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FY11 DETAILED WORK PLAN

OCTOBER 2010 - SEPTEMBER 2011

USAID SUSTAINABLE FORESTS AND COASTS

October 6, 2010

This Work Plan was prepared for the review of the United States Agency for International Development (USAID). It was prepared by Chemonics International.

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TABLE OF CONTENTS

Acronyms 3

Executive summary 4

1. Introduction 6

1.1 Project Goals 7

1.2 Geographic Target Areas 8

2. Implementation Strategy 10

2.1 Work Planning Process 10

2.2 Staffing Chart 11

3. Work Plan framework by PIR, Threats and Strategies 12

3.1 Implementation Framework Table 12

3.2 Work Plan Activity Narrative Description 13

PIR 1: Biodiversity conservation in critical habitats improved 13

Threat 1: Loss or alteration of critical habitats 13

Strategy 1.1: Improve management of critical terrestrial and coastal marine habitats 14

Strategy 1.2.: Rehabilitate degraded terrestrial and coastal marine habitats 17

Strategy 1.3.: Public policy advocacy 18

Threat 2: Climate change 19

Strategy 2.1.: Establish and implement climate change response and adaptation measures 19

Strategy 2.2.: Reduction of greenhouse gases and carbon sink conservation 20

PIR 2: Improved Local livelihoods 20

Threat 3: Lack of economic alternatives 20

The project will continue to strengthen the red crab value chain 21

Strategy 3.1: Development and promotion of market-based economic alternatives and economic incentives for critical habitat conservation 21

Activity 3.1.2 Develop economic incentives for conservation 22

Activity 3.1.3 Support accessing and maintaining Socio Bosque's incentives 22

PIR 3 Partnerships formed for ongoing support for biodiversity conservation 23

Threat 4: Insufficient institutional capacity for biodiversity conservation 23

Strategy 4.1 Strengthen management of protected areas 23

Strategy 4.2.: Improve inter-institutional communication and coordination 25

4. WORK PLAN BY GEOGRAPHIC AREA 27

4.1 Gran Reserva Chachi and its buffer zone 27
4.2 Reserva Marina Galera San Francisco and related watersheds....28
4.3 Parque Nacional Machalilla and Ayampe River Watershed.....30
4.4 Gulf of Guayaquil: 33
5. CROSS-CUTTING ACTIVITIES.....35
6. ENVIRONMENTAL COMPLIANCE.....36

ACRONYMS

ECAs	Field Schools
FECCHE	Federación de Centros Cháchis de Ecuador (Ecuadorian Federation of Cháchi Communites)
FY	Fiscal Year
FRA	Fichas de Revisión Ambiental (Environmental Review Worksheet)
INHAMI	Instituto Nacional de Meteorología e Hidrología (National Institute of Meteorology and Hydrology)
INP	Instituto Nacional de Pesca (National Institute of Fisheries)
MAE	Ministerio de Ambiente (Ministry of Environment)
MAGAP	Ministerio de Agricultura, Ganadería, Aquacultura y Pesca (Ministry of Agricultural, Livestock, Aquaculture and Fisheries)
MINTUR	Ministerio de Turismo del Ecuador (Ministry of Tourism of Ecuador)
PIR	Project Intermediate Results
PN	Parque Nacional (National Park)
POAM (ELUP)	Plan de Ordenamiento Ambiental (Environmental Land Use Plan)
PNM	Parque Nacional Machalilla (Machalilla National Park)
RE	Reserva Ecológica (Ecological Reserve)
RM	Reserva Marina (Marine Reserve)
RPF	Reserva de Producción Faunística (Wildlife Production Reserve)
SIGA	Sistema de Información de Gestión Ambiental (Environmental Management and Information System)
SNAP	Sistema Nacional de Áreas Protegidas (National System of Protected Areas)
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

In October 2009, USAID approved a three-year work plan for the USAID Sustainable Forests and Coasts project, which contained a detailed description of the activities and key actions planned for Fiscal Year 2010 (FY10) and a general overview of the activities for FY11 and FY12. The present detailed work plan for FY11 presents specific strategies, activities and key actions for implementation from October 2010 to September 2011.

In FY11, the Project will continue to consolidate its FY10 initiatives in the same geographic areas the Project prioritized in FY10 together with the Ministry of the Environment (MAE) and the USAID Environmental Team, as follows:

1. Gran Reserva Chachi and its buffer zone
2. Reserva Marina (RM) Galera San Francisco and related watersheds
3. Machalilla National Park (PNM for its Spanish Acronym) and the Ayampe River watershed
4. Reserva de Producción Faunística (RPF) Manglares el Salado
5. Reserva Ecológica (RE) Manglares Churute, its buffer zone and mangrove concessions

The Project´s implementation strategy remains focused on providing the **technical assistance** needed to reduce threats to biodiversity conservation in these priority areas, and particularly in protected areas. In the FY11 work plan these threats, and the strategies and activities designed to minimize them, are tailored o the project´s results framework and presented in alignment with the Project´s Intermediate Results (PIRs).

The project developed the FY11 Work Plan using a participatory approach, gathering input on needs and prioritizes thru strategic consultations with a wide range of stakeholders in each geographic area. The strategy building sessions focused on how to best promote conservation of areas critical to biodiversity conservation and reduce the major threats in each area. Stakeholders consulted included local government authorities, protected area managers, community members, NGOs and MAE authorities, among others. Key to developing the work plan was the close partnership the Project had developed with the MAE in FY10. This close working relationship is in part a result of the project´s support for activities related to the National System of Protected Areas (SNAP for its Spanish acronym) and technical assistance for the government´s programs and policies for biodiversity management. In addition, the Project´s close working relationships with parochial, municipal and provincial governments in each of the target areas facilitated work plan development and will continue to facilitate Project implementation. The Project expects to continue maintaining continuity in its partnership with the MAE and local governments, even during changes in leadership; however, this is always a critical factor in implementation.

The long-term sustainability of these efforts is being ensured by leveraging funds and creating partnerships with local, regional and international organizations and leveraging funds from public/private sources.

In response to PIR 1, In FY11, the Project will focus on implementing activities to achieve the result "**Improve biodiversity conservation in critical habitats.**" Strategies include **minimizing the loss and/or alteration of those habitats** (through improved management and rehabilitation of terrestrial and coastal marine habitats and public policy advocacy). A second strategy is to develop **climate change** adaptation measures, including activities to reduce risk factors (through establishing and implementing response and adaptation measures, reducing greenhouse gases and conserving carbon sink).

In response to PIR 2, the Project will **improve local livelihoods** and **create economic alternatives** by developing and promoting market based economic alternatives and economic incentives for conserving critical habitats.

Lastly, in response to PIR 3, the Project will continue to support **partnerships for biodiversity conservation** by promoting platforms to coordinate and lead conservation initiatives. This will ensure the continuity of biodiversity conservation in the medium and long term. The strategy consists of providing technical support to build local capacity in key stakeholders (particularly the MAE and local governments) by **strengthening management of protected areas and improving inter-institutional communication and coordination.** This will be accomplished by working through existing coalitions and partnerships and/or creating new ones while leveraging financial resources.

In FY11 the Project will continue complying with USAID environmental regulations through following procedures established in the Fichas de Revisión Ambiental.

1. INTRODUCTION

The objective of the USAID Sustainable Forests and Coasts Project is to promote biodiversity conservation in critical habitats on the Ecuadoran Coast by improving the livelihoods of local residents and creating partnerships that ensure the sustainability of results beyond the Project period. The first phase of the Project began in June 2009 and will last three years, with the option of a two-year extension.

The FY11 Detailed Work Plan follows USAID´s approval of a Three Year Work Plan in October 2009, which included a detailed description of the activities planned for FY10 and a general overview of activities for FY11 and FY12. The present Work Plan takes into consideration the lessons learned during the first year and focuses on consolidating the activities and results obtained thus far using an adaptive management approach.

Implementation in FY11 will continue to build on FY10 initiatives to conserve remnants of high biodiversity areas on the Ecuadoran coast by reducing threats, bringing benefits to populations living in and/or around those areas. The long-term sustainability of these efforts is being ensured by leveraging funds from public/private sources and creating partnerships with local, regional and international organizations.

A Participatory Approach to Developing Adaptation Measures for Climate Change

By holding community level workshops, such as the one shown below with residents of the Cerritos Los Morreños community, the project is assessing vulnerability to the effects of climate change using a participatory approach. Based on this assessment, the project will develop adaptation measures to prevent the severity of climate change impacts.

This work plan is divided in the following sections: Introduction (1) includes (1.1) the project's goals (archived and expected) by as well as (1.2) the geographic areas selected by the Project to work in the FY11.

Section 2 presents the Project´s implementation strategy, including an explanation of the methodology and the process to design this Work Plan (2.1 Work Plan Process), which includes the new staffing chart (2.2), which has been adapted to meet the needs of the project´s implementation strategy.

Section 3 presents the implementation framework for FY11 a Implementation Framework Table (3.1) which summarizes with the threats, strategies, and activities by PIR

Section 4 (Work Plan by Geographic Area) presents the work plan's activities and key actions by geographic area.

Section 5 presents cross-cutting activities, Section 6 explains how in FY11 the Project will continue complying with USAID environmental regulations through Fichas de Revisión Ambiental.

1.1 Project Goals

A description of each PIR, its goals, and a summary of the progress made thus far and goals for FY11 is presented in the sections below:

PIR 1: Biodiversity conservation in critical habitats improved

PIR 1´s overarching objective is biodiversity conservation. All Project activities tie into this PIR and address the need to conserve the last remnants of ecosystems and critical habitats on the Ecuadoran Coast.

Goals of PIR 1: Biodiversity conservation in critical habitats Improved				
Indicators	**3-year goals (phase one)**	**Goals FY10**	**Progress to date FY11 Estimates)**	**Goals FY11**
1.1. Number of hectares of terrestrial ecosystems in target areas under improved management	220,564	160,359	162,136	70,048
1.2. Number of hectares of marine ecosystems in target areas under improved management	135,188	104,771	109,255	30,417
1.3. Number of people trained in best management practices (BMP) for natural resources and along value chains	1700	400	1,290	482
1.4. Number of initiatives co-financed	20	6	7	8

PIR2: Local livelihoods improved

The overall purpose of the Project is biodiversity conservation, however, because many of the primary threats stem from human pressures exacerbated by poverty and the lack of economic alternatives, the objective of PIR 2 is to reduce these threats by creating incentives for conservation and improving living conditions for local communities in and/or around critical ecosystems.

Goals of PIR 2: Improved local livelihoods				
Indicators	**3-year Goals (phase one)**	**Goals FY10**	**Progress to date FY10 Estimates**	**Goals FY11**
2.1.Number of organizations linked to new markets	16	3	4	8
2.2. Number of families that have increased their economic benefits	1700	500	547	473

PIR 3: Partnerships formed for ongoing support for biodiversity conservation

This third PIR consolidates and promotes partnerships to leverage public and private funding for the sustainability of initiatives once the Project has ended.

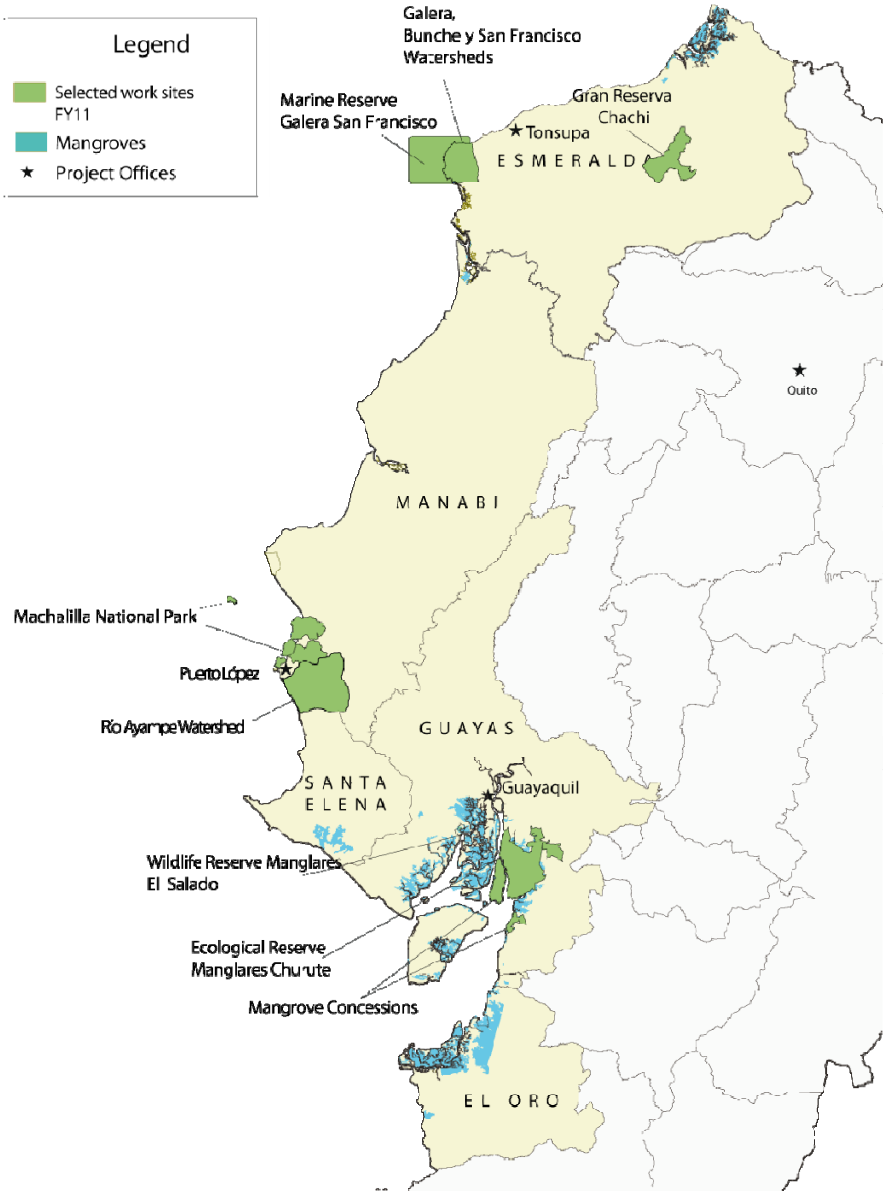
Goals of PIR 3: Partnerships formed for ongoing support for biodiversity conservation				
Indicators	**3-year Goals (phase one)**	**Goals FY10**	**Progress to date (FY10 Estimates)**	**Goals FY11**
3.1. Leveraging of public and/or private funds	US$ 2,600,000	US$ 700,000	US$ 5,882,086	US$ 1,000,000
3.2. Number of partnerships or coalitions created or strengthened	12	4	5	4

1.2 Geographic Target Areas

In FY11, the Project will continue to consolidate its FY10 initiatives in the same areas the Project prioritized in FY10 together with the MAE and the USAID Environmental Team, which were selected based on being critical to biodiversity conservation, as follows:

1. Gran Reserva Chachi and its buffer zone.
2. Reserva Marina Galera San Francisco and related watersheds
3. Parque Nacional Machalilla and the Ayampe River watershed.
4. Reserva de Producción de Fauna Manglares el Salado
5. Reserva Ecológica Manglares Churute, buffer zone and mangrove concessions

Map of Ecuadorian Coast Indicating Areas Selected for Project Activities



2. IMPLEMENTATION STRATEGY

The Project's implementation strategy remains focused on providing the **technical assistance** needed to reduce threats to biodiversity conservation in the five priority areas, and particularly in protected areas. These threats, and the strategies and activities designed to minimize them, are tailored to the project's results framework and presented below in alignment with the PIRs.

2.1 Work Planning Process

The project developed the FY11 Work Plan using a participatory approach, gathering input on needs and prioritizes thru strategic consultations with a wide range of stakeholders in each geographic area. The strategy building sessions focused on how to best promote conservation of areas critical to biodiversity conservation and reduce the major threats in each area. Stakeholders consulted included local government authorities, protected area managers, community members, NGOs and MAE authorities, among others. Key to developing the work plan was the close partnership the Project had developed with the MAE in FY10. This close working relationship is in part a result of the project´s support for activities related to the National System of Protected Areas (SNAP for its Spanish acronym) and technical assistance for the government´s programs and policies for natural resource management. In addition, the Project´s close working relationships with parochial, municipal and provincial governments in each of the target areas facilitated work plan development and will continue to facilitate Project implementation. The Project expects to continue maintaining continuity in its partnership with the MAE, even during changes in leadership; however, this is always a critical factor in implementation.

The FY11Detailed Work Plan responds to requests from the Government of Ecuador, particularly the MAE, within its scope and target areas, as well as to requests from local and sectional governments. The Project is tied into the "*Plan Nacional del Buen Vivir"* (National Plan for Good Living) and supports MAE policies in particular. The planning process has taken into account the technical assistance needs requested by the MAE and specifically by the Sub-Secretariats of Coastal and Marine Management and Natural Patrimony and Climate Change.

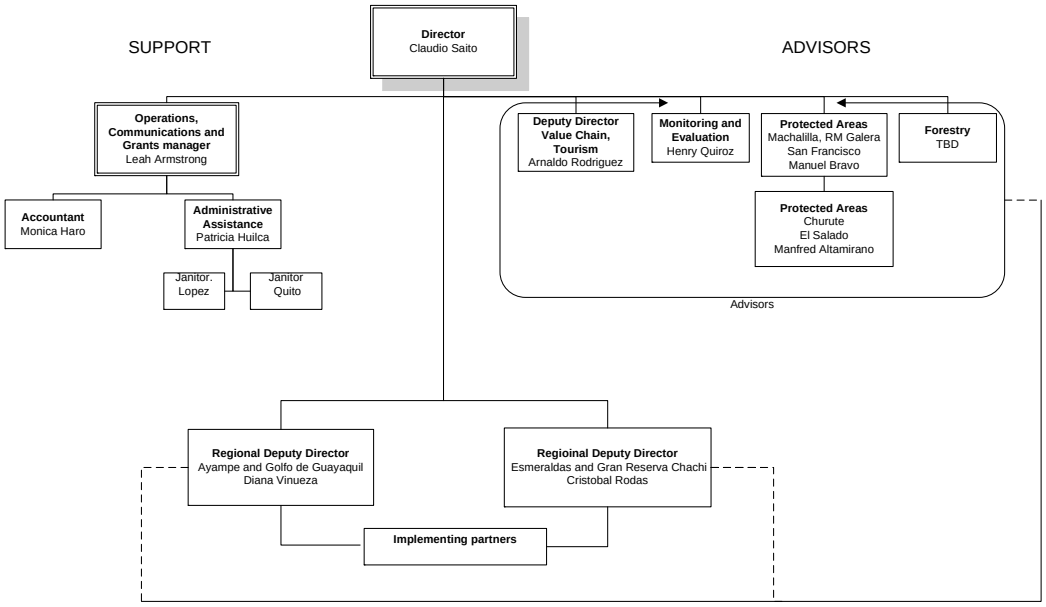
Primary threats were identified in conjunction with the MAE and technically defined through Environmental Land Use Plans (POAM for its Spanish acronym) [*planes de ordenamiento ambiental – POAM*] for the Ayampe River watersheds, watersheds affecting the Reserva Marina Galera San Francisco and the Capulí and Hoja Blanca centers in Gran Reserva Chachi. The POAMs developed by local governments and the MAE identified the primary threats to biodiversity conservation and used participatory methods to determine the main activities to reduce these threats, designate responsibilities, and create a Plan of Action.

The planning process for FY11 incorporated lessons learned from the first year. The consultation process for developing this plan was participatory and worked through consensus: in July and August 2010, over 100 public and private sector and

community stakeholders were interviewed. The planning process, which was undertaken in close coordination with the MAE and used an **adaptive management** approach, which will continue to facilitate any necessary changes along the way to ensure more effective activity implementation and results.

2.2 Staffing Chart

Bearing in mind the experiences gleaned from various Project interventions, the Staffing Chart has been modified to increase its field presence with a view towards consolidating the activities implemented to date. The new organizational structure is presented in the diagram below:



The first significant change is the appointment of regional deputy directors to facilitate supervision in the field. The regional deputy directors, previously partnership development specialists, report directly to the Project Director.

The second change is the creation of a technical advisory group that will provide support on issues related to productive chains and tourism, protected areas (focused on managerial support for directors of Project target areas and implementing partners). The advisory team will also include monitoring and evaluation and forestry experts[1].

[1] The long term forestry expert is in response to the assistance requested by MAE and is subject to additional funding from USAID.

3. WORK PLAN FRAMEWORK BY PIR, THREATS AND STRATEGIES

This section presents the implementation framework for FY11, which presents the threat, strategy for reducing the threat, and activities for each PIR. More detailed key actions are presented in the narrative section. This framework is based on addressing the main crosscutting threats that have been identified in each of the target areas and are tied in with the PIRs. Strategies and activities have been designed in response to these threats. The first part of this section (3.1 Implementation Framework) describes the primary threats and strategies and their respective activities. Section 4 Work Plan by Geographic Area presents the work plan's activities and actions by geographic target area, and includes the expected results, activities and key actions, implementation timeline, and the responsible staff or implementing partner.

3.1 Implementation Framework Table

This section presents the implementation framework table, which summarizes with the threats, strategies, and activities by PIR.

PIR 1: Biodiversity conservation in critical habitats improved		
Threats	Strategies	Activities
1. Loss and/or alternation of critical habitats	1.1. Improve management of critical terrestrial and coastal marine habitats	1.1.1. Improve management of and information regarding timber and non-timber forest products and coastal marine resources
		1.1.2. Promote forest management and conservation (timber and non-timber forest products).
		1.1.3. Strengthen Mangrove/concessions management
		1.1.4. Foment implementation of environmental management plan key actions for watersheds and beaches
		1.1.5. Promote protection of water source/riverbank vegetation
	1.2. Rehabilitate degraded terrestrial and coastal marine habitats	1.2.1. Foment mangrove recovery
		1.2.2. Promote reforestation/regeneration
	1.3. Public policy advocacy	1.3.1. Provide technical assistance for the review and reformulation of policies and programs related to conservation and biodiversity management
2. Climate change	2.1. Establish and implement climate change response and adaptation measures	2.1.1. Conduct vulnerability analysis, design and implement adaptation measures
	2.2. Reduction of greenhouse gases and carbon sink conservation	1.1.2., 1.1.3., 1.2.1. and 1.2.2.

PIR 2: Improved local livelihoods		
Threats	Strategies	Activities
3. Lack of economic alternatives	3.1. Development and promotion of market-based economic alternatives and economic incentives for critical habitat conservation	3.1.1. Facilitate access to environmentally responsible markets and support for microenterprises
		3.1.2. Develop legal/economic conservation incentives
		3.1.3. Support accessing and maintaining Socio Bosque incentives

PIR 3: **Partnerships formed for ongoing support for biodiversity conservation**		
Threat	Strategies	Activities
4. Insufficient institutional capacity for biodiversity conservation	4.1. Strengthen management of protected areas	4.1.1.Build institutional capacity
		4.1.2. Design and support implementation of surveillance and monitoring systems
	4.2. Improve inter-institutional communication and coordination	4.2.1. Strengthen coalitions/partnerships
		4.2.2. Obtain co-financing and/or leverage funds

3.2 Work Plan Activity Narrative Description

The following section describes each of the threats, strategies, and activities presented in the above implementation framework table and presents a detailed description the corresponding activities and key actions planned for FY11.

PIR 1: Biodiversity conservation in critical habitats improved

Threat 1: Loss or alteration of critical habitats

The Ecuadoran Coast is a mosaic of habitats and ecosystems in a variety of orographic formations. However, only in the Gran Reserva Chachi and the Reserva Ecológica Cotacachi Cayapas does natural forest coverage remain. Most vegetation has been converted to productive activities including African palm, banana, and cacao plantations, short-cycle crops, livestock, or shrimp harvesting. Timber harvesting, which also has had a high impact on vegetation, is frequently the first step in the conversion of forests to agricultural systems. The main causes of unsustainable timber activity are the fragmentation of woodlands that precludes long-term management, the lack of effective enforcement systems and sales to illegal markets, and the lack of clarity over land tenure. According to estimates, only 31.6% (Sierra 1999) of the original coverage on the Coast remains. Other threatened habitats and ecosystems include coastal marine systems, wetlands and water sources.

Strategy 1.1: Improve management of critical terrestrial and coastal marine habitats

In FY11, the Project will continue to promote conservation and improved management practices for critical habitat remnants in the selected geographic areas. It will promote the rehabilitation of degraded habitats and engage in public policy advocacy to ensure that this is accomplished or is sustainable in the long term.

Activity 1.1.1: Improve management of and information regarding timber and non-timber forest products and coastal marine resources

Lack of information about the regenerative capacity of ecosystems and populations can result in resource extraction methods that exceed their capacity to recover. Coastal marine ecosystems are particularly sensitive in this regard (for example, red crab, scallop, crab [*jaiba*], and lobster) as are woodland ecosystems (for example, tree populations with commercial potential). Absent this type of information, it is almost impossible to design and implement effective management systems or enforcement measures based on solid arguments for the beneficiaries of such activities.

Key actions for Activity 1.1.1

1. Stock assessments based on a monitoring system in the 6 de Julio, Balao and Mondragón mangrove concessions, working in conjunction with the National Fisheries Institute (INP for its Spanish acronym). Based on this information, appropriate management measures will be adopted to protect this resource from over-exploitation. It is hoped that this information can also be used in other areas of the Gulf of Guayaquil.

2. Develop and promote market-based management practices for timber and non-timber products for producers in target areas. This will begin with an exploratory forest inventory in the Ayampe watershed, which will provide an analysis of supply and demand for timber and non-timber forest products. It will also entail developing and promoting good natural resource management/harvesting practices for tagua palm in target areas. Management practices for Kapok and guadua bamboo will also be assessed; and technical assistance will be contingent on the demand.

The project will continue working with the Local Beach Management Committee and the community members and schools in Las

Tunas to improve beach management.

3. Continue to support management of Las Tunas beach in the Ayampe River watershed. The Project will follow up on priority efforts to strengthen the local beach management committee created during the first fiscal year and provide technical assistance for implementing key actions included in their work plan, particularly those related to biodiversity conservation –such as protecting sea turtle nesting sites.

4. USAID Sustainable Forests and Coasts is supporting the development of the tourism component of the management plan for RM Galera San Francisco, through a small grant to our local partner NAZCA. The core methodology for developing the tourism component is a dynamic tourism management system known as SIMAVIS (Sistema de Manejo de Visitantes or Visitors Management System) originally developed in the Galapagos Island. SIMAVIS lays the foundation for adequate tourism management by monitoring and generating adaptive responses to pressures generated by tourism activities.

   It is our understanding that once the development of the reserve's management plan is completed, MAE and NAZCA will implement key activities with funding from other organizations working in the area as well as from other sources.

Activity 1.1.2.: Promote forest management and conservation (timber and non-timber products).

Conditions in the Ayampe River watershed are favorable for establishing a forest management model that includes expanding the surveillance and enforcement system in PNM. The Project will implement a forest regency system at the request of PNM. The success of this system lies in hiring a regent capable of enforcing forest management regardless of the amount of wood extracted, since regents are typically paid based on the volume of wood extracted, which creates an incentive for over-exploitation.

Key actions for Activity 1.1.2

1. Develop an exploratory forestry inventory (also referenced in activity 2 under activity 1.1.1): forest tenure, species varieties, quantities and potential, with a focus on incentives for sustainable management that is responsive to the demand.
2. Based on the exploratory forestry inventory, develop a forest regency system in which compensation of inspectors is not based on timber volumes.
3. Establish forest control points in the Ayampe watershed as well as a surveillance and enforcement system for that area. This activity will use infrastructure provided by MAE and will be implemented with the participation of local communities.

Activity 1.1.3.: Strengthen mangrove/concession management

Concessions and mangrove management have proven to be an effective strategy and incentive for the conservation of this important resource. During FY10 the Project

supported activities associated with mangrove concession management. Specifically, it has supported the design of surveillance and enforcement systems, the establishment of new mangrove concessions and the renewal of existing ones. The Project will continue to provide technical support for as detailed in the following key actions:

Key actions for Activity 1.1.3

1. Provide technical guidance for implementing surveillance and enforcement systems in the 6 de Julio, Balao and Mondragón concessions and in the RE Manglares Churute.
2. Promote the establishment of at least one new mangrove concession in the Gulf of Guayaquil (Potential areas are: Puerto Roma and Ríos de Agua Viva).
3. Provide technical assistance for community-based mangrove management actions in the RE Manglares Churute.

Activity 1.1.4.: Foment implementation of the key actions set out in the environmental management plans for watersheds and beaches

The Project developed POAMs for the Ayampe River watershed and for the Bunche, Galera and San Francisco river basins. These plans identify key conservation areas, primary threats, communities and their relationship with conservation and strategies to minimize threats. The Project also prepared beach management plans for Las Tunas and Estero de Plátano beaches during the same period. These work plans have designed strategies for local governments based on the results and recommendations of the POAMs. Ultimately, the goal is to turn these POAMs into a guidebook for municipalities and provincial and parochial governments.

In the case of the Ayampe River watershed, the Project will continue to carry out key actions focused on the watershed as a whole. The Project for the Bunche, San Francisco and Galera watersheds whit emphasis in the micro watersheds level so that activities can be targeted to specific areas, in order to have tangible impacts that can be replicated in other areas.

The Project will continue to use the field school methodology [escuelas de campo – ECA] as a tool for promoting best practices and for implementing critical actions, such as protecting forests, terracing to prevent erosion, integrated farm zoning, reducing monocultures, limiting the use of agrochemical products and protecting water sources.

Key actions for Activity 1.1.4

Key actions for the RM Galera San Francisco and the Ayampe River watersheds, and Capulí and Agua Blanca are based on the POAMs. They are presented in Section 2 (*Work Plan by Geographic Area*) and include the following:

1. Protection of water sources (natural regeneration, establishment of protection belts, and steps to design legal safeguards).
2. Promotion of agro-forestry and training in best management practices for natural resources.
3. Implementation of agreements for community-based conservation.

4. Training and technical assistance on how to biologically control the highly invasive African Snail (in the watersheds related to the RM Galera San Francisco).

Activity 1.1.5.: Promote protection of water sources/riverbank vegetation

Water is essential for human populations and therefore features inherent incentives for its conservation. In light of this opportunity, the Project has implemented reforestation activities on riverbanks in the Ayampe River watershed and the Galera, Bunche and San Francisco watersheds. In FY11, the Project will continue to focus on protecting forest cover in the Ayampe River watershed and high-lying areas of critical micro-watersheds (Quinge and Caiminto) related to the RM Galera San Francisco.

The project will continue to support implementing best practices thru field school training, such as how to establish terraces to prevent erosion, as seen here

Key actions for Activity 1.1.5

- Establish micro-watershed conservation and restoration mechanisms based on integrated farms. Activities include reforestation, prevention and mitigation of erosion, best management practices (like reducing or eliminating pesticides, shifting from monocultures to agroforestry schemes, etc.).
- Provide technical assistance to families through field schools (ECAs) for the implementation of best practices for protecting water sources and river banks on integrated farms.
- Promote forest plantations with native species to recover pasturelands in upper areas of the Galera, Bunche and San Francisco watersheds.
- Support water conservation initiatives sponsored by provincial, municipal and parochial governments.

Strategy 1.2.: Rehabilitate degraded terrestrial and coastal marine habitats

This strategy focuses on restoring habitats for establishing conservation corridors. The Project will seek out partnerships or incentives as an "honest broker" to ensure the sustainability of these actions and avoid direct investments of capital or resources.

Activity 1.2.1.: Foment mangrove recovery

The MAE is requiring illegal shrimpers in the RE Manglares Churute to leave the area and finance shrimp farm restoration. Subject to the decisions made by the MAE, the

Project will provide technical assistance to support mangrove recovery efforts in shrimp farms within the protected area.

This may also have an impact on improving local livelihoods by generating alternative economic activities to crab harvesting thru mangrove nurseries, particularly in closed seasons.

Key actions for Activity 1.2.1

- Once illegal shrimp farmers leave the Reserve, the Project will provide technical assistance to the MAE in defining strategies to restore these habitats
- Technical assistance to concession holders for producing mangrove seedlings and accessing markets generated as a result of the MAE´s mandate.

Activity 1.2.2 Promote reforestation/regeneration

Reforestation activities implemented by the Project in FY10 included establishing nurseries in the Bunche, Galera and San Francisco watersheds and in the Ayampe River watershed. The Project will continue to pursue reforestation efforts using these nurseries as part of the strategy to promote and develop integrated farms with a focus on micro watersheds in areas related to the RM Galera San Francisco.

This year, the Project will focus on linking public initiatives (such as ProForestal or the new organization that replaces ProForestal)) and the private sector (forest companies) to promote sustainable plantations in upper areas of the Galera, Bunche and San Francisco watersheds. It will encourage converting pasturelands to woodlands populated by native species for small scale commercial sales. The Project will also promote and support provincial and municipal government-sponsored reforestation programs using native species.

Key actions for Activity 1.2.2

- Connect cattle ranchers with forest companies for commercial plantations of native species.
- Support ProForestal's initiatives and facilitate access to the program by farmers and landowners in deforested areas.
- Provide technical assistance with reforestation to provincial, municipal and parochial governments to help them target reforestation in critical areas.
- Promote reforestation activities on integrated farms.

Strategy 1.3.: Public policy advocacy

The Project advocates public policies that foster good resource management and create a legal and institutional framework for biodiversity conservation.

Activity 1.3.1 Provide technical assistance for the review and reformulation of policies and programs related to biodiversity conservation and management

The Project has responded to MAE and USAID requests to review and analyze forestry policy. The Project will continue to provide technical assistance with forestry legislation contingent on additional funding and promote programs related to Project activities. It will also provide support to provincial, municipal and parochial governments on environmental issues.

Key actions for Activity 1.3.1

The list below describes some of the key actions that the Project will continue to support:

- Continue to support the National Climate Change Strategy.
- Continue to support management of PNM, Reserva Marino Costera Galera San Francisco, RE Manglares Churute and RPF Manglares El Salado.
- Continue to support access to Socio Bosque and promote the program.
- Promote Pro Forestal (or the new organization that will replace Pro Forestal) by establishing ties with farmers and other users.
- Continue to support the development of a management plan for Reserva Marina Galera San Francisco and the implementation of priority actions.
- Support mangrove concessions (by providing technical assistance and promoting the establishment of new mangrove concessions).
- Technical assistance to provincial, municipal and parochial governments (local environmental planning).
- Support the review and development of a new forestry legal framework for Ecuador[2].
- Provide technical support to the Provincial Government of Guayas in obtaining the MAE's declaration of a new protected area in the Gulf of Guayaquil (potentially Don Goyo or/and Cerrito de los Morreños).

Threat 2: Climate change

Climate change due to natural and anthropogenic causes can exert pressure on ecosystems, habitats and species, including human populations. The impacts of climate change include changes in run-off water, altered flowering patterns, floods and droughts.

Anthropogenic activities influence climate change through the release of atmospheric carbon: for example, deforestation and slash-and-burn techniques exacerbate the greenhouse effect.

Strategy 2.1.: Establish and implement climate change response and adaptation measures

In response to a request from the MAE´s Sub-Secretariates for Climate Change and for Coastal and Marine Management, the Project has been supporting a vulnerability

[2] This activity is in response to the request from the MAE and is subject to additional funding.

analysis to develop adaptation measures in response to climate change in the RPF Manglares El Salado.
The Project will continue to support the study and development of climate change response and adaptation activities in RPF Manglares El Salado, as well as the implementation of critical actions in the RPF Manglares El Salado and PNM.

Activity 2.1.1 Conduct vulnerability analysis, design and implement adaptation measures

In April 2010, the Project began a vulnerability analysis of the Reserva de Producción Faunística El Salado. The Instituto Nacional de Meteorología en Hidrología (INAMHI) has completed a similar study for PNM. Based on these analyses, the project will develop adaptation measures for both.

Key actions for Activity 2.1.1

- Design adaptation measures based on the findings of the study on climate, socioeconomic and environmental vulnerability on the Reserva de Producción Faunística El Salado.
- Design and implement select adaptation measures in PNM based on the findings of the vulnerability study conducted by INAMHI.
- Prepare a comparative analysis of the vulnerability studies and adaptation measures to be implemented on the Reserva de Producción Faunística Manglares El Salado and in Parque Nacional Machalilla.

Strategy 2.2.: Reduction of greenhouse gases and carbon sink conservation

This strategy does not include its own activities, but instead ties in to other Project activities that promote best practices (such as changing slash-and-burn practices) and conservation of carbon sinks by preserving forest remnants and promoting restoration and reforestation. The work plan's activities that relate to this strategy are:

1.1.2. Promote forest management and conservation (timber and non-timber forest products)
1.1.3. Strengthen mangrove/concession management
1.2.1. Foment mangrove recovery
1.2.2. Promote reforestation/regeneration

PIR 2: Improved Local livelihoods

Threat 3: Lack of economic alternatives

One of the greatest threats to biodiversity in Project intervention areas is the lack of economic alternatives that leads to the unsustainable use of natural resources. The income of the majority of rural families living in biologically rich areas places them below the poverty line, with some families earning as little or less than U.S. $ 1.00 per person/per day. Living in remote areas without access to credit or markets, local residents frequently focus on opportunity costs (particularly illegal logging, farming and livestock) mainly for self-consumption. These activities bring about changes in land usage and residents generally face obstacles in trying to market or sell any of the products not consumed by their family.

Strategy 3.1: Development and promotion of market-based economic alternatives and economic incentives for critical habitat conservation

To reduce this threat, the Project will continue to focus on generating economic initiatives based on existing biodiversity. One example of a successful link between habitat and ecosystem conservation and economic resource generation that the Project promoted during FY10 is the mangrove concessions, which have generated economic resources through the harvesting of red crab. Other examples include tagua palm nuts and tourism. During FY11, the Project will also support microenterprises that combine biodiversity conservation with income generation, for instance pulp-producing microenterprises.

The project will continue to strengthen the red crab value chain

Activity 3.1.1 Facilitate access to environmentally responsible markets and support for microenterprise

The Project will continue to facilitate market access for products associated with, or that promote, biodiversity conservation. It will approach this from two angles: 1) by strengthening value chains by connecting producers to anchor firms and to markets based on the "honest broker" principle; and 2) by providing technical assistance for microenterprises working with products such us red crab, tagua, kapok, and tourism which depend on biodiversity conservation.

Key actions for Activity 3.1.1

- Facilitate linkages and developing commercial relationships (and needed follow-up) between farmers implementing best environmental practices and responsible markets (such as hotels) in the watershed related to the RM Galera San Francisco. Products include tropical fruit produced in 38 integral farms belonging to members of EcoCacao, an organization that has archived organic certification.
- Support implementation of critical activities in the crab pulp business plan for 6 de Julio, subject to a social feasibility study of the processing plant model.
- Support implementation of critical activities included in the community-based tourism business plan for Galera San Francisco.
- Promote nature tourism, such as activities related to birding and promoting the Ayampe watershed among local hotels and in the Machalilla National Park.
- Strengthen value chains for products such as red crab, tagua, kapok, tourism, which depend on biodiversity conservation.

Activity 3.1.2 Develop economic incentives for conservation

The Project also supported income-generation programs and key actions through conservation incentives in FY10. Examples include imparting best practices through field schools and facilitating market access (including the Jipijapa municipal market and hotels) for farmers who have signed conservation agreements.

Other actions include access to markets for agricultural products produced by farmers who have signed conservation agreements or who apply best environmental practices. The Project will explore additional potential economic conservation incentive mechanisms in FY11.

Key actions for Activity 3.1.2

- Develop and implement incentives for farmers who implement best environmental practices and provide technical support to the ones that received incentives in the past year, like farmers who got access to the municipal market in Jipijapa. In FY10 the Project obtained a commitment on behalf of the Municipality of Jipijapa to provide space in the municipal market to farmers working with the Project. By accessing the market farmers will sell directly to end-buyers without having to depend on intermediaries. The Project signed conservation agreements with 40 farmers that in turn committed to implement best practices in conservation (e.g. conserving forests, not expanding areas of monocultures, reducing the use of agrochemicals). Next steps include supporting farmers in this transition and in organizing themselves, as well as providing technical assistance to the municipality to monitor the farmers` fulfillment of commitments.
- Identify legal and economic incentives for conservation under current Ecuadorian legislation. There are a number of opportunities for economic incentives for conservation that can be explored, ranging from taxes added to car licenses to voluntary payments from private enterprises. The Project will explore at least 2 opportunities, develop the mechanism and depending on the scope implement key activities

The project will continue to provide technical assistance needed to access and maintain Socio Bosque´s economic conservation incentives

Activity 3.1.3 Support accessing and maintaining Socio Bosque's incentives

Since its inception, the Project has supported the Socio Bosque program as a mechanism to create an economic incentive for communities in high biodiversity forest areas in the Gran Reserva Chachi and its buffer zone and in the RM Galera San Francisco river basins and the Ayampe River watershed. The Project will continue to provide technical assistance to Socio Bosque beneficiaries who joined the

program last year and will facilitate access to the program for new landowners in priority areas (land bordering RE Cotacahi Cayapas within the Gran Reserva Chachi such as Tesjpi, San Miguel Negro y Viruela and in close proximity to PN Machalilla such as Comunas Río Blanco and San Francisco).

Key actions for Activity 3.1.3

- Promote Socio Bosque program.
- Provide technical assistance for land titling.
- Provide technical assistance for accessing to Socio Bosque.
- Provide technical assistance for developing investment plans and for monitoring
- Provide technical assistance for updating investment plans and preparing quarterly reports required by Socio Bosque.

PIR 3 Partnerships formed for ongoing support for biodiversity conservation

Threat 4: Insufficient institutional capacity for biodiversity conservation

The MAE has made significant efforts in the area of biodiversity conservation in recent years despite its limited budget. It has been unable however, to implement all needed activities, especially those relating to managing protected areas, which weakens both management and policy-making. Other government agencies such as the Ministry of Tourism (MINTUR) and Ministry of Agriculture, Livestock, Aquaculture, and Fisheries (MAGAP) are in similar circumstances.

Sectional governments sometimes fail to include biodiversity conservation in their planning and management processes and this creates gaps at the regulatory and planning levels that pose a threat to biodiversity conservation.

Another dimension of this threat is that many of the resources that might be earmarked for biodiversity conservation get lost, are duplicated or are not sustained over time due to poor inter-institutional coordination, which undermines the effectiveness of conservation activities.

Strategy 4.1 Strengthen management of protected areas

The Project will focus on providing technical assistance and supporting directors of protected areas. High level advisory services will be provided based on the needs of the directors of each area and carried out pursuant to a specific work plan. Technical advisors will focus assistance on activities related to Project goals.

The Project will also provide technical assistance as necessary to the MAE's regional directors. High-level technical assistance to the MAE will focus on policy-making.

Activity 4.1.1 Build institutional capacity

The Project will provide technical assistance through advisors experienced in the management of protected areas. These advisors will offer technical assistance to directors of protected areas and to MAE regional directors to support the planning and implementation of critical actions. Finally, the Project will provide support to

provincial, municipal and parochial governments and to grassroots organizations and community-based associations or businesses where opportunities for biodiversity conservation exist.

Key actions for Activity 4.1.1

- Provide technical assistance to improve management and administration of protected areas (RE Manglares Churute, RPF Manglares El Salado, PNM and RM Galera San Francisco).
- Provide technical assistance to strengthen the MAE provincial office in Esmeraldas and the management capacity in the RMC Galera San Francisco.
- Provide technical assistance to provincial, municipal and parochial governments on issues concerning biodiversity conservation and related to Project geographic target areas.
- Coordinate with MINTUR in:
    - Promoting nature-oriented tourism in the Ayampe Watershed, by incorporating this area in the Ruta del Spondylus.
    - Developing the tourism component of the management plan for the RM Galera San Francisco.
- Coordinate with MAGAP in:
    - Reforesting former pasture land in the upper parts of the RM Galera San Francisco watersheds –in coordination with Pro Forestal (or the new organization that will replace Pro Forestal).
    - Controlling the introduced African snail –in collaboration with Agro Calidad.
    - Analyzing and monitoring fishery stock in the Gulf of Guayaquil – potentially in collaboration with INP.

Activity 4.1.2 Design and support implementation of surveillance and monitoring systems

Surveillance and enforcement systems are a priority given their impact on threat reduction, particularly in areas where resource users play an active role. These systems complement the development and promotion of incentives.

The Project will continue to support surveillance and enforcement systems for mangrove concessions in the Gulf of Guayaquil and RE Manglares Churute, and for Socio Bosque, particularly in the Gran Reserva Chachi. It will also study the feasibility of supporting such systems in other Project intervention areas and protected areas. The Project's role in surveillance and enforcement systems is to facilitate and serve as a catalyst for the actions of the responsible institutions and others working in those areas.

This activity includes the surveillance and enforcement system and the forest regency for the Ayampe River watershed as an extension of the surveillance and enforcement system of PNM.

Key actions for Activity 4.1.2

- Facilitate a formal institutional relationship between the National Institute of Fisheries (INP) and mangrove concession-holders in the Gulf of Guayaquil.

- Implement surveillance and enforcement system in the Gulf of Guayaquil (geographic range to be determined) in conjunction with MAE.
- Provide technical assistance for implementing the surveillance and enforcement system designed with Project support in FY10 for the mangrove concessions in Balao, 6 de Julio, Mondragón and the RE Manglares Churute.
- Provide technical assistance for implementing a pilot surveillance and enforcement system for Socio Bosque in the Gran Reserva Chachi.
- Develop and implement a forest surveillance and enforcement system for PNM in the Ayampe River watershed (mentioned under the key actions for activity 1.1.2).

Strategy 4.2.: Improve inter-institutional communication and coordination

This strategy is designed to strengthen existing and promote new conservation coalitions. These coalitions are platforms to coordinate and plan conservation efforts among a wide range of stakeholders within specific Project areas. The strategy is also to promote direct partnerships with public, private and community stakeholders to leverage funds and to implement Project activities.

Activity 4.2.1 Strengthen coalitions/partnerships

During the first year of implementation, the Project supported an initiative by the MAE's Sub-Secretariat of Coastal and Marine Management to create partnerships involving public, private and community stakeholders in the Ayampe River watershed and in the RM Galera San Francisco and its watersheds. Key partnerships also have been established with stakeholders on the Gran Reserva Chachi. The Project will continue to support these conservation platforms to strengthen actions and avoid duplication of efforts.

Key actions for Activity 4.2.1

- Strengthen major conservation coalitions –for Galera San Francisco and Ayampe- and active partnerships with stakeholders from the public, community and private sector by supporting and facilitating events and meetings.
- Bring new stakeholders into existing coalitions –Galera San Francisco and Ayampe.
- Develop one new coalitions and partnerships in the Gulf of Guayaquil, with key stakeholders such as the Municipality of Guayaquil, Provincial Government of Guayas, MAE, local communities, mangrove concessionaries, associations of shrimp farmers, INP, MAGAP, CIIFEN, Ecuadorian Navy, NGOs, academia among others.
- Develop a conservation coalition on the Gran Reserva Chachi.

Activity 4.2.2 Obtain co-financing and/or leverage funds

The Project has a dual approach in this activity, as follows:

1. A small grants program for local stakeholders to support actions thatcontribute to achieving Project activities, such as promoting microenterprises or supporting mangrove concessions to fulfill the responsibilities assumed for managing and protecting the mangroves under their custody.

2. Leveraging funds from new sources -from other organizations or projects- to ensure the sustainability of key actions once the Project has ended.
3. Provide follow-up to partnerships forms with other organizations during FY10.

This fiscal year, the Project will work with regional deputy directors to identify opportunities for small grants and for leveraging funds for this program. It will also continue to leverage funds with other organizations.

Key actions for Activity 4.2.2

- The Project will continue to offer small grants as a means of achieving its activities and leveraging funds based on proposals submitted by partners and subject to the review of regional deputy directors.
- Continue to pursue key actions that ensure leveraging of funds.

4. WORK PLAN BY GEOGRAPHIC AREA

Continuing to work in areas selected in FY10 will enable the Project to target its efforts and provide continuity to the actions implemented during the first year.

The tables below summarize the expected results, key actions, geographic areas and sites, timelines, and responsible staff/implementing partner.

4.1 Gran Reserva Chachi and its buffer zone

Expected Results	Key actions	Geographic area/site	Quarter				Responsible Staff/ Implementing Partner
			1	2	3	4	
A total of 13,440.35 Has. of forest continue to benefit from Socio Bosque incentives and 3,000 Has. join the Socio Bosque incentives program	• Support individuals and communities in maintaining Socio Bosque's incentives by meeting program requirements (such as updating investment plans, and preparing quarterly technical and financial reports, etc) • Support meeting requirement to access Socio Bosque incentives for conserving natural forests.	Calle Mansa, Capulí, Guadual, Sabalito and Playa de Oro. San Miguel Negro, Viruela, Majua and Centro Chachi Tsejpi Hoja Blanca	X	X	X	X	Altrópico
Surveillance and enforcement systems operating throughout the Gran Reserva Chachi	• Support for implementing surveillance and enforcement systems	Calle Mansa, Capulí, Guadual, Sabalito and Playa de Oro		X	X	X	Altrópico
Coordination mechanisms to foster biodiversity conservation are functional	• Follow-up on partnerships between Socio Bosque and FECCHE • Promote the creation of a coalition for surveillance and enforcement on Gran Reserva Chachi territory	Gran Reserva Chachi	X	X	X	X	Altrópico

4.2 Reserva Marina Galera San Francisco and related watersheds

Expected Results	Key actions	Geographic area/site	Quarter				Responsible Staff/ Implementing Partner
			1	2	3	4	
Five hundred (500) Has. Remain in the Socio Bosque program	• Support Socio Bosque's longevity. • Assistance for land titling subject to an application to Socio Bosque.	San Francisco River micro watershed. Chipa area	X	X	X	X	Ecolex
Parish boards are taking measures to reduce threats to biodiversity based on implementation of environmental management plans for watersheds and beaches.	• Support for the implementation of the POAM (including training, support and implementation of critical actions).	Galera, Quingue and San Francisco del Cabo parishes.	X	X	X	X	Ecolex
Conservation incentives have been identified and found to be feasible and are being implemented in at least 1 case	• Identification of legal/economic incentives under existing law. • Design of new incentives for biodiversity conservation.	Global	X	X	X	X	Ecolex
Two hundred (200) families are applying best practices for natural resources management	• Implementation of new field schools for training in best practices and agroforestry systems designed to conserve critical habitats • Follow-up on improved practices with field school participants from FY10.	Quinge and Caimito micro watersheds 1) Estero de Plátano, 2) Galerita, 3) Caimito, 4) Cabo de San Francisco, 5) Quingue, 6) Galera, 7) El Aguacate.	X	X	X	X	CyD
Tagua nut harvesters have adopted sustainable management practices	• Implementation of minimum management practices that ensure sustainable tagua nut harvesting.	Tagua palm producers from the following communities 1) Estero de Plátano, 2) Galerita, 3) Caimito, 4) Cabo de San Francisco, 5) Quingue, 6) Galera, and 7) El Aguacate.	X	X	X	X	Deputy regional director for Esmeraldas
Two hundred (200) families have improved their livelihoods by implementing economic alternatives	• Follow-up and support for the development of commercial linkages between farmers and the market.	Ecocacao: 1) Estero de Plátano, 2) Galerita, 3) Caimito, 4) Cabo de San Francisco, 5) Quingue, 6) Galera, 7) El Aguacate.			X	X	Deputy regional director for Esmeraldas
One hundred fifty (150) families and 2 parish boards have implemented best practices for protecting water sources and riverbank	• Technical assistance for families provided through field schools (ECAs) and townships for implementation of best practices for the protection of	Quingue Galera San Francisco	X	X	X	X	CyD

vegetation in micro watersheds		water sources and riverbank vegetation.						
The MAE's Esmeraldas regional office strengthened	•	Technical assistance in Project related areas	Galera San Francisco	X	X	X	X	Protected Areas Advisor for RMGSF
Development of a business plan for a community-based tourist product for RE Galera San Francisco.	•	Product definition, demand analysis, financial analysis and business and marketing plan	Caimito	X				Nazca
Development of the tourism component for RM Galera San Francisco	•	Identification of tourism attractions, potential activities, and zone the area based on the findings.	Galera San Francisco	X				Nazca
	•	Development of a tourism management plan based in a dynamic tourism system (SIMAVIS)						
Area of degraded terrestrial habitats (1200 Ha) in recovery	•	Technical assistance for the establishment of forest plantations working with small scale forest companies and/or government programs in cattle areas of the upper Galera San Francisco watershed	Upper Galera watershed, Quitito Sector.	X	X	X	X	RA
Control of the introduced African snail	•	In collaboration with AgroCalidad, provide technical assistance on the control of the species and promotion of effective methods of control	Galera San Francisco			X	X	CyD
1 conservation coalition strengthened and functional	•	Follow-up on the conservation coalition for Galera San Francisco, including coordination and information meetings	Galera San Francisco	X	X	X	X	Deputy regional director for Esmeraldas

4.3 Parque Nacional Machalilla and Ayampe River Watershed

Expected Results	Key actions	Geographic area/site	Quarter				Responsible Staff/ Implementing Partner
			1	2	3	4	
Seven thousand hectares (7,000 Has.) of forest remnants protected under the Socio Bosque program (4,028.35 Has. remain in the program and 3,000 Has. join it).	• Support individuals and communities in maintaining Socio Bosque's incentives by meeting program requirements (such as updating investment plans, and preparing quarterly technical and financial reports, etc) • Support meeting requirement to access Socio Bosque incentives for conserving natural forests.	Río Blanco and San Francisco communities; farmers from Las Delicias Farmers from El Sombrero, La Crucita, El Jaile, La Vaca, Vueltas Largas and the Loma Alta community	X	X	X	X	Ecolex
Local governments are taking measures to reduce threats to biodiversity based on the implementation of environmental management plans for watersheds and beaches.	• Support for the implementing POAM (including training, follow-up and implementation of priority activities critical to biodiversity conservation, as well as communications)	Throughout the area	X	X	X		Ecolex
Conservation incentives have been identified and found to be feasible and are being implemented in at least 1 case	• Identify legal/economic incentives under existing law • Design new incentives for biodiversity conservation	Global	X	X	X	X	Ecolex
The MAE has current information to craft a policy for management and regularization of land tenure inside and along the boundaries of PNM	• Update information on land tenure inside and along the boundaries of the PNM in the Ayampe watershed based on secondary sources and on-site verification	The area of Parque Nacional Machalilla located within the Ayampe watershed.	X	X			Ecolex, Protected Areas Advisor for PNM
Two hundred (200) families are implementing best practices for natural resource management	• Implementation of new field schools for training in production topics and agroforestry systems designed to conserve critical habitats • Follow-up with participants in the field schools held in FY10 regarding implementation of best practices.	1) Vueltas Largas, 2) San José de Piñas, 3) Pedro Pablo Gómez, 4) Las Delicias, 5) Casas Viejas, 6) El Sombrero, 7) La Crucita, 8) Las Tunas, 9) San Pablo and 10) Pedro Pablo Gómez	X	X	X		CyD

Tagua palm producers have adopted sustainable management practices	• Implementation of minimum required management practices that ensure sustainable tagua palm exploitation	San José de Piñas, Palmital and Las Delicias.	X	X	X	X	Deputy regional director for Ayampe
At least one hundred (100) families have improved their livelihoods through the implementation of economic alternatives	• Follow up and support for the development of commercial ties between farmers and producers and the market	San José de Piñas, Palmital and Las Delicias.	X	X	X	X	Deputy regional director for Ayampe
250 families and 1 parish board have implemented best practices for the protection of water sources and riverbank vegetation	• Technical assistance provided to families through field schools (ECAs) and township boards for the implementation of best practices for the protection of water sources and riverbank vegetation	Pedro Pablo Gómez	X	X	X		CyD
Three thousand (3,000) Has. of land in the Ayampe watershed are under a sustainable forest management system	• Implementation of sustainable forest management practices (which includes determining the number of beneficiaries, a forest potential study, establishment of a regency and commercial relations)	Forest remnants in San José de Piñas, Vueltas Largas and El Sombrero.	X	X	X	X	RA
The 61,000 Has. of territory in the Ayampe watershed are subject to a surveillance and enforcement system under MAE jurisdiction	• Technical assistance for surveillance and enforcement provided to the MAE	Entire watershed			X	X	RA
One (1) management committee is implementing its plan of action for the management and zoning of the lower Ayampe watershed.	• Support the beach management committee in implementing its plan of action	Las Tunas, Puerto Rico and Ayampe.	X	X	X	X	EcoBiotec
Management of PNM strengthened	• Technical assistance in Project related areas • Update information on land tenure inside and along the boundaries of PNM in the Ayampe watershed. • Technical assistance to design a policy for the management and regularization of land tenure inside and along the boundaries of the PNM. • Complement MAE effort to demarcate the boundaries of PNM. • Support the MAE in updating a management plan	Puerto López Parque Nacional Machalilla	X	X	X	X	Protected Areas Advisor for PNM

	for Parque Nacional Machalilla.						
Develop the Ayampe watershed as a tourist destination	• Promote the watershed as a tourism destination with the support of MAE and MINTUR in a joint effort with hotel owners in Puerto López.	Puerto López		X	X	X	DCoP Deputy director Regional for Ayampe
Follow-up on market access for environmentally responsible producers	• Support the Jipijapa municipality in repaving a section of its market especially for environmentally responsible products • Technical assistance to the municipality to monitor the farmers` fulfillment of commitments • Technical assistance to farmers	Jipijapa Farmers from San José de Piñas, Las Delicias, and Pedro Pablo Gómez	X	X			DCoP Regional deputy director for Ayampe
Search for new products related to biodiversity, with market access	• Strengthen tagua nut value chain • Identification and linkages with markets for products such as ornamental plants and kapok	Middle and upper watershed		X	X	X	DCoP
1 conservation coalition strengthened and functioning	• Follow-up on the conservation coalition for the Ayampe River watershed, including coordination and information meetings	Ayampe River Watershed	X	X	X	X	Regional deputy director for Ayampe
Implementation of at least 2 critical actions identified in the INAMHI vulnerability and adaptation to climate change study	Implementation of critical activities in response to climate change in PNM and its area of influence	Parque Nacional Machalilla and area of influence		X	X	X	CIIFEN

4.4 Gulf of Guayaquil:

This area includes the Reserva de Producción de Fauna Manglares el Salado and the Reserva Ecológica Manglares Churute with their buffer zones and mangrove concessions

Expected Results	Key actions	Geographic area/site	Quarter				Responsible Staff/ Implementing Partner
			1	2	3	4	
Mangrove concessions are implementing management plans and fulfilling their commitments pursuant to agreements on "Sustainable use and stewardship of mangrove areas by ancestral users"	• Technical assistance in mangrove management for concession holders with over two years of experience	6 de Julio, Balao and Nuevo Porvenir	X	X	X	X	EcoBiotec
	• Technical assistance for concessions in the southern part of Mondragón Island	Aso. Buena Vista Cooperativa El Conchal Cooperativa Mondragón Pre-cooperativa Puerto La Cruz	X	X			BioEducar
At least one hundred (100) families involved in mangrove management will have improved their livelihoods through access to environmentally responsible markets and/or support for microenterprises	• Technical assistance to determine the social feasibility/institutional capacity for installing and activating a community crab pulp processing plant in 6 de Julio.	6 de Julio	X				EcoBiotec
	• Provide technical assistance and monitoring based on social feasibility/institutional capacity • Monitor and strengthen commercial relations between crabbers and firms	6 de Julio	X	X	X	X	EcoBiotec
Transfer of a surveillance and enforcement system to mangrove concession holders and RE Manglares Churute	• Implementation of critical actions in the surveillance and enforcement plan	6 de Julio, Balao and Mondragón	X	X			EcoBiotec
Management of RE Manglares Churute and Manglares El Salado strengthened	• Technical assistance in Project related areas • Support La Reserva Manglares Churute in the implementation of a surveillance and control system in conjunction with the 15 Crab fishermen Associations • Support in examining agreements on the use of fishing areas granted by the Reserva to 15 crabber organizations	Manglares Churute and El Salado	X	X	X	X	Protected Areas Advisor for Churute/El Salado

	working within the Reserva Manglares Churute and development of recommendations for a fishing zoning policy for the area. • Support the Reserva Manglares El Salado in the design of a surveillance and enforcement system; environmental education campaign, boundary revision and support in expanding the Reserva.						
Follow-up on the surveillance and enforcement system of 7 concession holders in the Gulf and in RE Manglares Churute	• Technical assistance, follow-up and monitoring of the surveillance and enforcement system.	Manglares Churute and El Salado		X	X	X	Protected areas expert
One (1) crab stock analysis, with management measures implemented by at least three (3) mangrove concessions and RE Manglares Churute	• Stock analysis, development of monitoring and enforcement systems for crab and mollusks; implementation of critical actions stemming from the stock analysis.	Mangrove concessions in the Gulf of Guayaquil and Manglares Churute	X	X	X	X	Protected areas expert, regional deputy director
5000 hectares of mangrove in the Gulf of Guayaquil are protected under a management system (concession, Ramsar site, etc.).	• Provide technical support to the Provincial Government of Guayas in obtaining the MAE's declaration of a new protected area in the Gulf of Guayaquil	Potentially Don Goyo or/and Cerrito de los Morreños	X	X	X		Protected areas expert
One (1) conservation coalition created and functioning	• Creation and support of a stakeholders' coalition in the Gulf of Guayaquil for biodiversity conservation	Gulf of Guayaquil	X	X	X	X	Protected areas expert, regional deputy director
At least one (1) new mangrove concession established	• Technical and legal assistance to help at least one community that depend on crabbing obtain mangrove concessions	Potencial beneficiaries are at least one of the following Puerto Roma and Río de Agua Viva.	X	X	X		Protected areas expert
Mangrove restoration in at least one (1) shrimp farm in RE Manglares Churute (To be determined)	• Technical assistance to the SGMC in mangrove reforestation of shrimp farms in the framework of Executive Order 1391, once illegal shrimp farmers leave the Reserve	To be determined	X	X	X		Protected areas expert
Vulnerability analysis and responses to climate change developed in the Reserva de Producción Faunística El Salado	• Design of adaptation measures based on the findings from the climate, socioeconomic and environmental vulnerability study in RPF El Salado	Reserva de Producción Faunística El Salado	X				CIIFEN
Implementation of at least 2 critical activities stemming from the vulnerability analysis (see previous result)	• Implement priority adaptation actions in El Salado • Implement priority adaptation actions in PNM	RPF Manglares El Salado PNM		X	X	X	CIIFEN

5. CROSS-CUTTING ACTIVITIES

In addition to its local interventions, the Project has been working at the national level on a number of issues with potential relevance beyond the target areas. The following are among the activities that the Project supported in FY10 and will continue to support in FY11:

- Coordination with ministries in project-related policies and strategies as requested
- Continue to support the National Climate Change Strategy.
- Continue to support management of PNM, RM Galera San Francisco, RE Manglares Churute and RPF Manglares El Salado.
- Continue to support access to Socio Bosque and to promote the program.
- Promote government conservation incentives by establishing ties with farmers and other users (to be determined with the MAE).
- Technical assistance for provincial, municipal and parochial governments (environmental planning).
- Support the review and development of a new legal framework for forests.[3]
- Document and disseminate technical materials, success stories, lessons learned, and foster their replication.

[3] This activity is in response to the request from the MAE and is subject to additional funding from USAID.

6. ENVIRONMENTAL COMPLIANCE

In FY11 the Project will continue complying with USAID environmental regulations through following procedures established in the following Fichas de Revisión Ambiental (FRAs or Environmental Review Worksheet): 1.) Agroforestry and reforestation, 2.) Mangrove management and red crab harvesting and 3.) Integral farms. In FY11, the Project will potentially provide technical assistance for small-scale forest management system, in the Ayampe watershed. This activity will depend on an exploratory forest inventory, which will provide an analysis of supply and demand for timber and non-timber forest products. Depending upon this inventory, the Project will develop another FRA for any activity that requires one.

Activities will be updated in Environmental Management and Information System (Sistema de Información y Gestión Ambiental or SIGA) in coordination with implementing partners, and reported in semiannual reports.