

PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Medium-sized Project TYPE OF TRUST FUND: GEF Trust Fund

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PART I: PROJECT INFORMATION

Project Title:	1 0 0	Improving mangrove conservation across the Eastern Tropical Pacific Seascape (ETPS) through coordinated regional and national strategy development and implementation				
Country(ies):	Eastern Tropical Pacific Seascape (ETPS) including Costa Rica, Panama, Colombia, Ecuador	GEF Project ID: ¹				
GEF Agency(ies):	Conservation International (select) (select)	GEF Agency Project ID:				
Other Executing Partner(s):	The United Nations Educational, Scientific and Cultural Organization (UNESCO) Regional Office in Quito (Ecuador)	Submission Date:	2014-04-16			
GEF Focal Area (s):	International Waters	Project Duration (Months)	24 months			
Name of parent program (if applicable): • For SFM/REDD+ • For SGP • For PPP		Project Agency Fee (\$):	171,073			

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK²:

Focal Area Objectives	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
IW-3 (select)	GEFTF	950,405	3,375,000
IW-2 (select)	GEFTF	950,405	3,375,000
(select) (select)	GEFTF		
(select) (select)	(select)		
Total Pro	ject Cost	1,900,810	6,750,000

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

To implement a comprehensive, multi-government ratified and regionally articulated mangrove conservation strategy in the Eastern Tropical Pacific Seascape (ETPS) countries of Costa Rica, Panama, Colombia and Ecuador through on-the-ground management activities and the strengthening of national and local policies that inform ridge-to-reef development planning and practices relevant to mangrove conservation.

Expected Outputs	Gran t	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant	Indicative Cofinanci
	Type ³	Outcomes			Amount	ng

¹ Project ID number will be assigned by GEFSEC.

Refer to the reference attached on the <u>Focal Area Results Framework and LDCF/SCCF Framework</u> when completing Table A.

					(\$)	(\$)
Component 1: Regional mangrove strategy development and implementation: Complete and support implementation of a government-led mangrove strategy by Y2Q4.	TA	1. The ETPS countries approve the regional strategy for the conservation of mangroves adopted by the Comisión Permanente del Pacífico Sur - Permanent Commission for the South Pacific (CPPS), to implement key mangrove conservation and restoration measures identified in this project, by Y2Q4	1.1. A Mangrove Technical Working Group comprised of leading mangrove experts is created within CPPS to advise on the completion of the regional strategy for the conservation of mangrove Y1Q3. 1.2. At least two meetings of a Mangrove Technical Working Group are held to contribute to regional strategy for the conservation of mangrove by Y2Q2.	GEFTF	726,424	713,552
		2. Costa Rica participates in the development of the regional strategy for the conservation of the mangroves via an agreement as a Cooperating Non-Party to the CPPS convention by Y1Q3. 3. Policy makers and national mangrove managers from at least three countries have the tools and capacity strengthen the implementation of the regional mangrove strategy by Y2Q4.	1.3. The updated regional strategy for the conservation of mangroves is ratified by Ministerial level authorities and published by Y2Q1. 2.1. MOU signed between CPPS and Costa Rica ratifying Costa Rica's participation in the regional strategy for the conservation of mangroves as a Cooperating Non-Party by Y1Q3. 3.1. At least two transboundary learning and cooperation exchanges between project countries and at least one international exchange with other			

 $^{^{3}\,\,}$ TA includes capacity building, and research and development.

<u> </u>						
			countries with			
			similar mangrove conservation			
			challenges			
			completed by Y2Q4.			
			completed by 12Q4.			
			3.2 Communication			
			products on			
			mangrove			
			conservation (policy,			
			regulations, field			
			implementation and			
			other related issues)			
			will be completed			
			and made available			
			to policy makers and			
			stakeholders by			
Component 2:	TA	1. At least two ETPS	Y1Q3. 1.1. Updated	GEFTF	415,099	1,427,104
Component 2: National mangrove	171	countries have	national mangrove	OLFIF	413,039	1,44/,104
action plans and		updated national	action plans are			
policy		mangrove action	formally ratified in			
strengthening:		plans in line with the	at least two ETPS			
National regulations		regional strategy and	countries by Y2Q4.			
and national		that addresses	•			
mangrove action		pressure on				
plans are improved		mangroves from				
and made consistent		sources across the				
with the regional		ridge-to-reef				
mangrove strategy		(watershed) scale by				
such that at least 736,000 ha. of		Y2Q4.				
priority mangroves		2. At least two ETPS	2.1. A national			
are put under an		countries have passed	mangrove policy and			
improved policy		stronger regulations	threat assessment for			
conducive to more		and incentives	each ETPS country			
effective on-the-		conducive to	to orient economic			
ground conservation		mangrove	valuation work,			
by Y2Q4.		conservation, such as	inform policy gaps,			
		establishing stricter	and identify			
		pollution controls,	outreach needs and			
		making	priorities in each			
		Environmental	ETPS country			
		Impact Assessments	completed by Y1Q4.			
		mandatory, clarifying tenure and use rights	2.2. Legislation			
		for local	passed to strengthen			
		communities,	the protection of			
		establishing incentive	mangroves in at least			
		schemes for effective	two ETPS countries			
		management or	completed by Y2Q4.			
		establishing more				
ı						

		mangrove destruction by Y2Q4.				
Component 3: Local conservation action: Local policy and management plans are strengthened and made consistent with national plans and the regional mangrove strategy in 2-5 sites that have field conservation measures underway to reduce degradation and increase mangrove coverage through restoration efforts.	Inv	1. At least two key mangrove ecosystems have updated management plans and/or_new local development plans consistent with updated national and regional strategies, taking into account the results of economic valuation studies from this and related projects and building on increased national capacity and support to protect mangroves in a comprehensive ridgeto-reef context by Y2Q4. 2. Economic evaluation tools and methodologies developed through the GEF-UNEP Blue Forests and other related projects are tested in at least two ETPS countries during their development phases to maximize applicability to policy and management at local to national scales by Y2Q3. 3. Outreach and capacity building for at least 30 local policymakers and stakeholders finalized by Y2Q4. 4. At least two demonstration	1.1. At least two local management plans and/or local development plans for priority mangrove sites are formally ratified by local authorities by Y2Q4. 2.1 Final report on the economic valuation of ecosystem goods and services provided by mangroves in at least two project sites, including a) fisheries, b) nature-based tourism, c) coastal protection, d) maintaining water quality and bioremediation, and e) carbon storage completed by Y2Q1. 2.2 Summary outreach document and associated strategy for making it most relevant to decision-makers on the methodology(ies) and toolkit(s) assessed and used to guide the implementation and policy application of economic valuation of mangrove ecosystem services that include cost-benefit analyses of alternative management	GEFTF	588,058	4,278,000

projects that provide	options, based on			1
incentives and/or that	existing initiatives			
create business	including the GEF-			
opportunities	UNEP Blue Forest			
associated with the	project and			
conservation and	WAVES, completed			
sustainable use of	by Y2Q4.			
mangroves initiated				
in at least two	2.3 Mangrove			
selected sites by	valuation, policy and			
Y2Q4.	development			
	planning outcomes			
5. Local stakeholders	and field			
participating in	conservation			
demonstration	communicated			
projects increased by	broadly, including			
20% over the project	through: distribution			
beginning baseline by	of communications			
Y2Q4.	materials; an			
	interactive			
	knowledge-sharing			
	platform;			
	presentation in at			
	least three national,			
	regional and global			
	conservation,			
	science, policy and			
	related fora (e.g.:			
	Ramsar, CBD,			
	IMPAC, Blue			
	Carbon Working			
	Group, ITTO);			
	participating in the			
	IWLearn mechanism			
	(including allocation			
	of 1% of project			
	budget for this			
	purpose), and			
	presentation to			
	policy makers in			
	other mangrove			
	relevant countries by			
	Y2Q4.			
	2 1 141			
	3.1 At least two			
	training events are			
	conducted per ETPS			
	country with at least			
	15 participants each			
	to build skills			
	relating to field			
	conservation measures and			
1	i measures and	I		1

measures and

	restoration of mangroves by Y2Q4. 4.1. MOUs with local associations that outline commitments to participating in mangrove conservation and restoration activities signed by Y1Q3.			
(select)		(select)		
Subtotal			1,729,581	6,418,656
Project Management Cost (PMC) ⁴		(select)	171,229	331,344
Total Project Cost			1,900,810	6,750,000

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
GEF Agency	CI through the Walton Family	Cash	2,500,000
	Foundation		
Other Multilateral Agency (ies)	IADB	Cash	2,000,000
Others	Swedish Lottery	Cash	500,000
Others	CPPS	In-kind	500,000
Other Multilateral Agency (ies)	UNESCO	In-kind	250,000
National Government	Governments of Costa Rica,	Unknown at this stage	1,000,000
	Panama, Colombia and Ecuador		
Total Cofinancing			6,750,000

D. INDICATIVE TRUST FUND RESOURCES (\$) REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (\$) (a)	Agency Fee (\$) (b) ²	Total (\$) c=a+b
(select)	GEFTF	International Waters	Regional:	1,900,810	171,073	2,071,883
			Colombia,			
			Panama,			

⁴ To be calculated as percent of subtotal.

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			Ecuador, Costa			
			Rica			
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total Grant Resources			1,900,810	171,073	2,071,883	

In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

PROJECT PREPARATION GRANT (PPG)⁵ E.

Please check on the appropriate box for PPG as needed for the project according to the GEF Project Grant:

		<u>Amount</u>	Agency Fee
		Requested (\$)	for PPG $(\$)^6$
•	No PPG required.	0	0
•	(upto) \$50k for projects up to & including \$1 million		
•	(upto)\$100k for projects up to & including \$3 million	91000	<u>8</u> 190 <u></u>
•	(upto)\$150k for projects up to & including \$6 million		
•	(upto)\$200k for projects up to & including \$10 million		
•	(upto)\$300k for projects above \$10 million		
			<u></u>

PPG AMOUNT REQUESTED BY AGENCY(IES), FOCAL AREA(S) AND COUNTRY(IES) FOR MFA AND/OR MTF ROJECT ONLY

			Country	(in \$)		
Trust Fund	GEF Agency	Focal Area	Name/ Global	PPG (a)	Agency Fee (b)	
GEF TF	(select)	International Waters	Regional: Colombia, Panama, Ecuador, Costa Rica	91,000	8,190	99,190
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total PPG Amount				91,000	8,190	99,190

MFA: Multi-focal area projects; MTF: Multi-Trust Fund projects.

6 PPG fee percentage follows the percentage of the GEF Project Grant amount requested.

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² Indicate fees related to this project.

On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

PART II: PROJECT JUSTIFICATION⁷

A. PROJECT OVERVIEW

A.1. PROJECT DESCRIPTION. BRIEFLY DESCRIBE THE PROJECT, INCLUDING; 1) THE GLOBAL ENVIRONMENTAL PROBLEMS, ROOT CAUSES AND BARRIERS THAT NEED TO BE ADDRESSED; 2) THE BASELINE SCENARIO AND ANY ASSOCIATED BASELINE PROJECTS, 3) THE PROPOSED ALTERNATIVE SCENARIO, WITH A BRIEF DESCRIPTION OF EXPECTED OUTCOMES AND COMPONENTS OF THE PROJECT, 4) INCREMENTAL/ADDITIONAL COST REASONING AND EXPECTED CONTRIBUTIONS FROM THE BASELINE, THE GEFTF, LDCF/SCCF AND CO-FINANCING; 5) GLOBAL ENVIRONMENTAL BENEFITS (GEFTF, NPIF) AND/OR ADAPTATION BENEFITS (LDCF/SCCF); 6) INNOVATIVENESS, SUSTAINABILITY AND POTENTIAL FOR SCALING UP

1. The global environmental problems, root causes and barriers that need to be addressed: The Eastern Tropical Pacific Seascape (ETPS)

The ETPS spans the national waters, coasts and islands of Costa Rica, Panama, Colombia and Ecuador (2,000,000 km²) (see Map 1). The coastline of the ETPS is unique, lying at the interface of complex oceanic systems and the abundant rivers flowing out from the region's central mountains. The numerous bays, estuaries and gulfs that result from this unique reef-to-ridge configuration are lined with expansive and productive mangrove forests. These mangrove areas provide the ecological connection between the estuarine waters, seagrasses, coral reefs, other marine ecosystems, terrestrial floodplains, and up-river watersheds across the region.



Map 1: The Eastern Tropical Pacific Seascape (ETPS)

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⁷ Part II should not be longer than 5 pages.

Like mangroves globally, the mangrove ecosystems of the ETPS provide a wide range of ecosystem services that are valuable ecological and economic resources for each of the ETPS countries' largest coastal population centers and hundreds of small communities.

- Mangroves are important nursery grounds and breeding sites for both marine and terrestrially associated birds.
- fish, crustaceans, shellfish, reptiles, mammals and commercially important species (Nagelkerken et al 2008). For example, in Panama, up to 60% of shrimp fisheries are based on 5 species, which directly depend on mangroves (Lacerda et al 1993).
- Mangroves, as areas of exceptional scenic beauty, support a growing sector of the region's
 ecotourism industry, which has been designated as a pillar for local and national development in each
 ETPS country. For example, Costa Rica's \$2 billion a year tourism industry is largely built on
 ecotourism.
- Mangroves are natural accumulation sites for sediment, contaminants, and nutrients from upstream terrestrial sources, and hence act to maintain coastal water quality.
- Mangroves are highly efficient at capturing and storing carbon from the atmosphere and ocean, thus
 mitigating climate change. Conversely, when degraded or converted, mangroves areas can become
 large sources of the greenhouse gas carbon dioxide (Pendleton et al 2012, Donato et al 2010).
- The role of mangroves in coastal protection from storms and against coastal erosion and flooding is now well established. Mangrove conservation is therefore an ecosystem based approaches to climate adaptation. For example, recent modeling has shown that the mangroves adjacent to the large city of Guayaquil can if fully forested protect the city from the high climate-change-related coastal flooding risk expected by 2070 (Temmerman et al 2013).

Globally, mangrove forests provide at least US \$1.6 billion each year in ecosystem services and support coastal livelihoods worldwide (Polidoro et. al. 2010).

Environmental problems, root causes and barriers

Despite the importance of mangroves to the ETPS, these ecosystems have been subject to extensive loss and degradation. Regional rates of loss are similar to those in coastal regions globally; over the past 50 years approximately one-third of the world's mangrove forests have been lost with continuing losses estimated at 1-2% annually. In fact, the highest proportion of threatened mangrove species is found along the coasts of Central America, with 40% of the mangrove species present along the Pacific coasts of Costa Rica, Panama and Colombia listed as threatened, and a fifth species *Rhizophora samoensis* is listed as Near Threatened (Polidoro et. al. 2010).

Each of the ETPS countries' largest coastal cities is located in large gulfs with extensive mangrove formations. As each of these cities - Guayaquil (Ecuador), Buenaventura (Colombia), Panama City (Panama), and Puntarenas (Costa Rica) - have expansively grown in recent decades. Consequently mangrove loss and degradation has been increasingly driven by urban expansion, associated industrial and shipping activities, and the waste produced by large coastal populations with inadequate sewage and garbage management infrastructure.

Rapid expansion of aquaculture has also resulted in extensive deforestation in the ETPS from conversion of mangrove forest to shrimp ponds. For example, in the two decades starting in 1980, nearly half of the mangrove area of Ecuador (ca. 80,000 ha) was deforested for various purposes, but particularly for shrimp ponds. Shrimp ponds are the major cause of mangrove decline in Latin America (Lugo 2002).

Significant additional mangrove losses in the region have resulted from exploitation for wood products. Charcoal production is a significant source of mangrove degradation and loss in the region. In Costa Rica up to 1,300 m³ of mangrove charcoal is produced annually, while in Panama this may reach up to 7,400m³. Mangrove bark is a source of tannins for the leather industry in most Latin America countries.

Bark yields range from 1,840 to 4,490 kg/ha in Costa Rica, and total production may reach over 400 tons/year in Panama (Lacerda et al 1993). The need for tannins is the leading cause of mangrove degradation in Panama's Gulf of Chiriquí where local communities have not yet adopted tannin substitutes for the local leather processing industry. In Colombia's Gulf of Tortugas direct exploitation for firewood and the need for construction materials is a leading cause for mangrove loss.

In more rural areas, agricultural expansion replaced mangrove forest with land of marginal value for livestock grazing and rice production. In Costa Rica's Gulf of Nicoya the expansion of rice production has been a leading cause of mangrove loss, and in Panama's Gulf of Chiriquí region the expansion of marginal grazing lands has encroached into coastal mangrove forests.

Apart from direct deforestation itself, degradation of large mangrove areas in the ETPS is being driven by inappropriate landuse practice in upstream watersheds. Diversion of freshwater for irrigation, application of pesticides and herbicides in agricultural lands and farming on steep slopes leading to high erosion rates are major causes of mangrove degradation in the region (Conde & Alarcon, 1993).

Responses to environmental problems affecting the mangroves of the ETPS

As a result of these multiple threats mangrove loss and degradation has continued across the ETPS, provoking considerable concern from the international and national environmental sector and affected local communities. As a result, all four ETPS countries have enacted regulations in an attempt to slow the rates of loss.

In 1996, Costa Rica enacted Forest Law 7575 that outlawed all mangrove extraction and suspended all licensing for additional shrimp ponds. Encouragingly, Costa Rica now has the lowest rate of direct impacts that cause mangrove loss in the ETPS. However, there are still measurable direct losses within mangrove areas and inappropriate upstream land use continues to be serious concern, especially in the highly productive Gulf of Nicoya.

In Ecuador, Resolution 56 establishes a fine of \$89,273 per hectare for mangrove destruction and the country is currently drafting a National Mangrove Action Plan. Importantly, Ecuador's Ministerial Agreements 129 and 144 create the possibility for designating exclusive non-destructive use to particular users of mangroves, thereby creating groups that become directly tied to specific mangroves and vested in their protection. At present, about 50,000 ha. of mangroves have been assigned under concession agreements to local communities. Unfortunately, as recently as 2013, 559 unregistered aquaculture sites, many in deforested mangrove areas, were discovered by authorities during a year-long census operation.

Panama has lost an estimated 30% of mangroves on its Pacific Coast and an estimated 50% of the national mangrove cover since 1969. In 1998, an effort to reduce this rapid loss, Panama's Law No. 41 General Environmental Law gave mangroves special conservation priority as ecosystems of particularly high biodiversity and productivity. More recently, a series of resolutions (AG-235, JD-020, Resuelto ARAP-1 de 2008) mandated the requirement for special permits for any use that could affect mangroves and gave Panama's Aquatic Resources Authority the powers to charge fines for any activity that damages mangroves. Unfortunately, in 2011 Panama's regulatory framework protecting mangroves took a step backwards as multiple urban developments were given approval that resulted in the destruction of extensive mangrove areas, including in Ramsar listed wetlands.

Colombia is the ETPS country with the highest total mangrove cover and highest absolute loss in cover over the past three decades. In 1995 Colombia's Ministry of Environment passed the first national legislation- Resolution 1602- specifically focused on mangrove conservation. This legislation was amended in 1996 to outlaw mangrove destruction in all national provinces and require licenses for any activities that could negatively affect mangroves. Unfortunately, and largely due to high rural poverty in Colombia's Afro-Colombian communities on the Pacific coast, Colombia continues to have the highest rate of mangrove loss of any ETPS country.

Regionally, the Permanent Commission for the South Pacific (Comisión Permanente del Pacífico Sur - CPPS) (members countries Chile, Colombia, Ecuador, Panama and Peru, with Costa Rica as a cooperating non-party) have recently committed to creating and implementing a region-wide mangrove strategy (Plan de Acción). Since Peru and Chile have only minimal mangrove areas, this strategy will be most applicable to the ETPS countries. This strategy is currently in draft format with anticipated formal ratification by the end of 2014. The CPPS parties have committed to adopt the strategy and there is significant political will within the countries. However, its effective implementation will require financial and technical support both directly to the CPPS and to member countries.

2. The baseline scenario and any associated baseline projects: Baseline scenario

If current rates of mangrove loss continue, nearly all unprotected mangroves globally could be lost in the next 100 years (Pendleton et al 2012), and this trend is apparent in the ETPS countries. While all four ETPS countries have some level of protection through policy, legislation and management relating to mangrove conservation, these mechanisms have had variable success in reducing losses. Hence, without intervention, the drivers of mangrove loss and degradation in the region described above can be expected to continue and potentially expand given national development trends relating to urban, aquaculture and agricultural expansion.

- The continued loss of mangroves within the ETPS countries will have significant impacts on the communities, from reef-to-ridge, through the loss of essential ecosystem services provided by mangroves. For example:
- Recent studies from Mexico have shown an almost immediate impact on local fisheries associated with even modest losses in mangrove cover (Carrasquilla-Henao et al 2013). The continued loss of mangroves across the ETPS will similarly result in major disruptions to the coastal fisheries that are a significant source of livelihoods for communities across the region. Very importantly, due to the high ecological interconnectivity of mangrove ecosystems, the losses in one country can affect the fisheries production in neighboring countries.
- The IPCC has identified the large coastal cities of the ETPS as being particularly vulnerable to climate change driven flooding. Seawater could penetrate 150 to 500 m inland along the Puntarenas coast of Costa Rica. In Ecuador, sea level rise over the next century will impact the Guayas river system, including associated coastal urban areas of Guayaquil, potentially resulting in the need for relocation of over 300,000 people, losses of US\$1,305 billion, losses of urban and recreation areas, and impacts on drinking water supply. In Colombia, permanent flooding of 4,900 km2 of low-lying coast, impacting 1.4 million people has been predicted (IPCC 2007). Extensive losses of mangroves, which provide natural coastal defenses against some of the threats in these areas will accelerate and amplify these impacts.
- Given the broad diversity of terrestrial and marine biodiversity dependent on mangroves, ongoing
 loss of mangrove habitat will have reef-to-ridge biodiversity implications. The 40% of mangrove
 species already classified as threatened will potentially be lost. Further, continued mangrove losses
 will have major impacts on the biodiversity of coastal ecosystems including seagrasses, coral reefs
 and others, which are populated by mangrove dependent fishes, shrimp and other species
 (Nagelkerken 2008).
- Recent measurements of carbon storage in Costa Rican mangroves have shown that these ecosystems
 in the ETPS have highly significant deposits of carbon. Converting these mangroves into shrimp
 ponds would result in estimated emissions of 2000 tons of carbon dioxide per hectare (Kauffman
 personal comm.).

Ongoing losses of mangroves will have major impacts on the coastal water quality in the ETPS.
 Mangrove losses will reduce the filtering of sediment and pollutants from upland water flows and coastal pollutant sources such as those from shipping. In addition, since intense rainfall events are expected to increase in the region over the next century (IPCC 2007), the amount of sediment and other pollutants likely to transported through rivers into coastal oceans will increase, amplifying the impact of mangrove loss on water quality.

While some laws and regulations related to mangrove conservation already exist in the ETPS countries (see above), continued weak implementation and enforcement will result in continued deforestation and degradation of mangroves, in particular the large mangrove formations in multiple use estuarine areas that are candidate focal sites in this project. Strengthening these laws and their enforcement, however, is highly unlikely to occur in the next decade or beyond, as there is limited coordination or support for mangrove conservation and restoration across multiple scales. The absence of such a plan articulated across multiple scales and that address both the drivers of direct mangrove destruction (such as conversion for shrimp ponds, urban development, and extraction of mangrove for wood, charcoal and tannins) and those occurring in adjacent upstream and inshore marine waters (such as upstream sources of sediment and pollutants, upstream changes to freshwater inflow, coastal sources of pollutants) will result in only piecemeal actions that fail to protect mangroves.

Although each ETPS country has gained valuable experience with site-level approaches to and best practices to promote mangrove conservation that are highly relevant in each country, these remain isolated efforts that will not be transferred or replicated by adjacent nations and will remain largely unknown to the global conservation, management and policy community. Similarly, while there is significant technical capacity on mangroves in some ETPS institutions, weak networks and lack of knowledge sharing platforms mean that this capacity is not broadly available. This lack of coordination particularly impacts the region's capacity to address trans-boundary drivers of mangrove degradation and loss and the subsequent losses of ecosystem services that also impact all the ETPS countries. The lack of a regional to national level plan for mangrove conservation will mean that this isolation of expertise will likely continue.

Baseline projects

As the importance of mangroves in the ETPS is becoming increasingly recognized and there has been a recent increase in projects addressing mangrove conservation and restoration. (See table below for a summary of recent and ongoing mangrove related projects in the region.) Notably there are emerging efforts to evaluate the status and ecosystem value of mangroves at sites, and in some cases nationally, in all the ETPS countries. These projects will provide key information for informing policy, regulation and management of these ecosystems. There are also a growing number of field level demonstration and capacity building projects developing and testing approaches for sustainable use, management and restoration of mangrove ecosystems.

Other than the Mangrove and Sustainable Development Open Initiative lead by the alliance of CPPS, UNESCO and CI, however, there are no regional efforts to coordinate mangrove related conservation, management or policy and especially to address mangrove-related issues that are transboundary or regional, including impacts on mangroves and consequences from mangrove losses. Similarly, there are no mechanisms to support cross-learning from the portfolio of mangrove projects in the region.

While policy and field implementation related to mangrove specific conservation in the ETPS countries is variable and largely uncoordinated, there is a growing body of other coastal conservation solutions in the region. The largest and most comprehensive of these approaches has been built over the past ten years by Conservation International, in support of the four national governments and in association with nearly one hundred local and national NGOs and research institutes. This initiative has contributed to the construction of one of the World's most comprehensive and best managed regional Marine Protected Area (MPA) networks (including a number of mangrove areas) through implementation of the Eastern

Tropical Pacific Seascape (ETPS) program. This program has included extensive coordinated regional planning, capacity building, knowledge sharing and implementation. Under the framework of the ETPS, the four countries have increasingly cooperated in terms of marine management planning, and in 2013 committed to developing a shared strategy for mangrove conservation in the form of a Regional Mangrove Action Plan under the auspices of the CPPS, and with the technical support of Conservation International and UNESCO. Over the next year, this plan be finalized and officially adopted but the CPPS. The CPPS parties have committed to adopt the strategy and there is significant political will within the countries. Effective implementation will then require each country to create a coordinated national mangrove plan that is consistent with the CPPS Regional Action Plan. However, the effective completion and implementation of these national plans is far from certain given the financial and technical resources required.

Country	Project	Status	Project Objectives
Costa Rica	Title: Securing Livelihoods in the Nicoya Peninsula, Costa Rica through Mangrove Conservation and Restoration (2013) Donor: Swedish Lotto Geography: Gulf of Nicoya, Chira Island	Under implementation by CI-Costa Rica	-Assess the value of mangrove for fisheries, tourism and carbon storage -Develop a pilot with small coastal community, to strengthen capacities of local stakeholders for effective mangrove management (environmental education, tourism related activities, mangrove restoration)
Ecuador	Title: Integrated management of marine and coastal areas of high value for biodiversity in Continental Ecuador (2013) Donor: GEF-FAO Geography: Coastal Ecuador	Under development by Ministry of Environment of Ecuador and CI-Ecuador	-Assess the environmental goods and services of the mangrove ecosystem - Assess socio-cultural characteristic of coastal communities - Identification of organized groups for stewardship agreement (feasibility study)
	Title: Application of the Blue Forests methodologies and approaches through small-scale interventions (2013) Donor: GEF-UNEP Geography: Gulf of Guayaquil * See last line of the table for the global component of this project	Under development by Ministry of Environment of Ecuador and CI-Ecuador	-Valuation of ecosystem services -Evaluation of effectiveness of existing management plans and concession agreements to protect mangrove ecosystemsCreation of new mangrove concessions -Inclusion of mangrove values (carbon and ES) in national policies (e.g., climate change, conservation, biodiversity and sustainable development)

	Title: Socioeconomic valuation of the mangrove ecosystem (2010) Donor: Ministry of Environment of Ecuador Geography: National Title: Multi-temporal study of mangrove forest cover (2006) Donor: IDB-Ministry of Environment of	Implemented by private consultant Implemented by PMRC-CLIRSEN* *PMRC: Coastal Resources Management Program,	-Establishing the economic value (nutrient generation, erosion protection, mitigation of CC, water purification, contaminant, protection of fisheries) of a hectare of mangrove ecosystem, in order to establish the fine to be imposed to infractors who would destroy this ecosystem. - Provide a comparative study between (1999/2006) using GIS and spatial data on mangrove, shrimp and saline areas.
	Ecuador Geography: Coastal mainland Ecuador	Ecuador CLIRSEN: The Center for Integrated Remote Sensing of Natural Resources, Ecuador	
	Title: Sampling protocol: population density studies and reproductive aspects of the mangrove red crab (Ucides Occidentalis) in the Gulf of Guayaquil Donor: USAID Coasts and Forest program Geography: Gulf of Guayaquil	Implemented by National Fisheries Institute (INP)	-Design and implementation of a monitoring system of red mangrove crab -Generation of scientifically-sound results to support establishment of management measures
Panama	Title: Assessment of the Current Status of Mangroves, its management and its Relationship to Fisheries in Panama (2008) Donor: FIDECO-Natura Geography: Emphasis in 3 sites: 1- Gulf of San Miguel in Darien, 2- Gulf of Montijo in Veraguas, and 3-Chiriquí Gulf in the province of Chiriquí.	Implemented by CATHALAC Beneficiary: ARAP	-Determine the current ecological, social and economic status of mangroves in order to contribute to the conservation and sustainable management of the mangroves on the Pacific coast of Panama, specifically in threatened areas of the Gulf of San Miguel in Darien, Golfo de Montijo in Veraguas and Chiriquí Gulf in Chiriquí.
	Title: Integration of Adaptation and Mitigation: piloting from Panama and beyond Donor: GEF Geography: National and Gulf of Chiriquí	Implemented by TNC and Wetland International Beneficiary: ANAM, ARAP and communities	-Demonstrate the mangrove ecosystems' contribution to climate change risk management (adaptation and mitigation) -Pilot areas in Gulf of Chiriquí for restoration activities, mangrove mapping and assessment of ecosystem services (incl. carbon storage) -Promote cross-learning between Panamanian mangrove sites (in and

	Title: Develop and implement the National Plan for Communication, Education, Awareness and Public Participation (CEPA) for wetlands in Panama (2014) Donor: FIDECO -	Implemented by Panama Audubon Beneficiary: several communities in the Country, ANAM and Bay of Panama Protected Area.	out the PA system) -Provide baseline and piloted measures that can feed into the national REDD process for mangrove as it matures -Formulate and implement the National Communication, Education, Awareness and Public Participation plan (CEPA) for wetlands in Panama in order to sensitize and train key sectors in the conservation and rational use of aquatic ecosystems.
Colombia	Natura Geography: National and Panama Bay Title: Conservation and management for multiple use and the development of	Implemented by the Colombian Association of Reforesters (ACOFORE) (1995-circa 2000)	-Overarching objectives: 1) Strengthen the generation of social and environmental production alternatives for the sustainable use of
	mangroves in Colombia. Donor: International Tropical Timber Organization (ITTO), Japanese Government, Ministry of Environment of Colombia Geography: National	Collaboration of local communities and Regional Autonomous Corporations.	the mangrove, and 2) monitor ecological parameters that ensures the prosperity of the mangroves
	Title: Colombian Program for the sustainable use, management and conservation of the mangrove ecosystems Leading authority: Ministry of Environment Geography: National	The program was made official in 2002.	-Overarching objective: This national program seeks to inform and develop actions to achieve sustainable use of mangrove ecosystems of Colombia.
	Title: Colombia's national program for investigation on quality of marine environment - Mangrove Group. Leading authority: Coastal and Marine Investigation Institute of Colombia (INVEMAR) Geography: National	The Institute's mangrove group has been active since 1995 with focus on mangrove inventories and zoning. Since 2005, focus has shifted on the services provided by mangroves, especially for its capacity to absorb contaminants.	-Overarching objective: The program's seeks to generate the adequate information that guides the strategies to prevent, mitigate, and rehabilitate mangrove ecosystems.
Regional	Title: Mangrove and Sustainable	Alliance CPPS-UNESCO-CI established in 2013	The alliance interest includes: environmental legislation and

	Development Open Initiative Alliance: UNESCO- CPPS*-CI *Permanent Commission for the South Pacific Geography: Southeast Pacific		policies related to mangroves, best practices and experiences of conservation and management of mangrove ecosystems.
Global	Title: Blue Carbon Initiative Donor: Various private foundations, NASA Geography: International	Under implementation by CI, IUCN and IOC-UNESCO	Increase conservation, restoration, and sustainable use of coastal and marine ecosystems by increasing global recognition of the carbon storage and mitigation capacity of these ecosystems.
	Title: Application of the Blue Forests methodologies and approaches through small-scale interventions (2013) Donor: GEF-UNEP Geography: numerous	Under development by UNEP (with Duke University, CI, IUCN and other partners)	To apply methodologies and approaches for carbon accounting and ecosystem service valuation in blue forests so as to provide evidence-based experience that supports replication, up-scaling and adoption of blue forests concepts by the international community and the GEF.

3. The proposed alternative scenario with the proposed project, with a brief description of the expected outcomes and components of the project:

This project will directly reduce continuing mangrove loss and degradation in the ETPS by supporting the development and implementation of regional, national and local policies and actions that overcome the lack of coordination, strengthen regulations and reduce drivers of mangrove loss. The project will build on a strong foundation of current regional and national policy and conservation efforts (described above), partnerships and networks to create and implement integrated and coordinated regional and national plans for mangrove conservation and restoration across the ETPS. Thus, the project will directly address the governance and capacity issues that lead to continued mangrove deforestation in the ETPS despite growing recognition of the importance of these ecosystems.

Component 1: Regional mangrove strategy development and implementation

Once adopted, the government-led, regionally articulated, CPPS Regional Mangrove Strategy will provide a region-wide strategy that will serve as a coordinating framework for mangrove policy and conservation across the region if supported with technical and financial resources. This project will

facilitate this process and support the completion and implementation of the regional strategy with capacity building, tools and cross-country learning.

The CPPS has already given Conservation International and UNESCO the mandate on behalf of CPPS member nation governments to construct this strategy. Strengthening implementation capacity will be achieved through conducting regional and global learning efforts between project countries and beyond in coordination with other initiatives, including the GEF-funded Blue Forest project and the World Bank Wealth Accounting and the Valuation of Ecosystem Services (WAVES) partnership.

This component will create a framework for building capacity and process for promoting regional and international exchanges to promote best conservation practices and facilitate the adoption of best practices for mangrove conservation. This framework and process will include the development of networking tools and communications products that facilitate learning and dissemination of project aims and results at the local, national, regional and global scales to ensure the project generates learning and awareness benefits from the site to regional scales.

Note that although Costa Rica is not a formal member of the CPPS agreement, for the purposes of this CPPS strategy Costa Rica will participate as a Cooperating Non-Party involved in key elements of the strategy's development. This includes ensuring Costa Rica's experience and successful approaches to mangrove policy and conservation are integrated into the plan.

Component 2: National mangrove action plans and policy strengthening

The project's second component will improve national policy/regulations and national mangrove action plans to make them consistent with the regional mangrove strategy completed under component one. As a result, at least 736,000 ha. of priority mangroves will be put under an improved policy framework conducive to more effective on-the-ground conservation.

Under this component at least two of the four ETPS countries will either complete or update their national mangrove action plans to make them consistent with the regional strategy. Importantly, updates to national action plans will ensure that "ridge-to-reef" (watershed) considerations are taken into account given the strong connectivity between upstream, coastal (including mangroves) and inshore marine ecosystems.

As necessary, and in coordination with other existing projects such as the GEF-funded Blue Forests project, national mangrove plans and related policy will be informed by economic valuations that better capture the true value of the ecosystem services mangroves provide and that take into account important factors such as the lost productivity (or remediation costs required) of associated ecosystems when mangroves are degraded or destroyed.

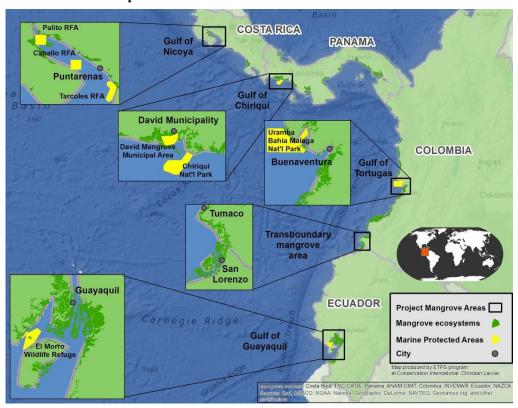
Component 3: Local conservation action

To demonstrate the implementation of the regional and national strategies at local scales, the project's third component will develop and/or strengthen mangrove management plans that are consistent with national plans and the regional mangrove strategy in 2-5 sites across the ETPS. In tandem with this, the project will implement mangrove conservation actions that are incremental to existing field conservation programs in at least two demonstration sites in the region's most critical mangrove ecosystems. Candidate demonstration sites include (see Map 2): i) Costa Rica's Gulf of Nicoya; ii.) Panama's Gulf of Chiriquí; iii.) Colombia's Gulf of Tortugas; iv.) Ecuador's Gulf of Guayaquil; and v.) the transboundary mangrove complex spanning the Colombia-Ecuador border. The demonstration sites will be identified during the PPG stage of the project after appropriate analysis for feasibility, conservation impact and broader usefulness as a demonstration site.

Consistent with the national mangrove action plans updates, the project will support development of specific regulations and incentive programs at the demonstration sites that result in on-the-ground

improvements in mangrove conservation. In these sites field conservation activities will be undertake to reduce degradation and increase mangrove coverage through restoration efforts. Specific conservation targets will be defined once the sites are selected during the PPG stage of the project.

Field actions will be advised by assessments of the field sites specifically including economic valuations of the priority mangrove ecosystem services: a) fisheries, b) nature-based tourism, c) coastal protection, d) maintaining water quality and bioremediation, and e) carbon storage. These assessments will, as relevant, build on the methodologies and results from other projects in the region and elsewhere (such as the Blue Forests project). Additionally, by considering the various alternative scenarios for site-level actions (i.e. the economic value of the areas with and without mangrove conservation), the economic assessment will support integration of mangroves into national policy as described in Component 2. In so doing, the project will participate in testing various economic valuation methodologies for appropriateness both in local project design and for advising national policy.



Map 2: Candidate Demonstration Sites within the ETPS

The project will support regional sharing and experiences through transfer of existing effective site-level practices within the ETPS. For example, building on Ecuador's national mangrove concession program, similar programs will be promoted in at least one additional ETPS country. This program uses preferential access rights that ensure specific beneficiaries of conservation and management actions become long-term conservation allies committed to participating directly in management programs, and as such, become a central part of making mangrove conservation and restoration efforts sustainable.

The transboundary mangrove complex spanning the Colombia-Ecuador border is a priority site for mangrove conservation within the ETPS but, to date, has not been the focus of conservation or management efforts. The project will include the site as candidate demonstration site for consideration during the PPG stage.

Capacity building will be a key element of local policy and conservation actions. Training will be conducted to ensure the best conservation practices and most innovative conservation and restoration methods are used. Additionally, available tools and communications products will be provided to support local management and conservation.

Complementing the communications and outreach materials produced under component one, component three will also feature development of an interactive knowledge-sharing platform and presentation of the outcomes of the project in at least three national, regional and global conservation, science, policy and related fora. Potential venues include international convention meetings (e.g. Ramsar and CBD, the International Marine Protected Area Congress (IMPAC), Blue Carbon Working Group and meetings of the International Tropical Timber Organization (ITTO)). Outreach activities will be conducted with policy makers in other mangrove relevant countries, including the Philippines, Brazil, Indonesia, Pacific Islands, Suriname and Guyana.

4. Incremental/additional cost reasoning and expected contributions to the baseline (refer to the GEF guidelines):

This project will build on and add significant incremental value to the strong foundation of existing programs in the region.

- Through the completion and implementation of regional and national mangrove strategies, this
 project will support the coordination of current mangrove projects across the region and their
 integration into a broader program, This includes government and non-governmental lead
 programs (see list above).
- The regional and national policy development and national strategy development and implementation proposed in this project will directly draw on the results from the projects evaluating mangroves (see project list above) including coverage and ecosystem service value. Similarly, the ecosystem service economic valuations undertaken through this project will build directly on these assessments. All of these results will be integrated into the communication and capacity building tools and programs implemented through this project.
- The implementation of demonstration projects and capacity building across the region will build on the experience and lesson-learnt in previous mangrove related demonstration projects across the region. Demonstration projects will, if possible, directly build on existing project work in the region. For example, the Gulf of Nicoya and Gulf of Guayaquil both have existing mangrove projects that can be a basis for expanded mangrove demonstration projects.
- The project will test and demonstrate the application of tools developed through the projects active in the region, specifically including the GEF/UNEP Blue Forests project. The project will be well coordinated with the global assessments and tool development within the Blue Forests Project. Further, the focus on policy within this project will assist the Blue Forests project in ensuring the ES toolbox meets the needs of policymakers
- The project build directly on the strong coordinated conservation, policy and management foundation developed through the CI ETPS initiative. This initiative has established a strong and expansive policy, partner and networking framework across the four countries and this project will expand that core and the strong science base on which to frame conservation strategies, respectively.
- This project will share between two to four sites with current projects within the CI ETPS Initiative. While the current ETPS projects focus on MPA and fisheries, this project support expanding these efforts to address mangrove conservation and restoration through ridge-to-reef policy and conservation actions. For example, in these sites the ETPS Initiative is strengthening management institutions to resolve long-standing issues related to unsustainable fisheries associated with mangroves. This project will frame those efforts, as they relate to mangrove conservation, in a ridge-to-reef context. Additionally, this project will add the dimension of being particularly focused on mangrove conservation as a critical intermediary ecosystem that bridges

terrestrial and marine environments and that provides the multiple ecosystem services noted above.

5. Global environmental benefits and/or adaptation benefits:

This project seeks to deliver the following global environmental benefits:

- Multi-state cooperation to reduce environmental threats: The project will support the completion and implementation of the CPPS regional mangrove conservation strategy of coordinated direct protection and reef-to-ridge threat reduction by the ETPS countries (including Costa Rica as a cooperating partner). In addition to supporting the policy process, this support will include capacity building and strengthening of regional technical and other networks so that the countries can sustain implementation of this multi-state cooperative agreement. Further, by strengthening national level capacity and actions to address mangrove degradation within the ETPS countries, and by providing regional demonstration projects, the project will build the in-country capacity and foundational actions to ensure effective implementation of the regional CPPS agreement.
- Reduced pollution load in international waters from land based sources: The role of mangroves in trapping and processing nutrients, heavy metals, sediments and other pollutants and hence in reducing the pollutant load is now well established (for example Ewel et al 1998, Wang et al 2010). Within the ETPS, mangrove areas receive and trap sediment, contaminants, carbon and nutrients from upstream terrestrial sources and coastal waters, removing these materials from the water hence reducing the pollutant and nutrient load on coral reefs, seagrasses and other offshore marine habitats. By increasing mangrove conservation across the region, the project will reduce the pollution and nutrient load from land based sources. Additionally, the project support of regional and national policy addressing terrestrial sources of pollutants impacting mangroves will, in turn, also decrease the pollutant load on other coastal ecosystems.
- Restored and sustained coastal and marine ecosystems goods and services: As described above, the mangroves of the ETPS provide essential coastal and marine ecosystem goods and services to the communities of the ETPS countries. This includes globally threatened mangrove species and important habitat, nursery grounds and breeding sites for extensive marine and terrestrially associated biodiversity (Macintosh & Ashton 2002). Recent measurements of carbon storage in Costa Rican mangrove areas suggest that the mangroves in the region have large carbon stores in the biomass and soil that are greater than nearby dry forests and amongst the larger deposits of carbon in mangroves globally (Kauffman, personal comm.). By increasing conservation of mangroves, the project will have immediate benefit for these ecosystem goods and services, including globally relevant biodiversity and the carbon sequestration and storage capacity which reduces global warming.
- Reduced vulnerability to climate variability through multi-state cooperation: The role of mangroves in reducing vulnerability to climate variability and other climate-related risks is now well established along coasts globally they provide coastal protection against storms, reduce coastal erosion and build ecosystem resilience for fisheries and biodiversity critical for livelihoods (Alongi 2007, Barbier 2011). The project by supporting and accelerating multi-state cooperation and incountry action mangrove protection conservation will secure this important climate adaptation role of mangroves. Further, the project will be supporting implementing conservation policy and management integrated across reef-to-ridge ecosystems and related sectors, importantly including surface and groundwater issues related to mangrove health. For example, upstream pollutant and sediment loads and coastal surface water quality issues will be considered and addressed.

6. Innovativeness, sustainability and potential for scaling up:

Innovativeness: While there is rapidly growing recognition of the importance of mangroves for the numerous ecosystem services they provide, there are few examples of regional or national policy and management addressing the full suite of pressures from across the reef-to-ridge complex that result in mangrove deforestation and loss. This is particularly true outside highly developed countries and specifically within the ETPS countries. This project will be innovative and timely by building and reinforcing the existing coastal site focused mangrove policy and management in the region – including the regional CPPS mangrove strategy – and expanding the perspective of these laws to recognize both pressures and ecosystem services associated with mangroves from reef to ridge.

Sustainability: This project will take place within the framework of a region where existing initiatives, regional scales projects and national investments have contributed within the last decades at building the many of the enabling conditions to ensure success of new conservation initiatives. Despite challenges, governments of the region are generally increasingly willing and committed to support conservation efforts recognizing to some extent the role and general value of ecosystems on human well-being.

The environmental policy framework in general, and the conservation of mangrove ecosystems specifically, is increasingly comprehensive in each of the four countries. In Ecuador for instance, mangrove protection is imbedded in the National Constitution (mangroves are recognized as fragile ecosystems that deserve priority protection) as well as in a series of existing legislation establishing provisions for their protection. Overall, the project will be based on basic but existing the policy framework which in turn it will help to improve.

The capacity in the region is also increasingly improving; thanks in part to initiatives like CI's ETPS program, which through support from the Walton Family Foundation has contributed widely to improving capacity with a sub-granting strategy. Nearly a hundred local partners from various sectors (academia, civil society, and public institutions) across the 4 ETPS countries have beneficiated from this program since 2005. This project aims at leveraging these achievements and contributing to it by working with existing regional, national and local actors and stakeholders.

In addition, the project will take place in a context where the financial sustainability of the regional network of marine protected areas have been received increasing attention from national authorities and philanthropy. For instance, all four countries have set up instruments and initiatives such as national funds (Forever Costa Rica in Costa Rica, Fundación Natura in Panama, Fondo Acción in Colombia, and Fondo Ambiental Nacional in Ecuador) that provide the foundation to the financial sustainability of their national network of protected areas and surrounding areas.

The Walton Family Foundation (WFF), which has been investing in supporting the consolidation MPAs and the conservation of surrounding areas, including most of the key mangrove areas included in the proposal, has great interest in the long-term financial sustainability of the network. In fact, to ensure sustainability of its past and current "investment" in the region, WFF and CI are planning in developing strategies and support the development of financing mechanisms for the long-term financial sustainability of key MPAs, and secure new financing sources during the 2014-2017 period. Over the project lifetime, CI will work at ensuring that key areas, including areas identified in this project, will have strategies for increasing and diversifying the revenue streams (public, philanthropy, trust funds, site generated incomes, etc) to cover long-term management of the areas.

To ensure results of this project are long-lasting and that the tools and instruments developed within this projects are implemented, buy-in from the very communities that will be involved in the protection, restoration and maintenance of mangrove ecosystem will be pursued.

Scaling Up: The CPPS mangrove strategy, national level policy and site-specific actions implemented with support from this project will provide the foundation for rapid and comprehensive expansion of mangrove conservation across the region. These policy and management tools will have country and

regional commitment for implementation and hence provide the roadmap for expansion of activities across the region. Further, these actions will be immediately available for integration into other relevant regional planning activities such as the GEF TDA-SAP LME process for the Pacific Central-American Coastal LME.

The results from this project will be immediately applicable globally to advise high mangrove-area countries, regions, and cooperating groups of countries. For example, examples of integrated reef-to-ridge policy for mangrove conservation will be immediately useful to advise governments and other agencies in South East Asia where pressures on mangroves are resulting in extensive loss. The tools, communications products, and capacity building approaches developed and tested in this project will be made available for government and non-governmental agencies to support scaling up in these areas.

The project results will be coordinated with a number of related projects (see table of related projects) to ensure maximum potential scaling-up through these other efforts. For example, the Blue Carbon Initiative will use the results of this project to advise mangrove conservation activities globally, particularly including the integration of the carbon value of coastal ecosystems in policy. The project will also ensure the results are contributed to the 50 in 10 initiative, specifically with respect to small-scale fisheries recovery dependent on mangrove areas.

A.2. Stakeholders. Identify key stakeholders (including civil society organizations, indigenous people, gender groups, and others as relevant) and describe how they will be engaged in project preparation:

All five candidate sites are relatively large, multiple use estuarine gulfs with a wide range of stakeholders ranging from small-scale fishing communities to large, sophisticated urban centers where main governmental decision-makers, the private sectors, universities and the urban populaces reside. As has been the case of nearly ten years of implementation of the ETPS program, this project will build on a large partnership with public and private organizations in the planning (PPG) and execution phases of this project. The organizations most relevant to mangrove conservation will be the primary participants in the project's consultative activities and will be beneficiaries of training. Following is a table that summarizes some of the most directly relevant stakeholders and their roles.

Stakeholder	Role	Contribution to the Project
Local communities	Implementation of field conservation actions	This project will seek participation and inclusion of three to five local communities most relevant to mangrove conservation planning and practice in the final selection of 2-5 field conservation sites. It will include both those who are considered the primary users and beneficiaries of the mangroves and those who from living near mangrove ecosystem indirectly beneficiate form the mangrove ecosystem's goods and services. Local communities contribution to the project will include participation in the development of mangrove management plans, and in field action for mangrove conservation and restoration.
Local civil society organization	Implementation of field conservation action	Existing local associations, groups, cooperatives or similar organized group with basic governance systems associated with management of natural resources and that are users and beneficiaries of the services and good specifically provided by mangrove ecosystems, will be identified. We will seek their engagement, collaboration with the project.
Local and regional private users of mangrove associated coastal	Integration of conservation actions into operations and	Private users of the mangrove areas and the reef to ridge areas incorporating the mangrove sites - specifically including the users driving impacts on the mangroves - will be identified through the PPG process. This includes coastal users such as

protected area administrators. Coastal and watershed coastal and land planners/managers. National and planners/managers. I local MGOs I Implementation of field conservation action action I Implementation of field conservation and the project and the project and the managers planners and other relevant and other national level relevant ministries National and local mangrove strategy and policy strengthening Mational Ministries of foreign affairs or most relevant authority Ministries of foreign affairs or most relevant authority Regional strategy development and implementation Ministries of foreign affairs or most relevant authority Regional strategy development and implementation Ministries of foreign affairs or most relevant authority Ministries of conservation action Mational And local mangrove strategy development and implementation Ministries of foreign affairs or most relevant authority Ministries of foreign affairs or most relevant authorities. It be found in the project action from an and implement and implement and implementation are conservation and planners and other relevant authorities include do from the project and the implementages and thers relevant authority and the managers, plannans and thory a managers, plannans and thory a managers, plannans and the project and the implement and of the mational park, tradears of the Nicoya Gull's Responsible Fishing Are Similarly the managers will local Good which relevant authority in the Ministries of the Nicoya Gull's Responsibl	areas (and related industry groups) [E.g. shrimp farmers, tourism developers and operators, farmers operating within watershed etc.) Conservation and	priorities Implementation	shrimp farming and tourism but also other users in the watershed such as farmers causing changes in freshwater flow and quality and fishermen dependant on mangrove related fish populations. Depending on the sites and the receptiveness of these users, the users will be actively included in the PPG stage of the project, implementation of the project or will be the target audience for outreach and communications outputs of the project. This projects aims at improving the management of
National Ministries of Environment and other national level relevant ministries National Ministries National Ministries National Ministries National Ministries National and local mangrove strategy and policy strengthening Ministries of foreign affairs or most relevant authority Ministries Regional strategy development and implementation National and local mangrove strategy and policy strengthening National and local mangrove strategy and policy strengthening National and local mangrove strategy within the framework of the Mangrove Technical Working Group created within CPPS. At the national level, they are to main leaders of their respective national mangrove strategy creation, revision and implementation, as well as leaders for the development of stronger regulations and incentives conducive to mangrove conservation. Some of the relevant authorities include MAE (Ecuador), ANAM and ARAP (Panama), MINAET (Costa Rica), MAI (Colombia). Pepending on the feasibility of developing a transboundary protected mangrove areas between Ecuador and Colombia, the proper authorities, likely the ministries of foreign affairs will be brought in the discussion and planning process. The Southern Pacific Permanent Commission (CPPS) is a k platform at the regional level, based in Guayaquil, Ecuador. Three of four countries in the project (Ecuador, Colombia a Panama) are contracting parties to this regional body. The	administrators. Coastal and watershed coastal and land	of field conservation action National and local mangrove strategy and policy	mangroves areas in and/or near existing protected areas rich in mangrove ecosystems and thus will include the active participation of representatives of these conservation areas administrators. Administrators will be key actors in the development of mangrove management plans. Depending on selected sites, this may include for example the administrator of Chiriquí National Park, Uramba-Bahía Malaga National Park, leaders of the Nicoya Gulf's Responsible Fishing Areas. Similarly the managers, planners and other relevant administrators for the coastal and watershed regions relevant to the field sites will be actively included in the PPG stage of the project and the implementation of the project as
development and implementation Independent and other national level relevant ministries National and local mangrove strategy and policy strengthening Ministries of foreign affairs or most relevant authority Ministries of foreign affairs or most relevant authority Regional strategy development and implementation Regional strategy developme	Local NGOs	of field conservation	where field action will be implemented, especially those with capacity to engage with local communities and/or association, will be identified and brought into the discussion as
Ministries of foreign affairs or most relevant authority Regional strategy development and implementation Regional strategy protected mangrove areas between Ecuador and Colombia, the proper authorities, likely the ministries of foreign affairs will be brought in the discussion and planning process. The Southern Pacific Permanent Commission (CPPS) is a k platform at the regional level, based in Guayaquil, Ecuador. Three of four countries in the project (Ecuador, Colombia a Panama) are contracting parties to this regional body. The	of Environment and other national level relevant	development and implementation National and local mangrove strategy and policy	responsible for topics related to the environment or aquatic resources and those with authority on protected areas. These actors will be contributing to the regional mangrove strategy within the framework of the Mangrove Technical Working Group created within CPPS. At the national level, they are the main leaders of their respective national mangrove strategy creation, revision and implementation, as well as leaders for the development of stronger regulations and incentives conducive to mangrove conservation. Some of the relevant authorities include MAE (Ecuador), ANAM and ARAP (Panama), MINAET (Costa Rica), MADS
development and implementation platform at the regional level, based in Guayaquil, Ecuador. Three of four countries in the project (Ecuador, Colombia a Panama) are contracting parties to this regional body. The	foreign affairs or most relevant	development and	Depending on the feasibility of developing a transboundary protected mangrove areas between Ecuador and Colombia, the proper authorities, likely the ministries of foreign affairs,
which this project aims at supporting its finalization and implementation. The CPPS will be the host of a <i>Mangrove Technical Working Group</i> within which other stakeholders will provide inputs on the finalization or implementation of strategy.		development and implementation	CPPS leads the development of a regional mangrove strategy, which this project aims at supporting its finalization and implementation. The CPPS will be the host of a <i>Mangrove Technical Working Group</i> within which other stakeholders will provide inputs on the finalization or implementation of

	Agency	be the project's lead executing agency operating, as as such work directly with CI's Project Agency team in the US and with CI's national offices in the 4 countries relating to the implementation of all the project's technical elements.
CI's National and regional team (Costa Rica, Panama, Colombia and Ecuador, ETPS)	Primary subgrantee	CI's strong national programs in the four ETPS countries will lead implementation of all technical elements of the project, as well as preparation of the PPG under the supervision of UNESCO.

Local communities' engagement

This project will include the participation of actors at various levels according to each of the project's components. For component 1, the project has already engaged with regional level partners such as the CPPS and the UNESCO under an open-ended alliance to develop the Regional Mangrove Conservation Action Plan. Also, through consolidating the support of the national GEF focal point for this project, we are already engaging with the relevant national authorities such as the Ministries of Environment of each country of the ETPS. To assess the feasibility of a transboundary protected mangrove area between Ecuador and Colombia, the project will engage with the relevant authorities in charge of foreign affairs during the PPG and implementation phases. For the implementation of the local conservation action plans, the project will engage -during the PPG period- with a series of local communities, associations and NGOs that are present in the 5 potential mangrove sites that has been identified as candidate sites. Given our ongoing presence in the region, the project has already an extensive network of partners and local stakeholders. Therefore, the preparation and implementation of this project will be carried out in a participative and inclusive manner.

To ensure that the project meets CI-GEF Project Agency's "Stakeholders' Engagement Best Practice", the Project Agency will develop and submit a "Stakeholders' Engagement Plan" at the beginning of the PPG phase for the Project Agency's approval. The Project Agency will oversee the implementation of this plan throughout the duration of the project.

Indigenous Peoples

The Safeguard Screening process of this PIF has not identified specific indigenous communities with which the project will interact. However, during the PPG phase the Executing Agency will identify, based on the final sites where the project will be implemented, any indigenous communities that will be directly or indirectly affected by the project. If at any phase of the project the Executing Agency identifies that it will affecting indigenous communities, and to ensure that the project meets CI-GEF Project Agency's "Indigenous Peoples Policy #4", the Executing Agency will develop, an "Indigenous Peoples Plan". The terms of reference will be provided by the CI-GEF Project Agency, who will approve and oversee the implementation of this plan throughout the duration of the project.

Gender mainstreaming

Throughout the project the Project Agency will ensure full and equitable representation in and benefit sharing from project activities. The project will seek to engage with all stakeholders within the community including any potentially marginalized groups. The project will engage through current leadership structures and will seek to add to or strengthen these groups when key stakeholders are underrepresented. The Project Agency will ensure that men, women, youth and other groups are engaged and build monitoring systems that include necessary disaggregation to track this throughout the life of the project.

To ensure that the project meets CI-GEF Project Agency's "Gender Mainstreaming Policy #8", the Project Agency will develop a "Gender Mainstreaming Strategy and Action Plan" during of the PPG phase that will guarantee the mainstreaming of gender issues throughout the project. The CI-GEF Project Agency will approve and oversee the implementation of this Strategy and Action Plan throughout the duration of the project.

A.3 Risk. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable):

Below are the main risks that might affect the performance of this project. A ranking (scale: low, medium, or high) is provided, along with the mitigation strategy to be implemented during the life of the project.

Risks	Ranking	Mitigation Strategy
Climate change, resulting in changed/increased pressures on mangrove forests	Medium	The project's emphasis on conserving mangroves will, due to buffering and stabilizing effect they have in the face of sea level rise and greater storm intensity
Weak institutional capacities for planning, management and governance in targeted mangrove forest areas	Medium	The risk will be reduced by working with and strengthening diverse institutions, from the national governments to local levels, thereby minimizing dependence on any one institution. The project will invest in addressing key capacity gaps; baseline analysis to be carried out during the PPG phase
Limited capacity, commitment and/or governance among local people in target mangrove forest areas.	Medium	Starting with the design phase, the project will work in a participatory manner with local communities to discuss and define the strategies to be implemented in the mangrove forest areas, in order to maximize the likelihood of ownership and uptake
Changes in some institutions providing co-financing could lead to their inability to do so	Low	Much of the co-financing for this project has already been secured. This risk will be further mitigated as much as possible by working with co-financing partners through the design phase to secure their involvement and investment.

A.4. Coordination. Outline the coordination with other relevant GEF financed and other initiatives:

As in any relatively large, multi-country project strong coordination between projects, with government and with major stakeholders is central to success. Over the past ten years CI has become specialized in building and participating in multiple networks across the ETPS countries. The following table explains with whom, and how, coordination will be maintained during this project.

Initiative	Coordination
Title : Eastern Tropical Pacific Seascape Program	The project will be closely coordinated with the broader Seascape Program, specifically building on the extensive coastal and marine
Donor: Walton Foundation	conservation, policy and capacity building programs that have been
Geography: Costa Rica, Panama,	developed over the last 10 years. This project will integrate the
Colombia, Ecuador	mangrove strategies and plans on regional to national to local levels
	with ongoing policy and site implementation work across the region.
	The project will build on the extensive networks of partners built
	through the Seascapes program, including the strong relationships

	with all four governments.
Titles Consider I in 1th and the	
Title: Securing Livelihoods in the Nicoya Peninsula, Costa Rica through Mangrove Conservation and Restoration (2013) Donor: Swedish Lotto Geography: Gulf of Nicoya, Costa RIca	The results and outputs of this project will advise the regional and national mangrove conservations plans and strategies. The Gulf of Nicoya is a potential field site for this GEF project. If selected during the PPG stage, the GEF project will use the analysis conducted here and will amplify the scheme developed in the pilot project to other coastal communities.
Title: Integrated management of marine and coastal areas of high value for biodiversity in Continental Ecuador (2013) Donor: GEF-FAO Geography: Coastal Ecuador	The GEF project will build on the results of the GEF-FAO project by integrating lesson-learnt into regional and national scale strategies and into capacity building and outreach with stakeholders.
Title: Application of the Blue Forests methodologies and approaches through small-scale interventions (2013) Donor: GEF-UNEP Geography: Gulf of Guayaquil, Ecuador	The ETPS project will be well coordinated with this project on both a national (within Ecuador) and international scale. Within Ecuador, the project will build on the analysis and results of the Blue Forests project by integrating the results into the national and regional strategies and plans. If an Ecuador-based site is selected for this project, the site based implementation will build on the Blue Forests results. This project will also have a greater focus on policy integration (than the Blue Forests project) and will communicate the results of both projects to policy-makers and stakeholders. This project will use the global Mangrove ES summary (to be produced in year one of the Blue Forests project) as a basis to advise its strategy and plan development. This project will also work closely with Duke University, CI, IUCN and other Blue Forest project partners to contribute data to and test the ES toolbox that is being developed by the Blue Forests project. To ensure this coordination, this project will work directly with Blue Forest partners, participate in the Blue Forests project directly through the Ecuador site, and CI staff active on this project will also be members of the science advisory panel for the Blue Forests Project.
Title: Socioeconomic valuation of the mangrove ecosystem (2010) Donor: Ministry of Environment of Ecuador Geography: Ecuador	The GEF project will build on the results of the Ministry of Environment project by integrating the results into regional and national scale planning and into capacity building and outreach with stakeholders.
Title: Multitemporal study of mangrove forest cover (2006) Donor: IDB-Ministry of Environment of Ecuador Geography: Coastal mainland Ecuador	The GEF project will build on the results of the Ministry of Environment project by integrating the results into regional and national scale planning and into capacity building and outreach with stakeholders.
Title: Assessment of the Current Status of Mangroves, its management and its Relationship to Fisheries in Panama (2008) Donor: FIDECO-Natura Geography: Chiriqui, Panama	The GEF project will build on the results of the FIDECO-Natura project by integrating the results into regional and national scale planning and into capacity building and outreach with stakeholders. If the Gulf of Chiriqui is selected as a field site, these results will advise project design and implementation.
Title: Integration of Adaptation and Mitigation: piloting from	The GEF project will build on the results of the Panama GEF project by integrating the results into regional and national scale planning and

Panama and beyond Donor: GEF Geography: National and Gulf of Chiriquí, Panama	into capacity building and outreach with stakeholders. If the Gulf of Chiriqui is selected as a field site, these results will advise project design and implementation. More specifically, the project will support the objectives of the Panama GEF project related to mangrove areas such as adoption of needed policy reforms.
Title: Blue Carbon Initiative Donor: Various private foundations, NASA Geography: International	The Blue Carbon Imitative (BCI) will directly support the analysis and communication of results of this project by providing technical support and advise to project design and implementation. Additionally, the BCI will integrate the results of this project into its policy and management related activities and the outputs of this project will directly advise the research and other priority activities of the BCI, including the expansion of the Initiative into ecosystem services beyond carbon.

B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAs, NAPs, NBSAPs, national communications, TNAs, NCSAs, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.:

As noted above, this project is consistent with growing national mangrove policies and regulations and is consistent with national policy goals and international commitments. The following table explains this alignment and complementarity.

Agreement/Strategy/Plan	Consistency with this projects			
CPPS regional mangrove action plan	This project is consistent with existing efforts and initiatives currently under way in the region. At the regional level, this project will have a direct contribution to the regional mangrove action plan led by the CPPS and for which CI and the UNESCO have been mandate to produce. This project is consistent and shares the same purpose of supporting the participating governments in strengthening their policies and programs for the protection, sustainable use and recuperation and/or restoration of the region's mangroves. Both aims at providing the most appropriate regional framework and tools that respect and is in alignment with national priorities.			
Colombia national mangrove program	This project shares similarities with specific objectives of the programs: Sub-program No 2. Planning for the conservation and sustainable use of mangrove: formulate and implement integrated management plans. Sub-program No 3. Protected areas: Support y strengthen the management of protected areas with mangrove ecosystems and coordinate with local communities the establishment and delimitation of new areas under the most adequate management category. Sub-program No 4. Investigation: Incentivize the scientific community, institutions and communities in general, to develop and participate in basic applied investigation in mangrove ecosystems. Sub-program No 5. Citizen participation, conservation education and training. Promote education and capacity building for the sustainable use and conservation with the aim of raising awareness of citizens on the values and functions of the mangrove y guaranty the participation of communities y			

	activities related to mangrove use, protection, conservation, management, development, and investigation.				
	Sub-program No 6. Restoration and rehabilitation of disturbed and degraded mangrove areas.				
	Sub-program No 7. Productive Pilot Project: Projects that beneficiate communities settled in mangrove ecosystems or areas adjacent to these areas.				
	Sub-program No 8. Upgrade and application of rules and regulations on mangroves				
	Sub-program No 7. Institutional strengthening: For management of mangrove ecosystem.				
Guide on best practices to protect Panama's Mangrove	The guides include recommendation for the preparation of Environmental Impact Assessment for projects taking place near mangrove ecosystems and that may have impact on them.				
RAMSAR convention	All the four countries included in this project are contracting parties (see entry year below) to the convention and therefore are committed to its implementation. Each countries have established a various numbers of Ramsar sites covering extensive mangrove areas. • Costa Rica (1992): 12 sites, 570,000 ha. • Panama (1990): 5 sites, 184,000 ha. • Colombia (1998): 5 sites, 460,000 ha. • Ecuador (1991): 18 sites, 287,000 ha.				
Convention on Biological Diversity (CBD)	This project addresses, directly or indirectly the following elements of the CBD programs:				
	Thematic Program: • Marine and Coastal Biodiversity				
	Cross-cutting issues:				
	 Aichi targets: T1: Awareness of biodiversity value T2: Biodiversity value integrated in plans and strategies T5: Rate of loss and degradation of natural habitats T7: Sustainable management of aquaculture and forestry for biodiversity conservation T11: 10% coastal and marine protected T14: Ecosystem providing essential services are restored T19: Knowledge of biodiversity value 				
Costa Rica's National Biodiversity Strategy and Action Plan (NBSAP)	This project addresses, directly or indirectly the following NBSAP's <i>Strategic Themes</i> :				

Panama's National Biodiversity Strategy and Action Plan (NBSAP)	 protection of coastal and oceanic resources ST13: Strengthening of national capacity for sustainable management of biodiversity. This project addresses, directly or indirectly the following NBSAP's <i>Strategic Objectives</i>: SO4: Elaborate policies, legal instruments, and methods to value biodiversity to incentivize sustainable use of biological resources. SO5: Increase local community participation in planning, management and use of biodiversity SO10: Ensure <i>in situ</i> conservation, including through strengthening of the National System of Protected Areas SO12: Contribute to the conservation of the global biological diversity.
Ecuador's National Biodiversity Strategy and Action Plan (NBSAP)	This project addresses, directly or indirectly the following NBSAP's Strategic Lines/Results: • SL1: Sustainability of productive activities based on native biodiversity. Specific results include: • Detain deforestation processes of native "forests" • SL2: Ensure existence and integrity and functionality of the components of biodiversity • Consolidated National System of Protected Areas • Protect threatened species • Restoration of degraded ecosystems
National Laws, policies, and regulations	This project both supports and is developed within the framework on national constitution, national laws, especially the ones related to environment and mangrove protection

B.2. GEF focal area and/or fund(s) strategies, eligibility criteria and priorities:

The proposed project is largely consistent with Objectives 2 and 3 of the IW focal area. This project links to the regional strategy under the Permanent Commission for the South Pacific (Comisión Permanente del Pacífico Sur - CPPS) (members countries Chile, Colombia, Ecuador, Panama and Peru, with Costa Rica as a cooperating non-party) that has recently committed to creating and implementing a region-wide mangrove strategy (Plan de Acción). Through the ratification and implementation of a comprehensive multi government mangrove conservation strategy, this project will demonstrate political commitment and directly address the governance and capacity issues that lead to continued mangrove deforestation in the ETPS despite growing recognition of the importance of these ecosystems.

Finally, this project will build on a strong foundation of current regional and national policy and conservation partnerships and networks to create and implement integrated and coordinated regional and national plans for mangrove conservation and restoration across the 4 countries.

B.3 The GEF Agency's comparative advantage for implementing this project:

B.3.1 Conservation International has nearly a decade of implementing large regional marine projects in the Eastern Tropical Pacific Seascape. During this period CI has invested over \$30M in the region of which nearly half has been re-granted in over 200 sub-projects to nearly 100 national and local partner organizations. Over the past decade CI has developed constructive working relationships with multiple local communities, the private sector and governments at all scales.

- B.3.2 CI's \$30M investment is targeting locally owned, effective, sustainable and evidence based management of ETPS. CI's primary achievement has been successfully moving from science to policy to action. Perhaps CI's greatest achievement has been to take policies, such as the declaration of new MPAs and the creation of updated, management plans to in-the-field conservation action that produces demonstrable ecosystems recovery and associated human wellbeing. The current proposal builds on previous investments and aims for increased local capacity as well as transferring knowledge. Even though conservation action is taking place on the ground, at this point there is no local partner in region that is equipped to be solely responsible to execute a multi-country program informed by the vast biophysical, social and other scientific datasets and analysis.
- B.3.3 CI Field Programs are CPPS's recognized closest NGO partners, having collaborated on a multitude of multi-country initiatives relating to the conservation and management of sharks, sea turtles, the regional MPA network, marine debris, small-scale fisheries recovery and Illegal, Unregulated and Unreported (IUU) fisheries management. Most recently, CI Field Programs and UNESCO were tasked by CPPS member nations with developing the regional mangrove strategy, of which this PIF is largely focused under component 1.
- B.3.4 UNESCO brings to the project the legitimacy of being a neutral, multi-governmental agency with a long-standing presence in the region. UNESCO's in-region staff have strong governmental relations, a firm grasp of the regional and national policy frameworks with their regional science director in Quito. B.3.5 UNESCO and CI complementarity

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.							
Agency Coordinato r, Agency name	Signature	DATE (MM/dd/yyy y)	Project Contact Person	Telepho ne	Email		
Lilian Spijkerma n	Dlum.	03/07/2014	Orissa Samaro o	703341 2550	osamaroo@conservation .org		