, data were used from a recent

[34] During a presentation to the Annual Meeting of Host Country Committee on Carbon Finance, the weighted average price for buyers purchasing high-quality potential compliance instruments was reported to be between $4.00 to $5.00. From the presentation notes of Richard Rosenzweig, Natsource Asset Management, February 2005.

[35] Pagiola, Stefano, Konrad von Ritter and Joshua Bishop, *Assessing the Economic Value of Ecosystem Conservation*, The World Bank Environment Department, Environment Department Paper No.101

study[36] that estimated that the annual mangrove deforestation rate in El Salvador has been 5.8 per cent since 1996 (before which it was 0.8 per cent). For the SDLB, the evaluation used a constant deforestation rate of 49.5 hectares/year from 2005 to 2010, which increased by 1 per cent from 2011 until 2055. The annual carbon storage capacity of mangroves and dry tropical forest are estimated to be 200 MtC/ha and 73.9 MtC/ha, respectively.[37]

6. **Fish Production.** Fishing is an important economic activity in both Jiquilisco Bay and SLBD. These fish stocks, however, are seriously threatened due to resource overexploitation and water pollution. The project is expected to result in benefits associated with traditional and industrial fishing equivalent to US$56.3m. This estimate is calculated as described below.

7. Sixty per cent of El Salvador's commercial fishing is mangrove-dependant. As Jiquilisco Bay accounts for 54 per cent of El Salvador's total mangrove area, it could be expected to support more than 30 per cent of the nation's commercial fishing. The depletion (overfishing) rate of Jiquilisco is estimated by CENDEPESCA to be 5 per cent. Based upon these data, and assuming a linear relationship between mangrove area and mangrove-dependent annual fish production, Jiquilisco's productivity index was calculated at 271 (i.e. sustainable harvest of 5,877,757 kg/estimated mangrove area in 2003 of 217,050 ha). Assuming the productivity index remains constant, the overfishing rate will increase to 17 per cent after 2010 as a result of continued deforestation. Consequently, the NPV of fish production foregone to deforestation will be US$53.8m over a 50-year period.

8. The fish production of the freshwater lakes Metapan and Guija, located in SDLB, is severely threatened by rising levels of pollution and deforestation associated with intensifying agricultural activities and urbanization. If the project were not implemented, the NPV of lost fish production would be US$2.5m over a 50-year period.

9. **Fuelwood**. Estimates of current annual fuelwood consumption in the two pilot areas range from 140,000 MtC in Jiquilisco to 231,880 MtC in SDLB. As one hectare is considered able to sustainably produce 409 MtC of fuelwood each year, it is estimated that the current annual extraction surpasses the sustainable volume of extraction by 57 hectares in Jiquilisco. In SDLB, current annual extraction is 1,253 MtC below the sustainable production. Without the project, future overexploitation of fuelwood is expected to increase due to continued deforestation and population growth. In order for fuelwood collection to be sustainable, the rate of its exploitation must be equal to its regeneration. The NPV for the incremental benefits of fuel exploitation with the project will be US$0.7m in Jiquilisco and US$-0.1m in SDLB. It should be noted that while the total incremental benefits are negative in SDLB, those values do become positive after 2021.

10. **Sustainable aquifer management**. One probable effect of deforestation would be the reduction of underground water reservoirs (aquifers) in the area. The socio-economic survey results indicate that 56 per cent of the Jiquilisco population use wells to provide water. In the without project scenario, it is estimated that by 2020 the capacity of local wells will be exceeded, requiring investment in a water pumping system to import water from the nearby cities of Puerto Triunfo and Usulutan. The NPV of this investment is US$165,000 over a 50-year period. Aquifer conservation is important not only for drinking and agriculture, but also for maintaining the

[36] Alpízar Vaglio, Edwin et al. 2003 "Evaluación del Potencial de Mitigación del Sector Forestal en la República de El Salvador, Ante el Cambio Climático, Mediante Prácticas de Reforestación y Forestación", p. 21

[37] ibid

freshwater flows into the mangroves, which is in turn vital for maintaining the salinity level on which much of the mangrove-associated organisms and processes depend.

11. **Pollution and soil erosion**. The SDLB pilot area supports about 1,800 hectares used for agriculture, of which 1,500 ha and 280 ha[38] are in the buffer zone and core "nucleus" zones, respectively. The establishment of basic crops, using poor agricultural practices (such as slash-and-burn and intensive use of agrochemicals), has led to erosion, loss in soil water absorption and soil fertility, and sedimentation of Lake Guija and Lake Metapan. According to a slope soil erosion study carried out by MARN from 1974-1979, it is estimated that erosion on slopes under agricultural production without conservation techniques contributes 19 MtC/ha annually. With the project, it is assumed that through technical assistance and financial incentives, all producers in the core nucleus of Portion 2 of the reserve as well as producers on slope areas of the buffer zones will introduce improved practices for soil conservation, thereby reducing the erosion rate by 90 per cent. The NPV of these project-associated incremental benefits is estimated at US$6.8m over a 50-year period.

Economic Benefits from Concessions

12. The economic analysis estimated the economic benefit associated with the provision of concessions in the pilot areas, which would be granted through the project for sustainable activities within the pilot areas.

13. MARN has proposed the amounts that would be paid by residents for concessions (in mangroves) and authorizations (in non-mangrove protected areas). The renewable concessions would be valid for a five-year period with the proceeds entering the country's General Fund. The proposed rates and expected annual revenues from such concessions are summarized in the following table.

Expected Rates and Revenue from Concessions/Authorizations

Pilot Area	Activity	Cost/5 year Concession/ha	Annual Revenue from Concessions*
Jiquilisco	1. Salt harvesting (includes construction and management)	$100	$34,040
	2. Aquaculture for shrimp, fish, etc. (includes construction and management) under three levels of technology:		
	a) Extensive (need definitions of each	$75	$7,320
	b) Semi-extensive	$125	$1,449
	c) Intensive	$175	-
SDLB	3. Agriculture	$30	$5,400
		TOTAL:	**$48,209**

* Assuming the total area under existing production schemes remains constant.

[38] The 280 ha are located in the core zone of Portion 2.

14. **Shrimp and Salt Harvesting Concessions**. In Jiquilisco, the environmental analysis identified 30 existing shrimp farms representing a total of 546 ha, of which 488 ha are managed under an extensive regime, and 59 ha as semi-intensive. The annual economic value of these existing concessions is estimated to be US$8,769, which is paid to the nation's General Fund. To estimate revenue from salt harvesting activities, 2002 data[39] show that 65 salt concessions exist in Jiquilisco, for a total area of approximately 1,702 ha. The value of these concessions is US$34,040 annually.

15. **Farming Authorizations**. There are approximately 1,800 ha dedicated to agricultural activities in the SDLB, including 1,520 ha in the buffer zone and 280 ha within the core nucleus. Of this area, it is estimated that about 882 ha inside the buffer zone are farmed illegally. If authorizations are given to all residents through the project, including those currently operating illegally, the economic benefits would be US$5,400 per year.

Economic Cost of Relocation

16. Under an alternative scenario, the economic cost of relocating all individuals within the core nucleus and buffer zones of the two pilot areas was conducted. In the case of Jiquilisco, the limits were defined as those identified by the 1973 census, while in the case of SDLB, the boundaries are those identified by LAP II. It was assumed that relocation of residents was done through the provision of land outside of the pilot areas so that those residents could continue to undertake productive activities under similar conditions. The average property value reported in the socio-economic survey was used to calculate the cost of relocation. The resulting estimated cost of relocation is considered to be US$79.6m.

Economic Cost of Human Relocation from Pilot Areas (US$ Million)

Pilot Area	Number of Families	Cost to Relocate Houses	Cost to Relocate Productive Parcels	Total
Jiquilisco	2,500	$26.8	$12.8	$39.6
SDLB	2,773	$29.7	$10.3	$40.0
			TOTAL:	**$79.6**

Financial Analysis of MARN's Natural Protected Areas System

17. A financial analysis of MARN's Natural Protected Areas System (NPAS) was undertaken to: 1) identify the project's incremental financial benefits and costs with regards to the NPAS; and 2) to assess the financial viability of the NPAS. The analysis includes a cash flow assessment, based on: (i) historical information for the years 2001-2005 (the "without project" scenario) to identify current revenue and cost of the NPAS; and (ii) a 10-year projection until 2015 (the "with project" scenario) that includes the incremental benefits and costs associated with the NPAS consolidation. The analysis includes historic costs so as to compare MARN's current budget with the incremental costs of consolidating the NPAS.

18. The following table shows the budget executed by MARN over the past five years, the approved budget for 2005, and the environmental funds that have been executed during this period. The environmental funds contribute to the protection of the NPAS, but they are not part of

[39]JICA. 2002. Estudio sobre el desarrollo de la pesca artesanal en El Salvador (informe final borrador). San Salvador, El Salvador.

the budget allocated to MARN by the Ministry of Finance. Specifically, the environmental funds that have contributed to MARN's activities include the Special Activities Fund for MAG, the Fund Initiative for the Americas (FIAES), FONAES, and Montecristo National Park. All of these funds come from sources external to MARN except for the park fees collected at Montecristo National Park (which are the only protected area-related fees that go back to MARN).

MARN- Executed Budget and Environmental Funds, 2000-20005 (US$ Million)

	2000	2001	2002	2003	2004	2005
MARN						
Institutional Direction and Administration	1,372	1,983	1,751	1,713	1,090	1,090
Sustainable Development of Natural Resources	1,792	1,442	1,626	1,846	1,081	1,081
Support to other Institutions	303	229	1,770	2,007	1,448	1,448
Sustainable Development of Natural Resources (counterparts)		434	306	200	242	242
Total Budget Executed by MARN	**3,467**	**4,088**	**5,453**	**5,766**	**3,861**	**3,861**
Environmental Funds	3,116	2,540	2,195	937	953	967
TOTAL:	**6,583**	**6,628**	**7,648**	**6,703**	**4,814**	**4,828**

19. The following table presents the projected incremental costs of the consolidated NPAS for the period between 2006 and 2015.

20. The cost of NPAS consolidation mainly reflects the investments and recurrent costs associated with the 15 conservation area offices that MARN intends to establish. The assumed timeline for the establishment of these offices is as follows: two in 2006 (Jiquilisco and SDLB); three in 2007; four in 2008; three in 2009; and three in 2010. It is assumed that the initial investments in each office would need to be repeated every eight years due to depreciation. By 2001, when all 15 offices will be operational, the annual average estimated incremental cost is US$2.5m, which represents 65 per cent of the general budget currently executed by MARN.

21. In addition to the incremental costs associated with the establishment of conservation area offices, the analysis assumes a necessary initial investment in ecotourism infrastructure, such as guest houses and interpretative trails, so that the protected areas attract revenue from tourism. It is estimated that only 12 NPAs have potential for tourism, and thus would require this investment. The cost of ecotourism infrastructure in Jiquilisco and SDLB was not considered in the analysis, as the respective investment would be financed under PACAP. For the other 10 areas, the projection for infrastructure investment is estimated to be US$6.5m.

22. The NPAS expects to generate incremental income from park entrance fees and the selling of authorizations and concessions. Based on the current situation in El Imposible National Park, it is estimated that approximately 7,500 visitors per year on average will visit the 12 protected areas with tourism potential, of which half are nationals (paying US$3 each) and the other half

foreigners paying US$6 each). The NPAS could generate as much as $380,000 per year when tourism infrastructure has been established in the other protected areas with tourism potential.

23. Income associated with shrimp and salt harvesting concessions in Jiquilisco and agriculture authorizations in SDLB is estimated to generate about $50,000 per year, of which 86% comes from Jiquilisco. It is important to note that the potential concession-related income in Jiquilisco is significantly higher than what would be expected to come from other NPAs. For the purposes of the estimated cost projection, the average annual concession-related income for NPAs was assumed to be US$10,000.

24. The analysis shows that the income generated from park fees and concessions/authorizations is insufficient to finance the consolidation of the NPAS.

25. So as to explore other potential complementary income sources, the analysis comprised three additional possible sources of financing, including: (i) residential permits (fees to protected area residents for their right to use the land to live); (ii) concessions/authorizations for fishing; and (iii) fees for the sustainable use of fuelwood. Although MARN is not currently considering the sale of residential permits, this measure could help raise about US$99,000 annually in each NPA, assuming permits were sold at a rate equivalent to 1.5 per cent of the property value. If MARN were to sell concessions/authorizations for fishing, they could raise US$62,000/year in Jiquilisco alone, assuming a 1.5 per cent tax on total production. In other non-mangrove NPAs, an annual average of US$10,000 could be generated from fish concessions/authorizations, adjusted to an inflation rate of 2.5 per cent. Similarly, were MARN to charge fees for the use of fuelwood, it could generate about US$29,500 per year for each NPA.

26. If these three additional sources of financing were tapped, the balance between incremental cost and revenues would yield a deficit of US$340,000 in year 2015, representing a "savings" of US$2.2m compared to the estimate based on visitor fees and concessions/authorizations for agriculture, shrimp and salt. While this is significantly closer to the costs needed to consolidate the NPAS, these sources alone will not yield enough income to make the NPAS financially sustainable.

27. The second scenario includes income generated from payments for environmental services. These additional sources are:

- A fee included within taxes for international air departures. As an example Costa Rica charges such a tax with the logic that tourists benefit from the natural beauty of its national parks. While El Salvador also has an international air departure tax, it does not currently include an environmental component;

- A tax for water consumption. Protection of the NPAS will directly affect the volume and quality of water available in El Salvador's aquifers, thereby benefiting the national population. MARN could charge an environmental tax linked to water consumption regulated by the ANDA system; and

- A tax for hydroelectric energy usage. Consolidation of the NPAS would contribute to the production of hydraulic power. Consequently, an environmental tax could be charged for the use of associated energy.

28. The projection evaluated different tax rates to propose a specific tax bundle that would generate a small surplus and result in an approximately equal distribution among these three

sources of financing. These rates and expected revenue are shown in the following table. The total amount of incremental income expected from these taxes is US$2.7m per year. Using these additional sources of financing, the projection shows that by 2011, when all the offices will be open, the NPAS could generate a profit.

29. The analysis concluded that in order to make the NPAS financially sustainable, it is necessary to consider a revenue structure that includes income generated from traditional sources (park fees and an expanded system of concessions/authorizations) as well as income generated from environmental service payments.

Incremental Revenue and Cost of the NPAS (US$ Thousands)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1. Incremental Cost of Opening New Offices	**425**	**908**	**1,547**	**1,918**	**2,352**	**2,433**	**2,466**	**2,557**	**2,553**	**2,582**
Investments	124	186	248	186	186	66	99	190	186	215
Human Resources	210	524	944	1,258	1,573	1,774	1,774	1,774	1,774	1,774
Operating Costs	91	198	356	475	593	593	593	593	593	593
2. Infrastructure Investment for Ecotourism	**540**	**920**	**1,040**	**940**	**700**	**710**	**560**	**560**	**560**	**560**
3. Incremental Income (Group A)		**108**	**227**	**408**	**544**	**680**	**680**	**680**	**680**	**680**
Entrance Fees to NPAs		68	127	228	304	380	380	380	380	380
Concessions/Authorizations for agriculture, shrimp, salt		40	100	180	240	300	300	300	300	300
4. Incremental Balance A (Line 3 – Line 1+2)	**-425**	**-1,640**	**-2,541**	**-2,841**	**-3,048**	**-2,603**	**-2,646**	**-2.437**	**-2,433**	**-2,462**
5. Incremental Income (Group B)		**319**	**1,251**	**1,676**	**2,092**	**2,122**	**2,122**	**2,122**	**2,122**	**2,122**
Residential Permits		198	891	1,188	1,485	1,485	1,485	1,485	1,485	1,485
Concessions/Authorizations for Fishing		64	94	134	164	194	194	194	194	194
Fees for fuelwood use		57	266	354	443	443	443	443	443	443
6. Incremental Balance B (Line 4 + Line 5)	**-425**	**-1,321**	**-1,290**	**-1,174**	**-956**	**-481**	**-524**	**-315**	**-311**	**-340**
7. Incremental Income (Group C)		**2,451**	**2,500**	**2,550**	**2,601**	**2,653**	**2,700**	**2,760**	**2,816**	**2,872**
Departure Tax at the International Airport		745	760	775	791	806	823	839	856	873
Water Consumption (ANDA)		822	838	855	872	889	907	925	944	963
Generation of Hydroelectric Power		884	902	920	939	957	977	996	1,016	1,036
8. Balance Incremental C (Line 6 + Line 7)	**-425**	**811**	**-40**	**-300**	**-447**	**50**	**60**	**324**	**383**	**410**
9. Cumulative Incremental Balance		**811**	**771**	**470**	**23**	**74**	**134**	**457**	**840**	**1,250**

Expected Rates and Income from Additional Taxes

Tax	Rate	Revenue
Departure Tax at International Airport	$0.93 per person	Assuming the number of international departures at 750,000 per year, the expected income would be $693,000
Tax for Water Consumption	$0.0028 per metric liter	Assuming an annual water consumption of 249 million m3, the expected income would be $697,000
Tax for Hydroelectric Power	$0.5 per Gwh	Assuming an annual injection of 1382 Gwh, the expected income would be $691,000

30. **Sensitivity Analysis:** Income reduction and cost increase switching values were calculated for the incremental cashflow analysis of the NPAS. The income sources included in the analysis were park entrance fees, concessions/authorizations for agriculture, shrimp, and salt, an international air departure tax, water consumption tax, and hydroelectric power generation tax, while the cost sources included were the cost for opening the new offices and infrastructure investment for ecotourism – all with a discount rate of 12 per cent. As shown in the following table, the NPAS is very sensitive to changes in income and cost; in fact, with a reduction in estimated income, estimated cost could increase simultaneously by only 4.3 per cent. Furthermore, the analysis shows that the NPAS is more sensitive to changes in income than cost. Everything else being equal, income cannot be reduced by more than 7.9 per cent before the IRR quickly becomes negative. Similarly, costs can be increased up to 9 per cent before the IRR is below the discount rate. This analysis demonstrates the importance of developing additional funding sources for the NPAS.

Presentation of Switching Values (IRR=12%)

Simultaneously	
A. Income	4.3%
B. Cost	4.3%
Ceteris Paribus	
A. Income	7.9%
B. Cost	9%

Annex 10A: Safeguard Policy Issues

EL SALVADOR: Protected Areas Consolidation and Administration Project

1. This project is expected to have a highly positive environmental impact. If implemented as planned, the project would have no significant adverse environmental effects. It would also comply with all applicable World Bank safeguard policies, as explained below.

2. **Environmental Assessment (OP 4.01).** The project is classified as Category B, requiring some type of Environmental Analysis (EA) but not a full-scale Environmental Impact Assessment. In accordance with OP 4.01, this project EA builds upon the one done for the partially blended LAP II, which was conducted by national and international experts during the summer of 2004. Specifically, the PACAP EA consists of three studies: (a) An overall protected areas study to develop recommendations for improving the NPAS; (b) ecological assessments of the two pilot areas; and (c) an environmental assessment of eligible project activities within the two pilot areas. This latter document provides the environmental criteria and procedures that are to be reflected within the protected area management plans that will be produced for each pilot area during project implementation (as part of Component 2). It indicates, among other information, (a) the types of eligible civil works (park guard houses, observation platforms, physical demarcation, and so forth) and other project investments (excluding any which are likely to be environmentally harmful); (b) the simple procedures and responsibilities (within MARN) for environmental screening and supervision of these investments; and, (c) standard environmental rules for civil works contractors and workers (regarding waste disposal, raw materials sourcing, no hunting, and so forth). In accordance with OP 4.01, extensive consultation with conservation NGOs, local community representatives, and other stakeholders on the project's environmental and other aspects took place during the preparation of the three reports that comprise the EA.

3. **Natural Habitats (OP 4.04) and Forests (OP 4.36).** The project is fully consistent with the Bank's Natural Habitats and Forests policies. It would not cause, nor facilitate, any significant loss or degradation of forests or other natural habitats. On the contrary, the project is intended to prevent, or at least reduce, such loss or degradation by improving the protection and management of natural habitats within the project areas. Through the management plans to be developed for each pilot conservation area (under Component 2), the project will regulate any extraction of natural products by local people. The project will also support the environmental monitoring of such harvesting (and making adjustments in harvesting limits, if needed) to ensure sustainability. In the Bahía de Jiquilisco Conservation Area, limited harvesting of mangrove trees (as an alternative to ongoing activities that are more destructive to the mangroves) might possibly be authorized under the management plan that will be developed during project implementation. In such a case, the management plan will specify the need to conduct any mangrove harvesting in accordance with the criteria of OP 4.36 (Paragraph 12) for forest harvesting by local communities under community forest management.

4. **Cultural Property (OPN 11.03).** Some of the conservation areas to be supported under the project (indirectly through Component 1 and directly through Component 2) contain significant archaeological, historical, or other cultural patrimony. The preservation of cultural sites or relics will be an important element of the management plans for relevant conservation areas.

5. **Involuntary Resettlement (OP 4.12).** Although no involuntary resettlement of any people will take place under the project, there might be increased restrictions in access to natural resources for some of the people living in, or adjacent to, the project pilot areas. Consequently, a Process Framework (see Annex 10C below) has been produced to ensure that project beneficiaries receive appropriate consideration and assistance in their efforts to maintain or improve their livelihoods.

Such assistance would be provided during the formulation and implementation of management plans for each pilot area.

6. In accordance with IBRD's policy on Disclosure of Information (BP 17.50), copies of the Environmental Assessment Report and Process Framework are available for public viewing at CNR's UCP office (1ª Calle Poniente and 45 Av. Nte. # 2310, San Salvador) and on CNR's website (www.cnr.gob.sv). These documents are also available in the Bank's InfoShop in Washington.

Annex 10B: Social Assessment
Executive Summary

EL SALVADOR: Protected Areas Consolidation and Administration Project

1. Background

The National Registry Center (CNR) and the Ministry of Environment (MARN), as agreed between the World Bank and the Government of El Salvador in the Country Assistance Strategy (CAS) for El Salvador, have the objective of promoting land tenure security. The design of the Project takes as its basic framework objective the conservation of biodiversity and reduction of poverty in rural and semi-urban areas in and near priority protected areas. The Project will cover two pilot protected areas: Bahía de Jiquilisco (Jiquilisco Bay) and Lago Guija (Guija Lake).

2. Design of the Social Assessment

To investigate the social universe to be covered by the Project, the Social Assessment (SA) identified and analyzed several different "sociogeographic" scenarios. These consist of various geographical areas and the social groups that characteristically utilize or occupy the areas (project beneficiaries as well as other social actors), including small and medium-sized rural producers, and the semi-urban population. The SA incorporated a gender perspective where relevant. In terms of tenure, the following types of beneficiaries were considered:

- People with legal, but irregular, titles, this includes people – rich and poor as well as ex-guerillas – who have lands titled by the municipalities, ILP and/or ISTA.
- People with concessions (e.g. existing use rights), which include those with concessions from MARN/Hacienda to undertake three types of activities: salt production, shrimp production, and agriculture. Concessions are only legally allowed in mangrove areas. (Protected areas can provide similar use rights under the new protected areas law through authorizations.) The types of concessions and authorizations that will be offered will be expanded through the project's development of management plans.
- People with no legal title to land or use right: This includes people living in and/or using the pilot areas, but without any legal right to the land or its use.

3. Methodology

The SA (a) identified the social actors involved, especially beneficiaries, and the mechanisms for their participation in project design and execution; (b) analyzed the factors influencing access to land, including gender; (c) documented the existing modalities of land tenure; (d) studied the nature of land tenure conflicts and the instruments for their resolution; (e) examined the potential social impacts of the Project and recommended actions to avoid, mitigate or enhance impacts depending on their contribution to project objectives; and (f) presented recommendations for the design and implementation of the Project to maximize beneficiary participation so as to achieve social development and poverty reduction. The SA was based on a combination of quantitative and qualitative methodologies. These included the collection of relevant secondary information, collection of primary data in the field relevant to the purposes of Social Assessment, consultations directly with the social actors involved to interpret the information collected, empirical verification of interpretations and conclusions in the field, and design of recommendations for project management.

Primary Data Collection: Views of the Beneficiaries. Three instruments were used to obtain the views of project beneficiaries and other social actors that will be involved in the project, as well as primary data concerning their land tenure situation. First, a socioeconomic survey was conducted of about 400 rural and semi-urban producers that occupy land in buffer zones with and without benefit of title. Second, semi-structured interviews were used to gather information from key informants, including members of ADESCOS and farmers, as well as NGOs (FIAES). Third, focus group discussions were held among direct beneficiaries of the Project (producers, ADESCO members and local leaders), non-governmental organizations (NGOs) and official institutions responsible for the current land administration system and associated programs. The latter served to compliment, corroborate and triangulate information and opinions received from the sample survey.

Gender Focus. So as to identify the significant gender-specific issues around land tenure, to provide data needed to address existing disparities and discriminatory factors, and to facilitate actions that favor women's access to land and ownership of production means, the SA collected and analyzed specific issues flagged by women heads of households. This focus was maintained in the sample survey as well as in interviews and focus group discussions.

4. Results

Land Tenure Characteristics. The majority of El Salvador's rural population occupies land owned by the national government (including both lands occupied for generations and land acquired by the State for agrarian reform purposes) and enjoy possession rights but do not have legal titles. The Project and the LAP II with which it is linked are designed to establish the necessary conditions to legalize some such possession. Some 60% of rural producers do not have titles to their farms. Salvadoran law provides the opportunity for these farmers to convert their possession into legal title through agreements with ISTA. While the majority of lands are legally considered to be under the "possession" of an individual, there are several forms of property rights that are recognized, depending upon how that possession was acquired (e.g. through inheritance, concession by the State, purchase or usufruct). The sample survey for the SA found that the majority of the lands in the pilot areas were acquired by occupancy, reform groups, inheritance or concession. The main obstacles to acquiring a title are economic: more than half of rural people live in poverty, and they cannot bear the cost of land and its title; the situation is even more severe for those living below the extreme poverty line. Furthermore, the institutional, legal and operational weakness of the current land administration system might constitute major obstacles (see LAP II Project Document).

Institutional Factors. El Salvador still needs to improve the institutional response and efficiency of the land administration system and clarify some related norms and procedures. This process is been carried out by the partially blended LAP II, implemented by CNR. Still, the beneficiaries of that project have difficulty understanding how the various parts function, who the responsible agencies are, and how to resolve their cases.

Economic Factors. Currently, the cost of land and land titling – which are the responsibility of the individual seeking legal title – are not affordable to the great majority of rural and semi-urban Salvadorans. In addition to the significant costs of land and title, the time-consuming process necessary to obtain a title, including land measurement, mapping, title search, title generation and land registry, imposes a high transactions cost that serves as a disincentive to property rights regularization.

Cultural Factors. Despite the long history of the informal property market in El Salvador, some farmers are aware that without legal title, they are at a disadvantage. At the same time, however, there is a wide-spread perception that land regularization and titling will incur high fees and time expenditures, while

moreover putting those who start the process at risk of loosing their lands if they are unable to pay the debts acquired with the State.

Gender Barriers to Land Tenure Regularization. While there are no special legal impediments affecting women's access to land tenure regularization, in practice, ideological and social stereotypes have historically interfered. Generally speaking, rural women possess neither land nor family patrimony, limiting their productivity and precluding their ability to generate some security for their offspring. To overcome these social limitations, the project should place special emphasis on education and information dissemination to both genders, more than on further refinement of the legal framework, and the policies, programs and actions designed under the project should provide special instruments for incorporating women into the project's activities.

Identification of Beneficiaries and Other Social Actors. The Project will benefit all those rural and semi-urban property holders who do not have registered legal title to the property upon which they depend for their livelihood. Specifically, the Project will benefit, at least, 40,000 small and medium producers in rural areas of which 80% are poor households. Most of these households have developed agricultural, livestock, fishing, extractive and manufacturing productive activities in areas traditionally dedicated to agriculture. Within this group, special attention is required to recognize the productive activities of female heads-of-households. About 70% of the persons consulted have "separate" parcels, including one used for residential purposes and another for agricultural activities. This pattern was found to hold in both rural and semi-urban areas.

Land Tenure Conflicts and Conflict Resolution. The findings of the SA indicate that despite the overarching national legal framework and country-wide commonalities in the socioeconomic, institutional and cultural factors that constrain access to land tenure security, there is marked variation in the nature and significance of land tenure conflicts among the pilot areas. For instance, the Jiquilisco area is home to many ex-guerillas who were granted land within the pilot area as part of the post-war Peace Agreements. Generally speaking, land tenure conflicts in protected areas stem from failure to regularize the holdings of individuals with possession or usufruct rights dating from before the creation of the protected area. Conflicts occur where protected areas have not been demarcated, and local property holders do not know the boundaries of protected areas. Still other conflicts are rooted in the exploitation of wood and other natural resources, without authorization by environmental authorities.

To address these conflicts, the project will pilot the establishment of formal and alternative conflict resolution mechanisms. Specifically, the project will support the targeted use of alternative dispute resolution strategies and methods to facilitate the resolution of disputes over land titling, demarcation, and the definition of possible mixed-use regimes within protected areas. A pilot program in dispute resolution will be launched in the opening months of the project and closely monitored to permit objective assessment of its utility. Key activities proposed for the dispute resolution component of the project include the following:

- *A training program for project staff*, especially those persons that will identify and seek to resolve conflicting titling and demarcation claims in the project areas. The training will provide a general introduction to the principles underlying alternative dispute resolution (ADR), but will emphasize the development of mediation skills relevant to the field teams' operating responsibilities. General introductory training in dispute resolution frameworks and strategies also will be provided to key staff of the eight government agencies that will be implementing the project.
- *Development of field manual.* The manual will provide hands-on, practical guidance for how field team members can apply dispute resolution principles to the settlement of competing claims over land titling and protected area demarcation.

- *Design of a conflict resolution monitoring and evaluation program* that can be used to assess the value of individual training events, field team success in using ADR techniques to resolve land conflicts, and the utility of the manual.
- *Collaborative planning seminars* for selected staff of the government agencies executing the project. Three government agencies with highly diverse mandates, philosophy, work cultures, and operating systems (e.g., the technical orientation of MARN compared with the legal orientation of the CNR) need to develop shared objectives and operating procedures in order for the project to succeed over the long run. The project will underwrite a series of collaborative planning seminars in which representatives of the government agencies can develop a collaboration framework.

Protected Areas. Land tenure conflicts in protected areas stem from failure to regularize the holdings of individuals with possession or usufruct rights dating from before the creation of the protected area. Conflicts occur where protected areas have not been demarcated, and local property holders do not know the boundaries of protected areas. Still other conflicts are rooted in the exploitation of wood and other natural resources, without authorization by environmental authorities.

The Project will demarcate two pilot protected areas and regularize the holdings of existing population. This is the first time El Salvador will undertake massive regularization in such areas. The Project will reach an agreement with present occupants on a cut-off date, before which all farmers and households resident in the area will have the right to title to their holding under certain conditions, for instance that they agree to: (a) restriction of uses on the land, (b) bide by specific rules governing the exploitation of natural resources within the pilot areas; and (c) participate actively in management plans.

Social assessment results indicate that about 90% of the people, at least in the Guija pilot area, are willing to participate in conservation and management plans if these are well-designed in terms of timing (relative to the agricultural calendar), activities, and monitoring, and if there is some economic compensation. With regards to the experience of these people in implementing activities including within the existing Guija management plan, most beneficiaries indicate that previous reforestation activities have failed because there is no follow-up or monitoring activities. It seems that the reforestation programs included in the management plan were designed as a tree-planting activity and do not provide maintenance to ensure forest formation. It seems also that indicators to measure reforestation need to be revised. The common indicator is number of trees or acres planted, but the more appropriate indicator might be number of acres supporting forest cover after three years.

All marine and coastal lands have various degrees of protection in relation to Integrated Coastal Management Plans, which are subject to legal enforcement in terms of inland zones subject to tidal flooding. Families using these lands must obtain title to the land by square meter rather than by hectare. In these cases, the Project will need to develop special provisions to ensure access to titles.

Relationship Between Poverty and Tenancy Regularization. It should be noted that the project beneficiary population greatly coincides with the priority intervention areas identified in the Poverty Map of El Salvador. From a social standpoint, a key condition necessary for the GOES to achieve poverty reduction is to establish alliances and linkages among the project activities and those of other Government institutions with responsibility for registry (CNR, ISTA), credit, technical assistance, education, etc. to compliment the impact of land regularization. Without these associated investments, the effects of regularizing land tenure may be nullified. Moreover, the results of the focus groups and peasant interviews indicate that there is a general fear that, far from improving the situation, land titling may have the opposite effect: many may be tempted to sell their land if the price for that land rises as a result of titling, and in the absence of complimentary programs to assist the poor to increase their productivity. This unwanted outcome would draw subsistence farmers off the land into the urban slums where impoverishment could deepen, given the lack of suitable skills and education of the rural poor. The full

SA provides detailed data regarding the socioeconomic characteristics of the rural and semi-urban population, as well as details of the actual legal status of the lands upon which they depend.

Social Scenarios. The pilot areas differ in terms of existing social scenarios. For example, the Guija area includes more beneficiaries affected by the Agrarian Reform – some of which have received titles and other are still in process – while in Jiquilisco, large groups of beneficiaries settled in the area as a result of the Peace Agreements. These "ex-guerilla" groups include members of both the Armed Forces and the revolutionary groups, representing both sides of the war, some of whom have received property titles while others have not.

Not all ADESCOS work well nor represent the community's interests to the same degree. From both a capacity and organizational perspective, the ADESCOs vary widely. This aside, generally speaking, local people relate to the ADESCO as an entity. The role of the ADESCOs in the two pilot areas differ: in Guija, ADESCOs are stronger and play a more important role in the minds of the local beneficiaries, while in Jiquilisco Bay, as people are mostly organized in cooperatives, they place more importance on the cooperative than on the ADESCOS.

In both pilot areas there are a limited number of "Natural Resources Guards", funded by local NGOs, as well as Environmental Police (part of the National Police). Both areas are home to "Peace Judges" to whom people could submit their complaints directly or through the Environmental Police.

In Guija, ISTA has zoned and demarcated lots near San Diego Volcano, in the south-west area core of the pilot area. Most of these lots are not used for households, but for agricultural production. Some of these farmers have titles. A parallel situation was found in Jiquilisco Bay where ISTA has also provided titles that are incongruent with MARN's conservation objectives.

Poverty and Land Tenure. Rural poverty is determined by structural conditions, which in turn affect agricultural production. In the case of El Salvador, this largely comprises the economic and technical constraints of traditional agriculture in facing a global market. However, the lack of property titles is a recognized factor contributing to poverty and to preventing peasants from realizing new economic opportunities. Thus, the project challenge will be to secure complementary processes and conditions that complement the delivery of property titles, such as: (i) mechanisms to guarantee access to land; (ii) changes in the social relationship between producers, the State, financial institutions and consumers; (iii) changes in the institutional and legal framework and in the mechanisms for technological transference to support associative efforts and consolidate the productive capacity of small- and medium-size producers.

Social Organization of the Actors. Actors organizations can be classified into three groups: (a) first-level organizations, including ADESCOS, producer organizations, cooperatives, community councils or committees (most water-related) with strictly local-level presence; (b) second- and third-level organizations, including the Association of Small and Medium Producers and the Federation of Agricultural Cooperatives.

As described above, it should be noted that ADESCOS are key local organizations whose activities vary across the country depending upon the degree to which social capital has been developed in each community. Some ADESCOS execute activities with local municipalities and/or NGOs to provide potable water and garbage collection such as in San Diego (Guija). Others execute reforestation activities, as in El Desague (Guija). There are also some cooperatives formed as a result of the Agrarian Reform, which play a large role in Jiquilisco. It is likely that these peasants feel more need to organize in order to protect their land claims.

Other Social Actors. In addition to the beneficiary organizations and the regional and national organizations working with them, there are three other types of social actors, private companies, NGOs, and Government institutions. Private companies include businesses such as CEL, CESSA and other tourist companies developing entertainment centers such as restaurants, spas and hotels in the pilot area buffer zones. There are also NGOs working in the pilot areas, areas such as FONAES and FIAES, whose degree of effectiveness, and related perception by local people, varies across communities. Lastly, government institutions include: (a) CNR, (b) Ministry of Tourism, (c) CONCULTURA, (d) Ministry of Culture, and (e) Ministry of Agriculture, among others.

Social Risks: The SA considered that the greatest social-related risks that project could face are:

1- *Institutional Weakness.* MARN is a new institution with very limited experience in demarcation and land rights allocation in protected areas.
2- *Weak Project Coordinating Unit.* Given the innovative nature of the project coupled with the limited capacity of MARN, the project needs a strong Project Coordinating Unit (PCU) familiar with World Bank and government procedures to ensure efficient and effective project execution. The project's regional offices will need highly capable social scientists to work with engineers, biologists and other in developing and implementing the conflict resolution processes, as well as the overall project. This PCU should be staffed with highly capable professionals (including social officers).
3- *Weak Project Execution Strategy.* Conflicts in the field (protected areas) will be aggravated if PCU and regional offices are weak and if the project's strategies are not adequate to deal with specific social realities.
4- *Lack of Trust.* Local people interviewed felt that some donors and government institutions have promised to implement many activities that have never been accomplished. To avoid the same mistake, the PCU must ensure that the project communication and dissemination campaign is properly done and effective. Messages have to be clear avoiding the creation of false expectation and conflicts.
5- *Inter-institutional Coordination.* MARN must closely coordinate with ISTA regarding pending property titles within pilot protected areas.
6- *Land Owners.* Specific mitigation and compensation measures must be developed to address land owners, as otherwise this group could be at risk of losing benefits through the project. Special attention should be paid so as to prevent land owners from losing, while those without clear tenure benefit from titles during the project demarcation process.

Table 1: Possible Negative Social Impacts and Conflict Resolution Mechanisms

Components and Activities	Potential Risk	Conflict Resolution Measures	Agency to Resolve Conflict	Process
1. Strengthening of NPAS				
Strategy to consolidate NPAS	• Perception of those with irregular but legal titles that strengthening the NPAS could result in jeopardy to private property • Sources of livelihood are	• Inform land owners of their property rights • Establish incentives to ensure that land owners cooperate with MARN	MARN-DGNP with community participation	MARN should ensure that: 1) community participatory methods and training re: land rights are clear and well-established to get land owners in board; 2) incentives are appropriate to promote cooperation and ensure that property rights are

	jeopardized			well protected
Strengthening of Legal Framework	• Use/property rights and livelihoods of those living and/or producing inside of PA or buffer zones are not respected • Project personnel lacks knowledge of new PA law, thus not protecting the rights of households living inside or near PA	• Ensure that Project personnel, especially at regional level, are well trained in legal matters	Project Regional and central PCU offices	MARN-DGPN and local communities in cooperation with project staff, ADESCOS (Guija) and Cooperatives (Jiquilisco Bay) should ensure that the communities living in and near the PA are informed about legal issues to understand their rights and responsibilities

Strengthening of Institutional Framework	• Lack of coordination between MARN central offices and PCU will lead to inconsistent actions at regional and local levels	• Build strong PCU with good communication channels between MARN central offices and regional and local personnel • PCU must include at least one social officer in each region	MARN	• Prioritize the establishment of PCU and regional offices. • PCU should be based on organizational chart with well-defined responsibilities • Design a deployment strategy to move personnel and begin operations quickly
Dissemination and Awareness Campaign	• Weak project dissemination • Weak explanation of project components and activities that leads to people's misunderstanding and creates false expectations and/or perceptions	• Ensure clear messages so that people understand their rights and responsibilities, as well as benefits of PA, and do not perceive their interest to be threatened • Campaign must target different actors: (a) people living and working inside PA, (b) people living within the PA but working in buffer zones, (c) people living in buffer zones but working in PA, (d) people living and working in buffer zones	PCU is responsible for ensuring the campaign addresses all issues, including project information as well as conflict resolution	Hire a competitive company to design and execute the campaign
2. Consolidation and Management of Pilot Protected Areas				
Characterization and Delimitation of Pilot Protected Areas	• Information management is inadequate • Miscommunication between project personnel and local community • Abuse of power • People actively oppose the project	• Project should hire a company and work with CNR to delimit: (a) PA area boundaries; (b) residential lots; (c) agricultural lots; and (d) use zones within the PA	PCU and COALs	• Ensure COALs are truly community-based committees, with participation of local community residents, NGOs, ADESCOS, project personnel and MARN, to ensure that people perceive as though they have a voice in the process and abuses will not take place • In case of conflict, the first recourse should be the COALs, which must resolve in 2 weeks and send the case to Environmental Police, which must in turn resolve it in 72 hours. If

				case is not resolved by COAL, escalate process; if not resolved by Police, send cases to court
Legalization and Regularization of Pilot PAs	• Project's strategy to offset impacts to different groups is not perceived as fair or adequate	• Ensure that people's rights are protected and their interests are taken into account in the design of project internal and external boundaries • Build a consensus among the residents so they support the rules and objectives of each use zone • Ensure that rules for legalization and regularization are clear, well-disseminated and adhered to	PCU, with support of contracted agencies (NGOs or other)	Maximize public participation in project implementation throughout life
Management Plans	• Management Plans not well-prepared or implemented	Ensure that MP clearly: • Identify important areas for conservation • Include activities to promote sustainable development of existing populations • Include community participation strategies according to different social realities • Are financially sustainable	UCP	See Process Framework
3. Project Management				
	• Lack of community involvement in M&E	• Ensure that social indicators and community participation indicators are included in M&E • Ensure that community members participate in collection of M&E data	UCP, NGOs, ADESCOs	

Consultation and Participation. It is highly recommended that the project set aside sufficient resources to strengthen the capacity of the rural, peri-urban and urban organizations that constitute natural allies, in order to secure their active involvement in Project's activities, particularly with ADESCOS.

Social Impact Indicators. The following are some of the most important indicators:

- Number of families with holdings and property title regularized by the Project (especially the 50% living in poverty) vs. number of families without title in areas that are adjudicable.
- Number of land rights conflicts resolved and accords signed among peasants and the System of Protected Areas.
- Number of land property disputes solved through alternative conflict resolution mechanisms vs number of dispute solved through judiciary means.
- Percentage of producers living under the poverty line making payments related to the cost of land and titles under the terms to be offered by the Project.
- Percentage of women heads of households receiving title.
- Number of poor landowners in the process of obtaining project grants.
- Number of households in the process of obtaining credit through using their legalized property as collateral.

Annex 10C: Process Framework for Mitigating Potential Livelihood Impacts
EL SALVADOR: Protected Areas Consolidation and Administration Project

1. **Project Summary.** The Project seeks to strengthen the national protected areas system through a strategy developed based on results from the consolidation of two priority protected areas. The principal activities of the project will include protected area policy reforms, as well as cadastre and registry, demarcation and legalization of two pilot protected areas, land conflict resolution, and development and implementation of management plans including regularization of eligible residents through the granting of authorizations for their land use and the issuance of appropriate legal instruments to recognize and allow their presence in two pilot protected areas: Jiquilisco Bay and Guija Lake.

2. **Potential Impacts on Livelihoods.** As the Project aims to protect important biodiversity in the pilot areas, the possibility remains that some Project activities to establish and consolidate protected areas might materially affect the current livelihoods of certain Salvadorans living within or adjacent to these pilot areas. This Process Framework outlines the key guiding principles, criteria and procedures which the Project will follow in such cases, to ensure that eligible, affected persons are assisted in their efforts to restore or improve their livelihoods in a manner which maintains the environmental sustainability and territorial integrity of the relevant protected areas. In all such cases, MARN as the executing agency would seek to address the livelihood issues of these persons in a manner which is fair, just, and in accordance with Salvadoran law, as well as consistent with the World Bank's Safeguard Policies on Involuntary Resettlement (OP 4.12), Indigenous Peoples (OD 4.20), Natural Habitats (OP 4.04) and Cultural Property (OPN 11.03).

3. **Key Principles:** The following principles will guide the project's consolidation of pilot protected areas and relations with communities living in core and buffer zones of those areas.

   - **Prevention of new settlements inside protected areas**: The Project will initiate actions to prevent new human settlements inside of protected areas. Furthermore, the Project will take care to ensure that activities supported through the project do not create incentives for the creation of new settlements in protected areas.

   - **Information and communication**: The Project will emphasize dissemination of clear, true and timely information to beneficiaries (including government and non-governmental organizations and the general public) as to the Project objectives, scope and benefits. The Project will strongly emphasize the provision of detailed information regarding the rights and obligations of the direct project beneficiaries, in a manner that is accessible and enables any questions, doubts or issues to be raised and resolved as quickly and efficiently as possible.

   - **Participation**: Broad public participation by those communities living in and near the protected areas will be strongly emphasized in the formulation, updating, execution, monitoring and evaluation of Management Plans

- **Biodiversity conservation and sustainable development**: Management plans will aim to harmonize the needs of local human populations with the preservation of natural resources.

- **Environmental education**. Environmental education will be strongly emphasized so as to promote awareness and sound behavior among the population of the importance of natural resource conservation.

- **Respect of legal land rights within protected areas**. Existing legal but irregular property titles within protected areas will be respected, as will results of "prueba testimonial" studies to demonstrate the acquired rights of individuals living within the protected areas.

- **No involuntary resettlement**. To effectively implement the project, no involuntary physical displacement or relocation of people would be required, and none will take place as a part of this project.

- **Voluntary resettlement**. In the case that human settlements in protected areas are not considered compatible with the conservation of important biodiversity, and innovative measures to mitigate the impacts of those settlements are not feasible, as a last recourse voluntary resettlement plans will be developed with the participation of would-be beneficiaries that would enable those persons to stay within the protected areas, respecting the uses and practices established in the Management Plans. Programs of voluntary resettlement, which would guarantee the reestablishment of existing socio-economic conditions, would be included within the Management Plans.

- **Transparency**. The dissemination and validation of management plan formulation, execution, monitoring and evaluation will be done in a fully transparent manner, such that all protected area community sectors are aware of the process. This process will be managed so as to guarantee that established criteria and procedures are applied transparently and equitably for all.

- **Co-responsibility**. Management plan development and implementation will include clearly defined roles and responsibilities for all institutions involved, including national and local governmental entities, social organizations and communities.

- **Respect for cultural identity of local communities and indigenous groups**. The development and implementation of management plans will respect the cultural identify of local communities and indigenous groups, in the case that they are found to live within the pilot areas.

4. **Eligibility Criteria.** The procedures outlined below will apply to Salvadorans who have occupied the land, or frequently utilized the natural resources, within a protected area prior to the official cut-off date. The project through MARN will specify the cut-off-date on a case-by-case basis for each protected area, after close consultation with local residents and other stakeholders. To assist in this process, project has incorporated within its design the functioning of local, community-based committees. As a general principle, the cut-off-date should be the date by which time essentially every head of household could reasonably be expected to know of the official existence and on-the-ground location of the protected area or could be a different date for each protected area based on its particular circumstances. In some cases, the cut-off-date might be the starting date of the demographic census that will normally

be part of the land tenure-socioeconomic study for establishing or consolidating a new protected area. In other cases, the cut-off date might be before the census, if the existing protected area's location was previously demarcated or otherwise adequately publicized to local residents and neighbors (such as through routine patrol or enforcement actions). Persons who illegally occupy or begin exploiting the natural resources of a protected area after the cut-off-date would not be eligible for any type of livelihood-related or other assistance (consistent with the spirit of the Bank's OP 4.12). Besides the cut-off date, other decisions concerning the eligibility of occupants or neighbors of protected areas for special consideration regarding livelihood issues would be consulted with stakeholders and recorded in the protected area Management Plan.

5. Procedures for Pilot Area Consolidation

Project Information Dissemination: Information regarding the project's goals, activities and advances will be disseminated at the local, regional and national levels in accordance with a communications strategy currently being finalized. This strategy is being developed to specifically target key stakeholders such as local communities and NGOs, as well as local, regional and national institutions and the general Salvadoran population.

a. ***Objectives:*** The objectives of the Project information dissemination campaign are the following:

- At the national and regional level: 1) disseminate the project objectives and reach; 2) generate a positive attitude toward the project; and 3) encourage public support for the project.
- At the local level, specifically for those communities living in protected areas and in the surrounding buffer zones, the above objectives as well as: 1) encourage support for the sustainable use of natural resources and conservation; 2) motivate local participation in the design and implementation of Management Plans; 3) disseminate the mechanisms for, and encourage participation in, local community-based committees (COALs); and 4) establish a two-way communications channel between communities and those responsible for project development and implementation.

b. ***Public Audiences:*** The communication strategy will emphasize the importance of regular public audiences through a variety of channels, in both the public and private sector, such as governmental institutions, NGOs, private businesses, schools, churches and civil society.

Technical Studies: The following technical studies will be done to document the status and location of natural and cultural resources within the pilot areas:

a. ***Rapid Ecological Assessments:*** Rapid Ecological Assessments (REAs) will be done in each pilot area to identify priority areas for conservation. The REAs will be done using field verification of existing information and aerial photography and/or satellite images. The results will be used as a basis for the design of Management Plans.

b. ***Socio-economic Diagnostics:*** These diagnostics will be done to characterize the existing occupations and uses of the pilot areas. Specifically, the diagnostics will: a) characterize existing land use and tenure; b) assess the local social dynamics, identifying key relationships between local actors, and the prevalent forms of social organization; c) characterize the local economic dynamics, identifying the role of actors and economic agents, and their relationships with the natural resources of the area; and, 4) identify historic and cultural values linking the identity of local populations with the natural resources of the pilot areas and their surroundings. Additionally, these diagnostics will assess the characteristics of the local populations, existing conflicts and infrastructure.

c. ***Development of Management Plans:*** The project will develop and implement management plans (MP) for the two pilot areas, Working heavily with local populations, these MPs will incorporate information from the Rapid Ecological Evaluations and Socio-economic Diagnostics, as well as existing management plans, to develop strategies that encourage medium- and long-term sustainable development of the pilot areas. Building upon these inputs, the MPs will include the definition the external pilot area boundaries (including both the core and buffer zones), as well as internal boundaries of differential use zones. These zones will be developed considering the location of existing human settlements and activities, the state of biodiversity conservation, and the compatibility of human uses with natural resource conservation. The allowable uses within internal zones will be defined, taking care to incorporate those populations whose existing uses and practices may be limited by these zones. In such a case, the MPs will include substitute activities for such persons. Draft MPs will be disseminated and consulted with local stakeholders so as to validate and revise them, where necessary. The final MPs will also be heavily disseminated so that stakeholders and local beneficiaries and knowledgeable about this key project activity.

d. ***Implementation of Management Plans:*** The project will ensure the full implementation of Management Plans in priority zones. For programs included within the MPs that require community participation, signed agreements will set forth the obligations and rights of each participant. Regular meetings will be held with local actors to update them on the MP's advances and results.

e. ***Conflict Resolution:*** the project may require the resolution of conflicts expected to include those: (i) among co-management entities and the local population; (ii) related to land tenure, especially regarding protected area and private parcel boundaries; (iii) regarding use of natural resources inside of pilot areas. Such conflicts will be addressed through a specific alternative resolution mechanism developed through the project. This mechanism is expected to function as follows. Initially, conflicts will be addressed locally, first through the project's regional PCU that investigate the complaint, and attempt to resolve it through mediation, then through the COALs for each pilot area, each of which includes representatives from MARN, local communities, and NGOs and ADESCOs working in the protected area. If the conflict cannot be resolved at this level, it will be escalated to MARN's Natural Patrimony Department. If still not resolved, the conflict will be addressed at the strategic level through CONANP (the National Protected Areas Council), which includes the Minister of MARN, and representatives of the Ministries of National Defense, Education, and Agriculture, National Civil Police, Attorney General for Human Rights, universities, NGOs, and communities living in protected area buffer zones. In order to trigger this process, conflicts should be addressed to MARN's regional PCU or MARN's Inspectorate located in San Salvador.

f. ***Monitoring and Evaluation:*** Project monitoring and evaluation (M&E) will take place at the pilot area and project level. At the pilot area level, M&E will follow the method set forth in the PROARCA manual *"Medición de la efectividad de manejo de áreas protegidas"* adapted by MARN for use in El Salvador. Monitoring of biodiversity parameters will follow norms established in the *"Manual para la evaluación y monitoreo de la integridad ecológica en Áreas Protegidas"* (PROARCA, 2004), as well as those set forth in the *"Manual de Inventarios y Monitoreo"* (MARN, 2003), and *"Modelo de seguimiento ecológico en espacios Naturales Protegidas"* (Atauri y De Lucio, 2002). At the Project-level, M&E will include those indicators established in project documents, such as the environmental assessments done for project preparation (MARN y CNR, 2005a; MARN y CNR, 2005b).

6. **Institutional Arrangements:** Implementation of this Process Framework is the responsibility of MARN. Supporting MARN will be a number of actors, such as ISTA, CNR, municipalities, NGOs, ADESCOs, COALs, and the private sector. Specifically, ISTA, CNR and the municipalities will provide MARN with information regarding those pilot area residents that have registered property claims or rights. Technical studies, such as the REA, Socio-economic Diagnostics, and MPs will be overseen by MARN, and carried out by private sector firms and/or NGOs (or other competent actors). Implementation of management plans will be the responsibility of those entities contracted by MARN. Conflict resolution will be the responsibility of MARN, who will preliminarily delegate such activities to COALs.

7. **Financing:** The activities mentioned above are included in the scope and costs of the project.

Annex 11: Project Preparation and Supervision

EL SALVADOR: Protected Areas Consolidation and Administration Project

	Planned	Actual
PCN review		Sept. 7, 2004
Initial PID to PIC		Nov. 18, 2004
Initial ISDS to PIC		Nov. 18, 2004
Appraisal		September 22, 2005
Negotiations		October 5-6, 2005
Board/RVP approval	November 29, 2005	
Planned date of effectiveness	Jan. 31, 2006	
Planned date of midterm review	January 5, 2009	
Planned closing date	June 30, 2011	

Key institutions responsible for preparation of the project:

CNR, MARN

Bank staff and consultants who worked on the project included:

Name	Title	Unit
Ann Jeannette Glauber	Co-TTL/Environmental Officer	LCSEN
Frederic de Dinechin	Co-TTL/Senior Land Officer	LCSER
George Ledec	Lead Ecologist	LCSEN
Anna Corsi	Operations Analyst	ESDVP
Elena Correa	Senior Social Specialist	LCSEO
Jorge Villegas	Consultant	LCSEN
Luis Prada	Procurement Specialist	LCOPR
Fabienne Mroczka	Financial Management Specialist	LCOAA
Joseph Formosa	Loan Officer	LOAG1
Monica Lehnhoff	Procurement Analyst	LCOPR
Teresa Roncal	Operations Specialist	LCSER
Fabiola Altimari	Country Lawyer	LEGLA
Selpha Nyairo	Legal Associate	LEGLA
Ketty Morales	Project Assistant	LCSER
Mary Lisbeth Gonzalez	Social Consultant	
Roger Pipe	Economic Consultant	
Simon Milward	Junior Professional Associate	LCSEN
Mark Zimsky	Senior Biodiversity Specialist	GEF

Bank funds expended to date on project preparation:

1. Bank resources: $52,200
2. Trust funds: $350,000
3. Total: $402,200

Estimated Approval and Supervision costs:

1. Remaining costs to approval: $30,000
2. Estimated annual supervision cost: $80,000

Annex 12: Documents in the Project File

EL SALVADOR: Protected Areas Consolidation and Administration Project

1. Government's project document
2. Detailed Project cost tables
3. Procurement Plan
4. Participatory Social Analysis
5. Process Framework
6. Economic-Financial Analysis
7. Analysis of Protected Areas System (NPAS)
8. Environmental Assessment of Bahía de Jiquilisco
9. Environmental Assessment of Lago Guija Complex
10. Environmental procedures for management plans in pilot areas
11. Institutional Analysis
12. Legal Analysis
13. Monitoring and Evaluation plan
14. Protected Areas Tracking Tool for Bahía de Jiquilisco Conservation Area and Lago Guija-San Diego- La Barra Complex
15. Summary of public consultations
16. Absorption plan for project staff

Annex 13: Statement of Loans and Credits

EL SALVADOR: National Environmental Management Project

Project ID	FY	Purpose	Original Amount in US$ Millions				Cancel.	Undisb.	Difference between expected and actual disbursements	
			IBRD	IDA	SF	GEF			Orig.	Frm. Rev'd
P064919	2003	SV JUDICIAL MODERNIZATION PROJECT	18.20	0.00	0.00	0.00	0.00	18.02	6.58	0.00
P067986	2002	SV-EARTQUAKE EMERGENCY REC. & HEALTH SER	142.60	0.00	0.00	0.00	0.00	139.86	-2.74	0.00
P050612	1998	SV EDUCATION REFORM	88.00	0.00	0.00	0.00	0.00	14.04	14.04	14.04
P041680	1998	SV SECONDARY EDUCATION	58.00	0.00	0.00	0.00	0.00	12.47	12.47	0.00
P007164	1997	SV PUBLIC SECTOR MODERN	24.00	0.00	0.00	0.00	0.00	7.62	7.62	0.00
P007174	1996	SV LAND ADMINISTRATION	40.20	0.00	0.00	0.00	0.00	3.88	3.88	-0.96
		Total:	360.80	0.00	0.00	0.00	0.00	195.89	41.85	13.08

EL SALVADOR
STATEMENT OF IFC's
Held and Disbursed Portfolio
In Millions of US Dollars

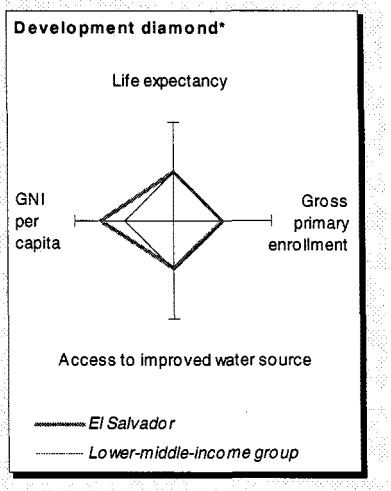
FY Approval	Company	Committed IFC				Disbursed IFC			
		Loan	Equity	Quasi	Partic.	Loan	Equito	Quasi	Partic.
	AFP Crecer	0.00	1.20	0.00	0.00	0.00	0.78	0.00	0.00
2001	CAESS/EEO	43.44	0.00	0.00	70.90	30.02	0.00	0.00	48.54
2002	CALPIA	0.00	2.00	0.00	0.00	0.00	1.99	0.00	0.00
1997/00	CESSA	0.00	0.37	0.00	0.00	0.00	0.37	0.00	0.00
1998/03	CUSCATLAN-ES	0.00	0.00	15.00	0.00	0.00	0.00	15.00	0.00
2004	Metrocentro	25.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00
1998	SEF Baterias	1.29	0.00	0.00	0.00	1.29	0.00	0.00	0.00
1999	SEF IMACASA	0.00	0.20	0.00	0.00	0.00	0.20	0.00	0.00
	Total portfolio:	69.73	3.77	15.00	70.90	41.31	3.34	15.00	48.54

FY Approval	Company	Approvals Pending Commitment			
		Loan	Equity	Quasi	Partic.
	Total pending commitment:	0.00	0.00	0.00	0.00

Annex 14: Country at a Glance

EL SALVADOR: National Environmental Management Project

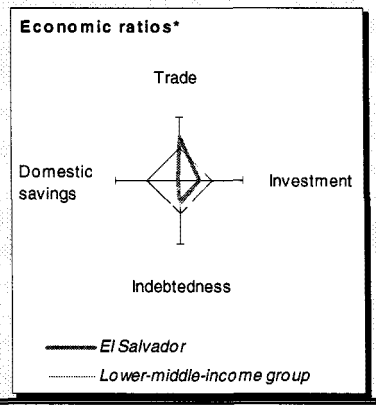
POVERTY and SOCIAL	El Salvador	Latin America & Carib.	Lower-middle-income
2002			
Population, mid-year *(millions)*	6.5	527	2,411
GNI per capita *(Atlas method, US$)*	2,080	3,280	1,390
GNI *(Atlas method, US$ billions)*	13.6	1,727	3,352
Average annual growth, 1996-02			
Population *(%)*	2.0	1.5	1.0
Labor force *(%)*	3.2	2.2	1.2
Most recent estimate (latest year available, 1996-02)			
Poverty *(% of population below national poverty line)*	..	..	..
Urban population *(% of total population)*	62	76	49
Life expectancy at birth *(years)*	70	71	69
Infant mortality *(per 1,000 live births)*	31	27	30
Child malnutrition *(% of children under 5)*	12	9	11
Access to an improved water source *(% of population)*	77	86	81
Illiteracy *(% of population age 15+)*	20	11	13
Gross primary enrollment *(% of school-age population)*	109	130	111
Male	112	131	111
Female	107	128	110



KEY ECONOMIC RATIOS and LONG-TERM TRENDS

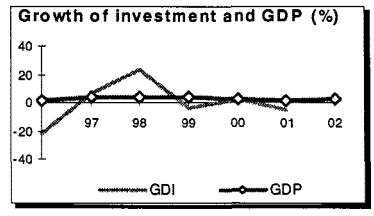
	1982	1992	2001	2002
GDP *(US$ billions)*	3.4	6.0	13.7	14.3
Gross domestic investment/GDP	13.2	18.5	16.0	..
Exports of goods and services/GDP	22.8	16.1	28.9	..
Gross domestic savings/GDP	7.5	2.2	2.0	..
Gross national savings/GDP	6.7	13.1	14.4	..
Current account balance/GDP	-6.9	-5.6	-1.5	..
Interest payments/GDP	1.3	1.3	1.2	1.4
Total debt/GDP	42.4	38.0	34.1	..
Total debt service/exports	13.6	12.5	6.4	..
Present value of debt/GDP	..	..	33.4	..
Present value of debt/exports	..	..	76.4	..

	1982-92	1992-02	2001	2002	2002-06
(average annual growth)					
GDP	2.1	3.8	1.8	2.3	3.0
GDP per capita	0.8	1.6	-0.1	0.4	1.1

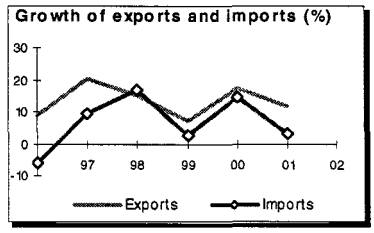


STRUCTURE of the ECONOMY

	1982	1992	2001	2002
(% of GDP)				
Agriculture	32.6	14.2	9.5	..
Industry	22.2	29.6	29.7	..
Manufacturing	16.6	23.8	23.0	..
Services	45.2	56.2	60.8	..
Private consumption	76.7	88.4	87.9	..
General government consumption	15.8	9.4	10.0	..
Imports of goods and services	28.5	32.4	42.9	..

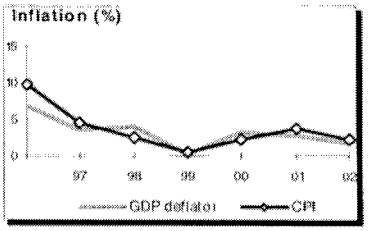


	1982-92	1992-02	2001	2002
(average annual growth)				
Agriculture	0.6	0.8	-2.1	..
Industry	2.5	4.9	5.0	..
Manufacturing	2.6	5.0	4.2	..
Services	2.5	4.3	1.2	..
Private consumption	4.2	4.3	0.2	..
General government consumption	-2.9	2.7	1.1	..
Gross domestic investment	6.9	3.4	-5.3	..
Imports of goods and services	6.0	9.8	3.3	..



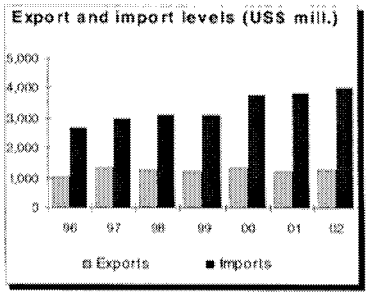
PRICES and GOVERNMENT FINANCE

	1982	1992	2001	2002
Domestic prices				
(% change)				
Consumer prices	11.9	11.2	3.8	2.2
Implicit GDP deflator	9.3	8.8	2.7	1.7
Government finance				
(% of GDP, includes current grants)				
Current revenue	..	..	11.6	..
Current budget balance	..	..	0.1	..
Overall surplus/deficit	..	..	-4.0	..



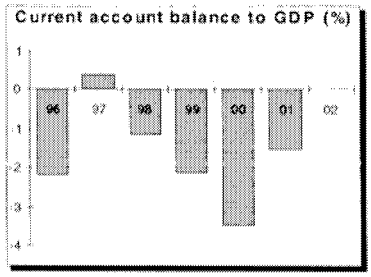
TRADE

	1982	1992	2001	2002
(US$ millions)				
Total exports (fob)	.	597	1,249	1,304
Coffee	..	151	115	..
Cotton	..	45	70	.
Manufactures	..	380	1,042	1,046
Total imports (cif)	..	1,899	3,866	4,049
Food	.	417	1,098	..
Fuel and energy	..	128	169	..
Capital goods	.	431	900	1,003
Export price index *(1995=100)*	.	65	57	58
Import price index *(1995=100)*	.	89	82	82
Terms of trade *(1995=100)*	..	74	70	70



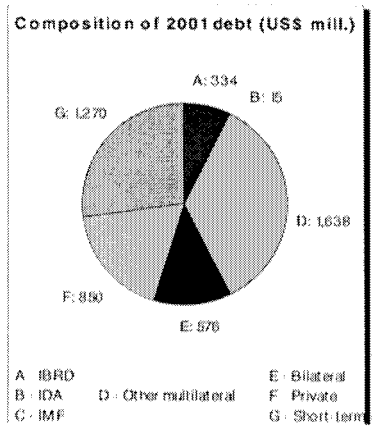
BALANCE of PAYMENTS

	1982	1992	2001	2002
(US$ millions)				
Exports of goods and services	851	1,137	3,977	.
Imports of goods and services	1,059	2,079	5,892	..
Resource balance	-208	-942	-1,915	..
Net income	-19	-97	-264	-311
Net current transfers	94	708	1,968	2,056
Current account balance	-233	-331	-211	..
Financing items (net)	309	391	392	..
Changes in net reserves	-76	-60	-181	48
Memo:				
Reserves including gold *(US$ millions)*	..	501	1,741	1,890
Conversion rate *(DEC, local/US$)*	2.6	8.4	8.8	8.8



EXTERNAL DEBT and RESOURCE FLOWS

	1982	1992	2001	2002
(US$ millions)				
Total debt outstanding and disbursed	1,443	2,263	4,683	..
IBRD	105	182	334	.
IDA	27	22	15	.
Total debt service	129	234	384	..
IBRD	12	27	48	..
IDA	1	1	1	..
Composition of net resource flows				
Official grants	117	223	147	..
Official creditors	193	112	160	..
Private creditors	56	-15	406	.
Foreign direct investment	-1	15	268	..
Portfolio equity	0	0	0	.
World Bank program				
Commitments	0	0	0	..
Disbursements	11	11	50	.
Principal repayments	5	13	25	..



Annex 15: Incremental Cost Analysis

EL SALVADOR: Protected Areas Consolidation and Administration

OVERVIEW

The **development objective** of the partially blended Second Land Administration Project is to improve land tenure security and land transactions by providing efficient, equitable, and accessible land administration services, thereby facilitating better land-related investments and more productive and environmentally sustainable land use.

The **global objective** of the proposed project is to conserve El Salvador's globally significant biodiversity by strengthening the national protected areas system and consolidating two priority protected areas to have a strengthened national protected areas system in place, through a strategy based on results from the consolidation of two priority protected areas.

The global objective will be accomplished by the following components:

(i) **Strengthening the National Protected Areas Strategy (NPAS)**—improving the existing strategy, institutional framework and necessary legal instruments for the national protected areas system based on broad stakeholder participation, and disseminating lessons learned through the process;

(ii) **Consolidation and management of pilot protected areas**—developing and implementing strategies for consolidating two pilot protected areas—Bahía de Jiquilisco Conservation Area and Lago Guija-San Diego-La Barra Protected Area Complex—including management plans; and

(iii) **Project Administration**—improving capacity to manage and supervise, and monitor the protected area system.

The **principal project outcomes** will be:

(i) Updated strategy and action plan for consolidating national protected areas system developed;

(ii) Two pilot protected areas consolidated and effectively managed (Tracking Tool score of at least 40 for the 35,600 ha in Bahía de Jiquilisco and 1,917 ha in Lago Guija Complex San Diego-La Barra); and

(iii) Biodiversity benefits established in at least 37,000 ha (in Bahía de Jiquilisco PA at least 35,600 ha of mangrove or associated humid forest coverage that will have zero deforestation compared to baseline; in Lago Guija Complex San Diego-La Barra at least 1,400 ha of dry tropical forest or associated riparian forest that will have zero deforestation compared to baseline).

The GEF Alternative will achieve these objectives at a total **incremental cost** of US $10 million (M), 5.0 M of which is being requested from the GEF to directly fund global benefits and 5.0 M of which would come from the IBRD loan for the LAP II project which would fund necessary data-collection activities and investments in methodologies, as well as producing associated domestic benefits that would be essential in order to make the global benefits sustainable.

Context and Broad Development Goals

El Salvador supports an impressive diversity of species, comprising 1,477 species of vertebrates (27 percent of which are threatened, or severely threatened, with extinction), including 510 bird species (of which 17 of the 23 birds endemic to northern Central America are a part), an estimated 7,000 native plant species, including more than 700 species of trees, 140 species of reptiles and amphibians, and 800 species of butterflies– all in an area the size of Massachusetts. This high biodiversity stems from the country's unique setting, being highly volcanic and isolated from Central America's Atlantic moist forests. Yet, despite the importance of these resources, El Salvador's protected area system only covers 755 km^2, representing only 4.6 percent of the total country.[40,41]

The El Salvadoran authorities are becoming increasingly aware of both the importance of indigenous biodiversity and the significant threats to its sustainable management, which include a variety of unsustainable land and natural resource practices that are increasingly impacting all ecosystems and have been exacerbated by the intense population growth that has made the country the most densely populated area in Latin America. These include: conversion of wetlands and other critical natural habitats to agriculture or other land development; interference with the hydrological regime of wetlands for agriculture, municipal and industrial use of water; pollution; overgrazing and other unsustainable agricultural practices; hunting and unsustainable management of marine resources; and encroachment into protected areas.

El Salvador's National Protected Areas System (NPAS) aims to protect these remaining resources, but has struggled due to a variety of constraints, most importantly the complicated legal and institutional frameworks coupled with severely constrained institutional capacity for protected area management, lack of a tested model to consolidate the NPAS or individual protected areas, and unclear inadequate land tenure. Additionally, the biodiversity harbored within the NPAS is threatened by habitat transformation, fragmentation and degradation; encroachments into protected areas are a serious problem for which the government does not have a viable strategy. These encroachments result in significant habitat destruction and deterioration, through the conversion of forests, pollution, and overexploitation of resources, all of which stem in part from a lack of environmental awareness.

However, a series of events have culminated to provide an important enabling environment for addressing the threats to the globally significant biodiversity protected within the NPAS. First, the protected areas law, on hold for 25 years, was passed in February 2005. This law provides MARN with the legal framework necessary to oversee these lands, as well as significant political capital. Secondly, the IBRD-loan financed Land Administration Project (LAP) is mid-way through the completion of the cadastre and registry of all lands in the country—which has been deemed a priority effort for the new government. During the preparation of the second phase of the IBRD-funded project (which will begin disbursements in January 2006), the GOES identified the importance of resolving tenure conflicts in protected area lands, without which the LAP's efforts to address all of El Salvador's lands will fall short. The LAP's implementing agency, CNR, has taken significant efforts to involve MARN in that project, including a component for demarcation of three protected areas. While the participation of MARN in the LAP has historically been limited by MARN's capacity, by developing a partially blended operation, GEF funds

[40] According to the *Ecosystem Profile: Southern Region, Mesoamerica (*Critical Ecosystem Partnership Fund) this is significantly behind Costa Rica (with 24 percent of the land protected), Guatemala (23 percent), Nicaragua (17 percent), Panama (17 percent), Belize (10 percent), and Honduras (8 percent).

[41] More than 1.6 percent of El Salvador's land was officially designated as protected area in the newly approved protected areas law (*Ley de Áreas Protegidas,* February 2005). These lands include all mangroves in the country, which were considered national forests outside of the protected areas system prior to the passage of the law.

will catalyze the consolidation of the national protected areas system by exploiting the significant opportunity presented by the LAP.

The immediate development goals of the new Government of El Salvador administration include accelerating broad-based equitable growth and increasing employment, improving equity by building human capital and expanding access to basic infrastructure, assets, and markets, and enhancing security and reducing vulnerability. In response, the World Bank's new business compact with the Government of El Salvador focuses on priority areas consistent with the Government's reform agenda, including: (a) consolidating the regulatory and legal framework for the environment sector, supporting implementation of measures aimed at watershed recovery, reforestation, management of ecosystems, and biodiversity conservation; and (b) supporting activities to promote sustainable development, as vulnerability to natural disasters is closely related to rural poverty and that low productivity and high population pressures have depleted natural resources in many rural areas, caused soil erosion and land degradation, led to loss of habitat, biodiversity, and natural forests, and exacerbated problems in water management and conservation.

The GOES has also set forth priorities for biodiversity in the 2002 National Strategy on Biological Diversity (NBS; GEF/UNDP/MARN). The NBS establishes as priority actions the implementation of a biodiversity information system and the consolidation of the national protected areas system; the redefinition of institutional responsibilities for conservation activities; and the strengthening of national, institutional and human resource capacities in biodiversity conservation.

Baseline Scenario

Baseline scenarios for the three objectives of the project are set out below. The table in Attachment 1 below gives further details.

1: National Protected Areas Strategy: The following ongoing projects provide baseline support for the NPAS:

- The Mesoamerican Biological Corridor project (UNDP/GEF), which is improving management capacity for key protected areas;
- Further UNDP/GEF ventures that have supported the development of the National Biodiversity Strategy and improved capacity for national biodiversity management;
- The National Land Use Plan (Funded by the Salvadoran Fund for Preinvestment Studies; FOSEP), which established 15 Conservation Areas for consolidating protected areas management;
- The FORGAES project (EU), which has strengthened natural resource management;
- The FIAES project (funded through the US Debt Swap), which has supported small-scale sustainable development for conservation;
- Participation in Environmental Management project (USAID), which has improved civil society participation in natural resource management;
- Several projects supported by the Spanish Government (AECI), including supporting the management of Los Volcanes National Park, and the Integrated Management of Mangroves and Coastal Wetlands (including a national wetlands inventory); and
- Preparatory studies funded by the GEF/IBRD-financed Environmental Services Project, which provide detailed descriptions of land uses and incentives in and around protected areas.

The current costs of the baseline activities that provide support for this component are US$19.3 million. On their own, these activities will result in a certain reduction of pressure on the protected areas but

further activities are essential if adequate protection is to be given that is appropriate for El Salvador to play its role within the Meso-American Biological Corridor. Fortunately, however, there is significant *potential* for conserving global biodiversity as the baseline establishes an enabling environment for further activities to provide these global benefits. In particular, the geo-spatial data provided by the baseline and the strengthening of the institutional framework and management efforts in effect lays the groundwork for the current project to achieve global benefits through resulting in long-term conservation and sustainable use of globally and regionally significant biodiversity.

2: Consolidation and Management of Two Pilot Areas (Bahía de Jiquilisco and Lago Guija San Diego-La Barra): The following ongoing activities in the pilot protected areas contribute to the baseline:

- Management Plans, which exist for *part* of both pilot protected areas (Funded by AECI in Bahía de Jiqulisco and CATIE in San Diego-La Barra);
- Ramsar proposals for Bahía de Jiquilisco (AECI) and Guija San Diego-La Barra (IUCN), grants to local NGOs at both sites (CODEPA, UNES, CRD, MSM, Asociación Mangle and the local ADESCOs in Bahía de Jiquilisco—and CEPRODE in San Diego-La Barra) provided by FIAES and IUCN;
- Sustainable Development Program for the lower Lempa River, which includes the Bahía de Jiquilisco (funded by IDB); and
- Lessons learned from the GEF-financed Promotion of Biodiversity within Coffee Landscapes, which will likely be used to provide alternative income generation sources in the pilot areas.

The current costs of these baseline activities are US$ 2.0 million. On their own, these activities will result in protection of the biodiversity within these areas. However, this will fall far short of the potential protection that could be provided through comprehensive conservation activities in these areas combined with sympathetic management of the surrounding area and management of an entire national protected area system functioning as part of the Meso-American biological corridor.

3: Project Management and Monitoring: The proposed project relies heavily on monitoring and evaluation (M&E) to capture lessons learned, which will in turn be used to adapt project management and design. The proposed project's M&E system builds directly upon the system built for the LAP II, which contributes to the baseline for these activities. Additionally, the substantial investments in technical and institutional strengthening for LAP project management, in part contribute to the baseline as the proposed project will capitalize upon this installed capacity to handle most project administration activities (for example, procurement, financial management).

The estimated cost of the baseline is US$ 0.6 million. Future investment would build on the lessons learned and best-practice generated by the LAP II project and would be essential for producing a consolidated protected area system that would adequately conserve the globally significant biodiversity.

Overall Baseline Costs and Benefits

Baseline Costs: Implemention of the aforementioned programs/projects alone will contribute—in a limited way—to the project development objective. The total estimated costs of baseline activities amount to US$21.9 M and sources of assistance vary, consisting of Government revenues and funds from bi- and multilateral organizations. The Government/public contribution to the baseline is an estimated 29 percent. The remaining estimated 71 percent of the baseline costs is financed by external donors (AECI, IUCN,

EU, CATIE, EU and IDB) and the other GEF-funded projects, mentioned above, that help to produce the limited baseline global benefits that are detailed below.

Baseline Benefits: Activities under the Baseline Scenario will result in limited protection of biodiversity, increased national environmental benefits related to small-scale conservation, forest and watershed management, increased participation in conservation, and slight improvements in protecting coastal areas. In addition, forest and soil conservation measures should marginally increase carbon storage in El Salvador's forested areas. Moreover, land regularization activities should somewhat decrease pressure on protected areas, through the improved tenure security in nearby areas (although no parallel regularization or detailed information collection will take place in protected areas). Likewise, some progress will be made in achieving broader development goals related to strengthening environmental management and improved social and rural development. Training that has been provided by the GOES has been focusing on the importance of land rights/tenure security, but does not contribute to an improved understanding of the importance of conservation as a global or regional environmental issue. The baseline would include some introductory actions aimed at biodiversity conservation, such as: *partial* on-the-ground supervision and management of the two pilot protected areas, but this is very restricted in scope and highly dependent on outside funding sources; preliminary development of regulations for the new protected areas law, utilizing inadequate resources and based on highly limited experience;

Under present circumstances, any action toward consolidating the protected areas system (or individual protected areas) would have less than optimal outcomes. Implementing a strategy for consolidating the system requires appropriate policies, techniques and methodologies applicable to: (a) strategies seeking support from rural landowners/residents as regards implementation of biodiversity-friendly land uses, including developing effective incentives; (b) identifying additional significant and sustainable sources for system financing; and (c) building capacity and clarifying roles and responsibilities for agencies charged with managing (or contributing to the management of) protected areas; and (d) gaining broad consensus as to the importance of and objectives for the NPAS.

GEF Alternative:

Scope: The GEF Alternative will support the conservation and sustainable use of regionally and globally significant biodiversity in El Salvador through the rationalization and consolidation of the protected areas system. The project would finance the incremental costs through a US$5.0M GEF grant and US$5.0M provided by the IBRD LAP II Project. Specifically this money would be used to:

(i) Improve the strategy, institutional framework and necessary legal instruments for the national protected areas system based on broad stakeholder participation, and disseminating lessons learned;
(ii) Develop and implement strategies for consolidating two pilot protected areas—Bahía de Jiquilisco Conservation Area and Lago Guija-San Diego-La Barra Protected Area Complex—including management plans; and
(iii) Improve capacity to manage, supervise and monitoring the protected areas system.

Costs: The total cost of the GEF Alternative, combined with the Baseline is estimated to be US$ 31.9M which includes a GEF grant of US$ 5.0M and US$ 5.0M from the IBRD-loan financed LAP II project.

This LAP II project is the partially blended Second Land Administration Project (IBRD loan) for which the GOES is borrowing US$ 40.2M, to fund national environmental benefits including:

(i) Improved prioritization of protected areas interventions;
(ii) Reduced local poverty through the adoption of sustainable development practices and improved tenure security in small rural properties, leading to increased soil productivity and new possibilities to obtain financial resources derived from environmental services rendered by target priority pilot protected areas;
(iii) Better quality and quantity of water for local consumption through improved natural resource management, and the resulting decrease in erosion rates and sediment flows into water bodies; and
(iv) Increased capacity for protected area management, including improved outreach and involvement of civil society and the private sector in protected area management contributing to the improved quality of life for El Salvadorans.

This GEF project will influence these IBRD funds to demarcate three new protected areas within the updated and linked national land cadastre and registry and to obtain high-quality geospatial and land tenure data for the two pilot protected areas and their surroundings, as well as investments in methodologies (including legal tools) for land regularization. This will both help the LAP II project to achieve local benefits as well as enabling the GEF project to pursue its objectives. In addition, the local benefits generated by the IBRD project will improve the sustainability of the global benefits produced by the GEF project.

This breaks down into the three project components as shown in the table in Attachment 1:

Benefits: Under the GEF Alternative, El Salvador would have in place a strengthened protected areas system, built on experience gained through consolidation of two priority protected areas. This would contribute to the conservation and sustainable use of regionally and globally significant biodiversity in El Salvador through the rationalization and consolidation of the protected area system. Additionally, it would assist the country in developing adequate tools and mechanisms to facilitate future large-scale consolidation of the overall protected area system, while providing additional opportunities for improved livelihoods and economic well-being of rural communities, which could in turn be used in other countries in the region undergoing or considering land regularization programs.[42]

Global benefits would include:

(i) Long-term conservation and sustainable utilization of globally and regionally significant biodiversity, through strengthened on-site management;
(ii) Development of viable approaches to sustainable natural resource use in protected areas;
(iii) Enhanced ecosystem integrity as a consequence of the adoption of improved natural resource management practices, in both productive landscapes and priority ecosystems (mangroves, humid tropical forest, tropical freshwater lakes and wetlands, and tropical dry forest), which results in decreased soil erosion, increased carbon sequestration, and improved conservation and sustainable use of biodiversity;
(iv) Enhanced ecosystem integrity through implementation of corridors between isolated protected areas of global biodiversity importance;
(v) Restoration of globally important ecosystems, including through active reforestation programs and decreased pressure on those systems, with positive impacts on conservation of aquatic and terrestrial biodiversity; and

[42] The IBRD is currently supporting ten similar projects in Latin America, with another ten under preparation. In addition to El Salvador, these include projects in other Central American countries such as Guatemala, Nicaragua, Honduras, and Panama.

(vi) An established protected area monitoring system, based on the updated protected area registry and cadastre, incorporating global concerns to the baseline M&E activities.

Sustainability would be ensured in part through the IBRD-financed components that would ensure local benefits arose from the conservation of globally significant biodiversity, as well as through the GEF-financed activities including a more rational, focused protected area system supported by a strong institutional and legal framework.

Incremental Costs

The incremental cost—the difference between the Baseline Scenario (US$21.9M) and the GEF Alternative (US$31.9M), is US$10M which would be financed partly by a US$5.0M grant from the GEF which would fund interventions to conserve the globally significant biodiversity and partly through US$5.0M from the LAP II IBRD loan which would fund activities such as demarcation and data collection and ensuring that local benefits arose from this conservation. These are essential to the project's success as they provide the necessary background data and contribute to ensuring the sustainability of the project. The matrix below summarizes the baseline and incremental expenditures during the five-year project period.

Attachment 1: Incremental Cost Matrix

	Cost Category	US$ Million	Domestic Benefit	Global Benefit
Component 1: Strengthening of NPAS				
	Baseline	US$19.3M	Slight decrease in pressure on protected areas through land regularization activities in neighboring lands Preliminary development of regulations for the new protected areas law, utilizing inadequate resources and based on highly limited experience Updated large-scale geospatial data used for non-conservation purposes and omitting protected areas from detailed cadastre and registry activities Improved policy, institutional framework and tools to strengthen protected areas management Improved prioritization of management efforts for protected areas system Improved long-term financial planning ability for protected area system management; Improved institutional capacity to enforce protected areas legislation Improved public participation in natural resource management Improved understanding of the importance of conservation to long-term economic growth.	Limited protection of globally significant local biodiversity

	With GEF Alternative	US$22.2M (Additional 0.9M IBRD 2.0M GEF)	Some economic benefits to local communities (funded with IBRD money) that are essential for them to engage positively in conservation and to ensure the sustainability of the global benefits Demarcation of three new protected areas (bringing the total number of demarcated protected areas within El Salvador to six out of 118) Delimitation of all protected areas and mangroves in country	Long-term conservation and sustainable utilization of globally and regionally significant biodiversity Development of viable approaches to sustainable natural resource use in protected areas
	Incremental	***US$2.9M***		
Comp 2: Consolidation and Management of Pilot Protected Areas				
	Baseline	US$2.0M	Limited natural resource management of two pilot areas Improved tenure security for some people living on private lands adjacent to pilot areas	Limited protection of globally significant local biodiversity
	With GEF Alternative	US$8.2M (Additional 3.9M IBRD 2.3M GEF)	Improved natural resource management of two pilot areas, including alternative income generation activities, leading to decreased local poverty Improved tenure security for eligible people living on state lands within protected areas and for some people living on private lands adjacent to pilot areas Some benefits to local communities that are essential for them to engage positively in conservation and to ensure the sustainability of the global benefits.	Development of viable approaches to sustainable natural resource use in protected areas Enhanced ecosystem integrity as a consequence of the adoption of improved natural resource management practices in priority ecosystems Enhanced ecosystem integrity through corridor implementation between isolated protected areas of global biodiversity importance Restoration of globally important ecosystem, with positive impacts on conservation of aquatic and terrestrial biodiversity
	Incremental	***US$6.2M***		
Comp 3: Project Administration and Monitoring				
	Baseline	US$0.6M	Improved project and management skills at national and protected area levels	Limited protection of globally significant local biodiversity
	With GEF	US$1.5M (Additional 0.2M IBRD 0.7M GEF)	Improved institutional capacity to monitor protected areas Monitoring and evaluation system in place and operational	Increased capacity for consolidating protected area system Monitoring and evaluation system incorporating global concerns to the baseline M&E activities Improved outreach and involvement of civil society and the private sector in natural resources monitoring and management
	Incremental	US$0.9M		
	Total Baseline: US$21.9M			
	Total GEF Alternative: US$31.9M (5.0M GEF grant, 5.0M from IBRD-loan financed LAP II project)			
	Total Incremental Costs: US$10M			

Annex 16: Pilot Site Selection

EL SALVADOR: Protected Areas Consolidation and Administration Project

Background

The Protected Areas System of El Salvador (NPAS) comprises 118 Natural Protected Areas (*Áreas Naturales Protegidas;* NPAs) and all mangroves in the country. As most NPAs included in the System are small and isolated, the Ministry of Environment and Natural Resources (MARN) has proposed the creation of 15 Conservation Areas (*Áreas de Conservación*), comprising most Natural Protected Areas (NPA) and all mangroves, along with buffer zones linking those areas. The goal of this proposed project is to strengthen the NPAS by developing a strategy to consolidate Conservation Areas. Toward this aim, the project will consolidate and manage two pilot areas (consisting of one full Conservation Area, and one portion of a Conservation Area. The lessons learned through this effort can be used throughout the NPAS to create a comprehensive and robust national protected area system.

Methodology for Choosing Pilot Sites:

The pilot areas were chosen through a two-step process.

Step one was done during the prioritization of Conservation Areas, as part of the development of the National Protected Areas Strategy (*Diagnóstico y priorización de Áreas Naturales Protegidas y Corredor Biológico Nacional;* 2005). This effort, undertaken in 2004, was led by MARN, and convoked 14 experts in protected areas management, representing government institutions, NGOs, community associations, and academics. The goal of this prioritization was to be able to use the list and information about the parks to target and optimize future management. The specific criteria used are described below.

Step two was done in February 2005 during the preparation of the proposed project. Building upon the results of step one, MARN protected area experts developed additional criteria important to the project objective which required, in particular, that the areas be *representative of other areas* in their management requirements, *cover a comprehensive set of management conditions* in order that the suggestions produced would be transferable and *contain significant threats to their future conservation.* The specific criteria are described below.

Criteria for Choosing Pilot Sites

The specific criteria used during the two-stage pilot site selection included:

Step One:

- State of conservation of the area;
- Legal and land tenure status;
- Representativeness of the ecosystems as typical of El Salvador;
- Degree of community participation in the area's management;
- Biodiversity and presence of endangered or threatened species;
- Ecosystem goods and services that the area provides; and
- Total size.

Step Two

- *Representativeness:* the existing threats are typical of those faced by PAs within the NPAS, including:
  - Pressure from economic development;
  - High invasion threats; and
  - Unresolved land-tenure issues.

- *Comprehensiveness:* the areas chosen represent examples of contrasting management requirements types and *legal frameworks*, which cover, as far as possible, situations that will be found throughout most of the NPAS. Specifically, the areas together will contain examples of:
  - Mangroves;
  - Natural protected areas;
  - Unconsolidated (non-legalized) areas with potential for integration into the NPAS;
  - Preferably one example of an entire Conservation Area; and
  - A broad spectrum of physical and biological characteristics.

- *Threats to* priority biodiversity due to *lack of resources* (financial or human) that prevent adequate protection and management of resources.

- *Enabling Enviroment:* the existing enabling environment is representative of those in other areas including:
  - The area has existing local stakeholder capacity including NGOs and social organizations;
  - Updated geo-spatial data exists or will exist due to the LAP and LAP II IBRD projects; and
  - The surrounding landscape facilitates the creation of biological corridors, as there are relatively large, well-protected nuclei.

Results

Following Step One, five areas were identified as being of significant conservation value and of potential use as pilot sites. These were:

- Bahía de Jiquilisco Conservation area;
- Montecristo National Park;
- El Imposible National Park;
- Lago Güija-San Diego-La Barra Complex; and
- Colima Natural Protected Area.

It should be noted that, during step two, the additional criteria of being representative of other areas in El Salvador and containing significant threats to conservation ruled out the two most renowned areas—the Montecristo National Park and the El Imposible National Park—because of the significant and successful conservation efforts realized to date, coupled with the high amount of resources dedicated to these areas.

Also, satisfying the criteria of having a comprehensive balance of different situations clearly favored choosing Bahía de Jiquilisco Conservation Area and the Lago Güija-San Diego-La Barra Complex as:

- They have complementary and broad ranging geographical and biological conditions that cover most of the conditions that will be found in other protected areas throughout El Salvador; and

- Together, they contain a comprehensive blend of legal frameworks including an entire conservation area, and mangroves and Natural Protected Areas within conservation areas.

Therefore the GOES considered that: (a) **Bahía de Jiquilisco Conservation Area**; and (b) Lago Guija-San Diego-La Barra Complex **(Lago Guija Complex)**, part of the Trifinio Conservation Area were the best choices for pilot areas. Detailed site descriptions demonstrating this are given below.

Pilot Protected Area #1: Lago Güija San Diego-La Barra Complex (Lago Guija Complex)

The 5,840 ha Lago Guija complex is located in the extreme northwest of El Salvador along the Guatemalan border. The area supports a wide variety of habitats, including: several lakes (Lago Guija, Metapán Lagoon, San Diego Lagoon, Clara Lagoon and Teconalá Lagoon); two separate Natural Protected Areas including the 1,831 ha tropical dry forest expanses of San Diego-La Barra Natural Protected Area (the best and most intact example of this regionally threatened ecosystem in El Salvador), as well as surrounding private lands. Thus, the project would provide useful, transferable examples for protection of a wide variety of scenarios.

From a biodiversity perspective, the complex is of high conservation value, supporting numerous animal species that are threatened and in danger of extinction, both locally and internationally, endemic plants, and other dry forest species comprising cactus and *Bignoniaceae,* with a high presence of migratory birds, such as *Falco peregrinus, Buteo ptatypterus, Icterus galbula, Dendroica vires, Dendroica magnolia, piranga rubra, Catharus ustulatus.* The area supports one of the last relict patches of tropical dry forest in El Salvador, which, according to Dinnerstein and others (1995), is bioregionally outstanding, a high conservation priority at a regional scale and critically threatened. Within the area 180 species of plants have been recorded including: *Terminalia oblonga, Ceiba petandra, Cochlospernum vitifolium, Sloanea terniflora y Omphalea oleifera*; 250 species of birds, including: *Agamia agami, Nomonyc deminicus, Parabuteo unicinctus, Pardirallus maculatus, Amazona auropilliata, Anas acuta* and *Pasarían ciris*; 37 species of mammals, including: *Canis latrans, Galictis vittata, Leopardus wiedii* and *Conepatus mesoleucus*. Also present are fish species *Cichlasoma guija* (Mojarra negra o nativa), which is in danger of extinction, and *Cichlasoma trimaculatum* (Istatagua), which is threatened.

The area also is representative of mountainous regions being surrounded by dormant volcanoes and mountains including the volcanoes of San Diego, Isla El Tule, Masatepeque, La Vega de la Caña and Cerro Quemado.

The area also supports active local communities and local groups have developed a proposal to designate the area as a Ramsar site. In addition to its global and regional important for biodiversity, the site contains strong local partners (for example, CEPRODE, the local NGO, and the community ADESCO), which are actively involved in conservation, a solid baseline, and a protected area management plan that has been developed in collaboration with a local NGO with technical assistance from CATIE. On the Guatemalan side of Lago Guija, there is no official protection, but also currently no significant human populations.

The site also contains many typical key threats, including encroachment, agriculture-associated forest fires, illegal hunting, resource extraction, lack of education and options, and water pollution (from agrochemicals and household sewage).

Pilot Protected Area #2: Bahía de Jiquilisco Conservation Area

The proposed Bahía de Jiquilisco Conservation Area is a 63,000 hectare complex of coastal mangroves, intertidal mudflats, estuaries, barrier islands, sandy beaches, and remnant humid forest patches that is

representative of other coastal areas. It comprises several Natural Protected Areas—Chaguantique (77.1 ha in two patches), Normandía (440.6 ha), and El Tercio (43.5 ha), which protect remnants of alluvial forests (3,551 ha.), along with the Bay's mangrove forests (19,330 ha)—the largest expanse in the country. The area conserves populations of the threatened species the black-handed spider monkeys (*Ateles geoffroyi)*, as well as breeding sites of coastal and marine bird species, and four species of nesting sea turtles.

The Bahía de Jiquilisco Conservation Area also contains most of the country's marine and coastal birds, as well as being the unique nesting site for some of them. Species of fauna in danger of local extinction include four species of nesting sea turtles (all threatened), the American crocodile (*Crocodrylus acutus*), caiman (*Caimàn crocodilus*), spider monkey (*A. geoffroyi*), white-tailed deer (*Odocoileus virginianus*), and the bivalve casco de burro (*Anadara grandis*). The area also supports a large diversity of migratory birds, including abundant shorebirds as well as land birds, including the American oystercatcher (*Haemantopus palliate),* yellow-naped parrot (*Amazona auropalliata*), Pacific parakeet (*Aratinga strenua*), and muscovy duck (*Cairina moschata*). Owing to its importance for migratory birds, the area has been nominated as a Ramsar Wetland Site. Geomorphologically, the area plays an important role in terms of processing water-borne nutrients, controlling coastal erosion and mitigating earthquake damage.

The area also has prominent NGOs operating in the small remnant forest patches, which operate on a total annual budget of $100,000 (see Table 17.1). MARN provides no direct budget support to the management of the area and no on-the-ground government activities exist, despite the importance of the ecological resources present.

Key threats to the area include conversion of mangroves for housing, expansion of shrimp and salt ponds, agriculture and tourism.

Table 17.1: NGO Management of Humid Forest Patches in Bahía de Jiquilisco

Bahía de Jiquilisco Conservation Area				
Location	**Organization**	**Source**	**Amount**	**Duration**
Puerto Parada	CODEPA	FIAES	$20,000	2 years
Overall Conservation Area	UNES	IUCN	$50,000	1 year
El Espino	CRD	FIAES	$20,000	2 years
San Juan del Gozo	MSM	FIAES	$20,000	2 years
Bajo Lempa	Asociación Mangle	FIAES	$20,000	2 years
Nancuchiname	ADESCO BN	FIAES	$20,000	2 years

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Annex 17: Coordination between the El Salvador Protected Areas and Administration and El Salvador Environmental Services Projects

EL SALVADOR: Protected Areas Consolidation and Administration Project

1. The two IBRD/GEF-supported projects in El Salvador—the Protected Areas Consolidation and Administration project (P092202; PACAP) and the Environmental Services project (P064910; ESP)—contribute to the protection of globally significant biodiversity through different yet complementary approaches aimed at countering differing root causes of biodiversity loss. The Protected Areas Consolidation and Administration project: (a) strengthens the national protected areas system (NPAS), through updating the NPAS Strategy, improving the related legal and institutional frameworks, improving MARN's capacity to oversee the NPAS, and improves its sustainability through the creation of a unified protected areas registry and monitoring and evaluation system; and (b) consolidates two priority protected areas (one national park/Natural Protected Area and one protected mangrove forest) through a pilot program to develop and implement management plans that regularize communities in those areas, subject to use restrictions emphasizing the sustainable use of protected area resources. The Environmental Services project provides incentives to landowners living in protected area buffer zones and other environmentally sensitive lands to change their land use practices, thereby contributing the enhancement and protection of biodiversity.

2. Consequently, both projects, in conjunction, support the GOES's strategy to further biodiversity conservation through the prioritization of 15 conservation units, comprising most of the country's protected areas (for example, El Salvador's "Natural Protected Areas", corresponding to IUCN Category II), building upon the biological corridor concept. The conservation units constitute "nuclei", comprising the country's 118 natural protected areas, and surrounding private lands that comprise the "buffer zones". The specific approach to consolidate these areas target the primary threats to biodiversity, including habitat destruction, and the loss of natural resources stemming from deterioration in the quality of life for local populations (NBSAP 2000).

3. In concert with the partially blended Land Administration projects, the proposed project aims at contributing to this strategy by developing and pilot testing mechanisms for biodiversity conservation. Specifically, the LAP (under Phase I that is nearing completion and Phase II that is partially blended with the proposed project) would delimit all protected areas in the LAP II area, resolve land tenure in adjacent private lands (buffer zones), and collect high quality geospatial data for many protected areas.[43] Building upon the enabling environment presented by the LAP II, the proposed project would develop protected area policy reforms, delimit all protected areas (nuclei) in El Salvador, and in two pilot protected areas (*Bahía de Jiquilisco* and *Lago Guija* Complex, including both nuclei and buffer zones), demarcate and legalize those areas, resolve land conflicts, and develop and implement management plans including granting of usufruct rights to eligible residents. The proposed project would provide payment for environmental services (PES) as an incentive for biodiversity-friendly land use in private lands adjacent to the protected area nuclei (buffer zones) in the *Bahía de Jiquilisco*.[44]

4. Table 20.1 shows how both projects target different types of lands within priority Conservation Areas: the Environmental Services project does not work within strict protected areas but only in the buffer zones of those areas as well as in mangroves, which are subject to a different degree of legal protection (corresponding to IUCN Category VI); the Protected Areas Consolidation and Administration project, on the other hand, will work in one Natural Protected Area and one mangrove.

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[43] These include all protected areas and mangroves in the LAP II area, plus the Lago Guija pilot area that is in the (already completed) LAP I area.

[44] The Payment for Environmental Services Project overlaps with the proposed project in one area: *Bahía de Jiquilisco*. The selection of future PES Project sites would strongly consider the proposed project's second pilot area (*Lago Guija* Complex), so as to maximize biodiversity conservation impact.

5. Likewise, the approaches and activities supported by the two projects are different yet complementary. The Environmental Services project provides payments to landowners, whose land use practices contribute to the conservation and restoration of lands supporting globally significant biodiversity. This market-based mechanism is intended to promote biodiversity-friendly land use in areas critically important for conservation, yet outside the national protected areas system. In contrast, the Protected Areas Consolidation and Administration project supports the consolidation of the pilot areas (nuclei), including demarcation, resolution of legal status, development and implementation of management plans, capacity building and institutional strengthening for those areas—in short, the direct infrastructure and capacity investments to enable their sustainability. Only using mechanisms targeting both private and public lands can MARN realize their Conservation Area-based strategy.

6. Both projects are intentionally designed to complement each other's activities to maximize impact and minimize duplication. With regard to technical activities, special attention will be paid to the institutional strengthening/capacity building and legal framework aspects of both projects to prevent redundancy and promote synergy. As noted, the partially blended LAP II/PACAP projects focus on defining tenure for all private and public lands in El Salvador, advancing the rationalization of the national protected areas system, consolidating two priority protected areas and developing a strategy to address existing communities in those areas. These activities are strongly complemented by the ESP, which provides incentives to landowners living in protected area buffer zones and other environmentally sensitive lands to sustainably manage their lands. The two complementary strategies are pilot testing mechansisms to support MARN in the establishment of it's 15 Conservation Areas, by addressing the nuclei (natural protected areas), through the land administration GEF, and the buffer zones (adjacent private lands), through the ESP.

7. In addition to their technical complementarily, implementation arrangements have been developed to enhance impact. Both projects aim to maximize MARN's technical and administrative capacity, while mainstreaming GEF activities within MARN's portfolio and staffing. Specifically, a small project coordination unit (PCU) will be created for each project—and part of MARN's existing administrative unit – comprising a project coordinator, administrative staff and a few select technical people. Likewise, both PCUs include fiduciary staff (an accountant and procurement officer) that will be physically located within MARN's existing accounting unit (UFI). More importantly, as the proposed project will be implemented in January 2006, one year earlier than the start date for the PES Project, the capacity created within MARN for complying with World Bank fiduciary and administrative standards will benefit the PES Project. Toward this aim, the proposed project takes advantage of the partially blended LAP II by housing PCU fiduciary staff within the LAP II administrative unit (UACI within CNR) for the first six months of project implementation so that they are trained in approved administrative procedures. After this period, the fiduciary staff would move to MARN's UFI, where they would, in turn, build relevant capacity within MARN staff (and PES Project staff, as needed).

Table 20.1: Breakdown of Activities Financed by PACAP and ESP

		Location of Investments		
Project	**Activity**	**Protected Area (Nucleus)[45]**	**Mangrove (Nucleus and Private Lands)[46]**	**Buffer Zone (Private Lands)**
Protected Areas Consolidation and	Demarcation	X	X	X*
	Legal Consolidation	X	X	X*
	Management Plan Development	X	X	

[45] IUCN Category II.
[46] IUCN Category VI.

Administration (PACAP)	Management Plan Implementation	X	X	
	Cadastre/Registry	X	X	X*
	Institutional Strengthening/Capacity Building	X	X	
	MARN Legal Framework	X	X	
Environmental Services (ESP)	Environmental Service Payment Contracts		X	X
	Institutional Strengthening/Capacity Building		X	X
	Environmental Service Payments Legal Framework		X	X

* Through partially blended IBRD loan.

MAP SECTION

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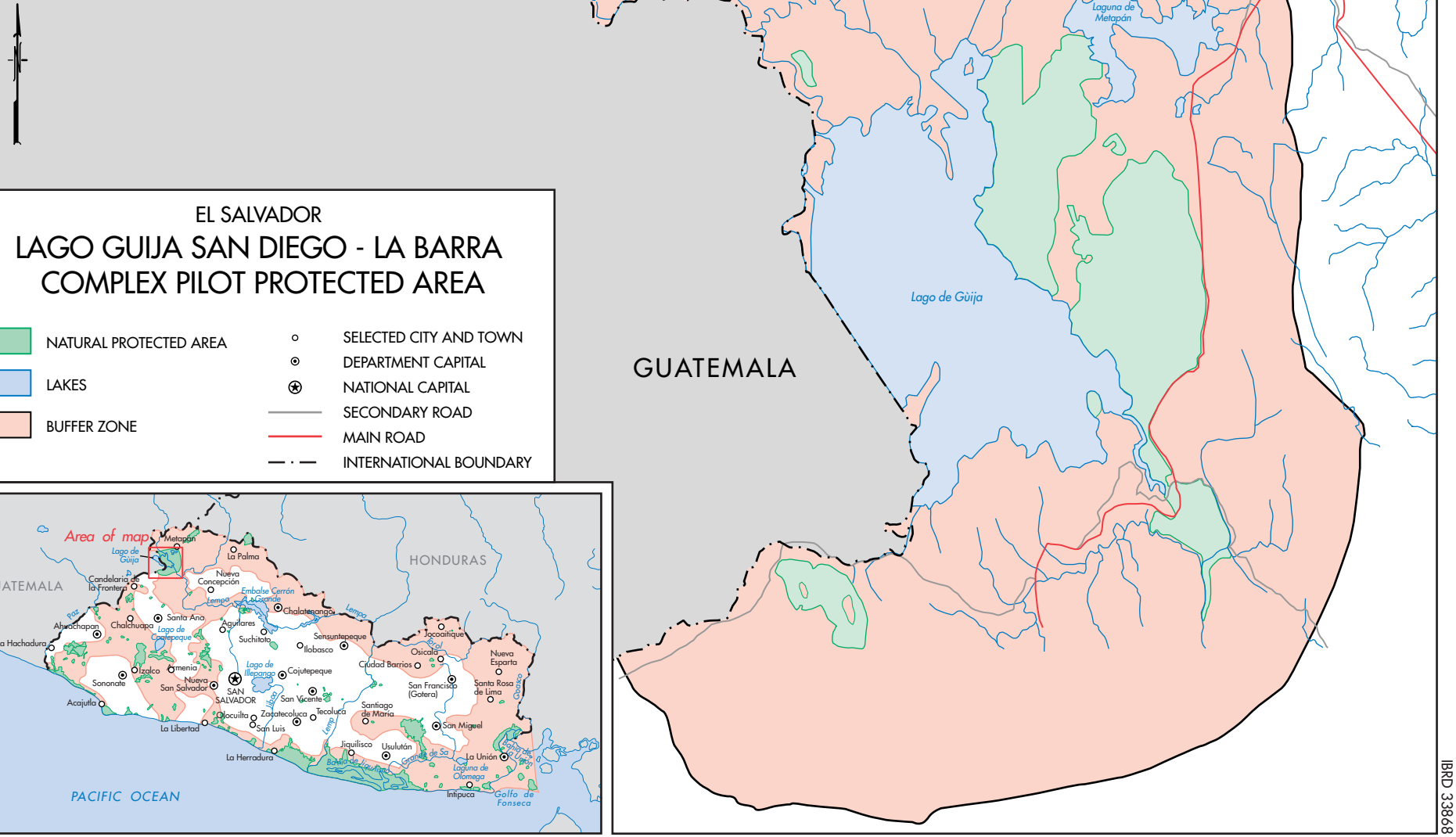
EL SALVADOR

LAGO GUIJA SAN DIEGO - LA BARRA COMPLEX PILOT PROTECTED AREA

- NATURAL PROTECTED AREA
- LAKES
- BUFFER ZONE
- SELECTED CITY AND TOWN
- DEPARTMENT CAPITAL
- NATIONAL CAPITAL
- SECONDARY ROAD
- MAIN ROAD
- INTERNATIONAL BOUNDARY



JUNE 2005

IBRD 33868

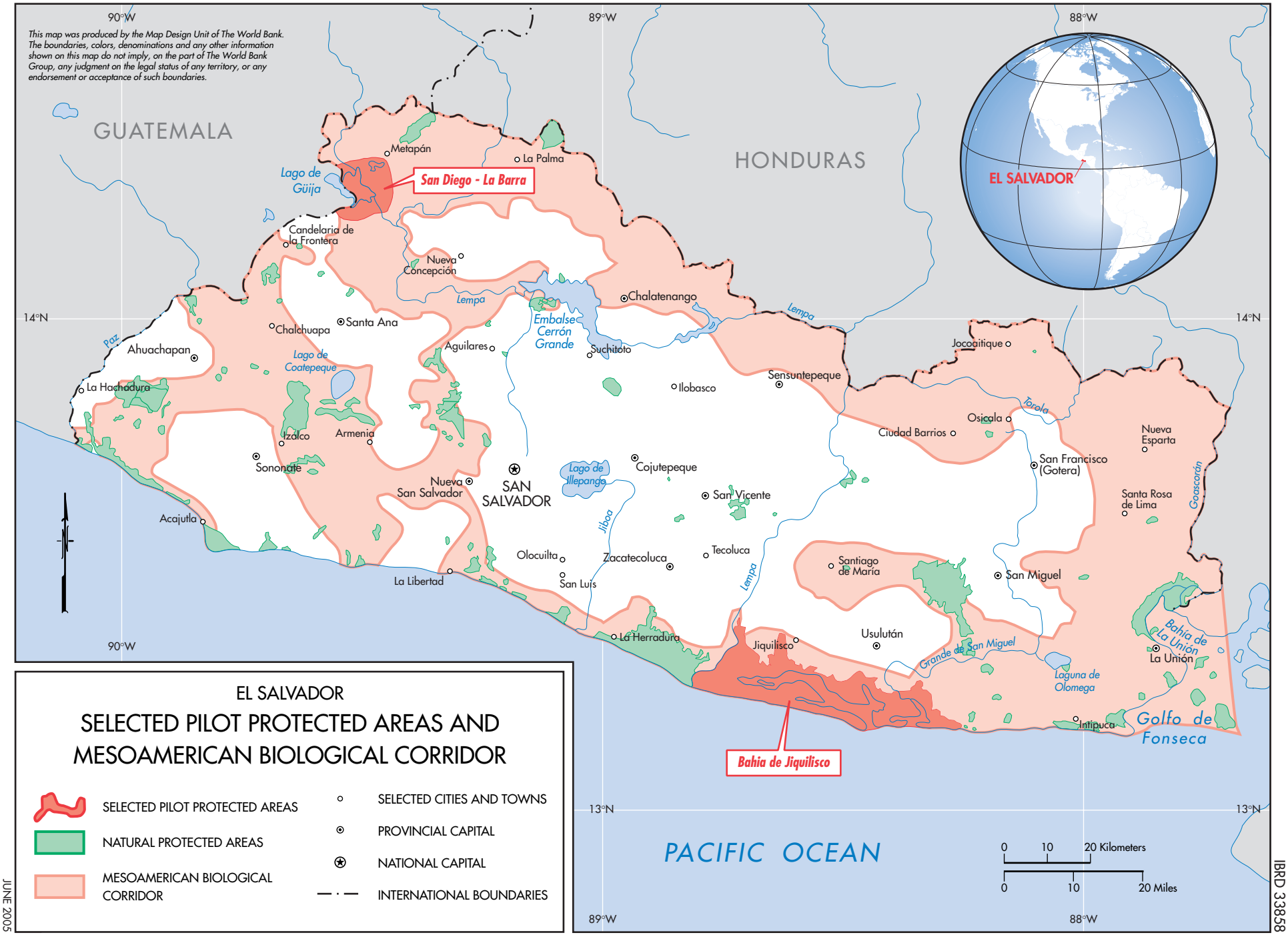
EL SALVADOR

NATURAL PROTECTED AREAS SYSTEM AND MESOAMERICAN BIOLOGICAL CORRIDOR

- NATURAL PROTECTED AREAS
- MESOAMERICAN BIOLOGICAL CORRIDOR
- SELECTED CITIES AND TOWNS
- DEPARTMENT CAPITALS
- NATIONAL CAPITAL
- DEPARTMENT BOUNDARIES
- INTERNATIONAL BOUNDARIES

JUNE 2005

IBRD 33859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GUATEMALA
HONDURAS
PACIFIC OCEAN
EL SALVADOR
San Diego - La Barra
Bahia de Jiquilisco
Golfo de Fonseca
Lago de Güija
Lago de Coatepeque
Embalse Cerrón Grande
Lago de Ilopango
Metapán
La Palma
Candelaria de la Frontera
Nueva Concepción
Chalatenango
Chalchuapa
Santa Ana
Ahuachapan
La Hachadura
Aguilares
Suchitoto
Ilobasco
Sensuntepeque
Jocoaitique
Osicala
Ciudad Barrios
Nueva Esparta
San Francisco (Gotera)
Santa Rosa de Lima
Izalco
Armenia
Sononate
Nueva San Salvador
SAN SALVADOR
Cojutepeque
San Vicente
Acajutla
La Libertad
Olocuilta
San Luis
Zacatecoluca
Tecoluca
Santiago de Maria
San Miguel
Usulután
Jiquilisco
La Herradura
Intipuca
La Unión
Bahia de La Unión
Laguna de Olomega
Grande de San Miguel
Lempa
Paz
Jiboa
Torola
Goascorán
14°N
13°N
90°W
89°W
88°W
0 10 20 Kilometers
0 10 20 Miles
EL SALVADOR
SELECTED PILOT PROTECTED AREAS AND MESOAMERICAN BIOLOGICAL CORRIDOR
SELECTED PILOT PROTECTED AREAS
NATURAL PROTECTED AREAS
MESOAMERICAN BIOLOGICAL CORRIDOR
SELECTED CITIES AND TOWNS
PROVINCIAL CAPITAL
NATIONAL CAPITAL
INTERNATIONAL BOUNDARIES
JUNE 2005
IBRD 33858

EL SALVADOR

BAHIA DE JIQUILISCO PILOT PROTECTED AREA

MANGROVE

HUMID FOREST

BUFFER ZONE

SELECTED CITY AND TOWN (INSET)

DEPARTMENT CAPITAL (INSET)

NATIONAL CAPITAL (INSET)

INTERNATIONAL BOUNDARY (INSET)

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Nacuchiname

Normandia

Rio Lempa

Chaguantique

El Trecio

Manglar
Bahia de Jiquilisco

Manglar
Bajo Lempa

La Esperanza
o Ceiba Doblada

San Carlos

La Redenci n

Isla
San Sebastian

PACIFIC OCEAN

JUNE 2005

IBRD 33869