



LIFEWEB PROJECT EXPRESSION OF INTEREST

NOTES:

- The total text provided should generally range between 3 and 5 pages.
- Please attach any supporting materials with your submission.
- Project Expressions of Interest are accepted in this PDF version and a user-friendly online version available at <http://www.cbd.int/lifeweb/projectprofile>.

SECTION I: BASIC INFORMATION

COUNTRY

Costa Rica

PROJECT TITLE

Improving ecological integrity of coastal and marine biodiversity in MPAs as adaptation measures for climate change

GEOGRAPHIC SCALE

Please check one of the following.

<input checked="" type="checkbox"/>	Sub-national
<input type="checkbox"/>	National
<input type="checkbox"/>	Multi-national

SUBMITTED BY

Please check one of the following.

<input type="checkbox"/>	Government
<input type="checkbox"/>	Indigenous or Local Community
<input checked="" type="checkbox"/>	NGO

SCOPE

Please check all that apply to this project.

<input checked="" type="checkbox"/>	Creating new protected area(s)
<input checked="" type="checkbox"/>	Strengthening management of existing protected area(s)
<input type="checkbox"/>	Improving the protected area enabling environment

If this project's scope involves the **strengthening management of existing protected area(s)**, please indicate the names of the area(s) that will be strengthened, among those registered in the [World Data Base on Protected Areas](#) (WDPA). If the area(s) are not registered in the WDPA, please indicate the complete name(s) and you will be contacted by the WDPA inviting you to register it.

Piedras Blancas National Park

MAP AND PICTURES

Please attach a map situating the project area. If possible, please send at least two pictures and any additional media of the area.

SECTION II: PROJECT DESCRIPTION

LOCAL CONTEXT AND PROBLEMS TO BE ADDRESSED BY THE PROJECT

Please describe the area context and challenges (including [threats to biodiversity](#)) being faced. You are welcome to attach supporting documents.

The region including the exclusive marine economic zones of Ecuador, Colombia, Panama and Costa Rica is one of the most productive areas of the Eastern Tropical Pacific and belongs to one of the biogeographical provinces with one of the highest index of endemism in the world. This area has a high ecological interconnection level and complex oceanographic properties, given mainly to the multiple marine convergence currents, which facilitates the dispersion of marine larvae (corals, crustaceans, equinoderms, mollusks, fish), affecting migrations, movements and distribution of many regionally and globally important species, such as: tuna fish, sharks, marine turtles, whales and marine birds.

The Eastern Tropical Pacific is intensely affected by the climatic phenomenon “*El Niño - La Niña*”, which result in drastic changes in nutrient upwelling, temperature and ocean productivity, contributing to the complexity and fragility of its ecosystems. The global importance of this region is demonstrated by the presence of 4 World Patrimony Sites: the Galápagos Archipelago in Ecuador, the Coco Island in Costa Rica, the Coiba Island in Panama and the Malpelo Island in Colombia.

Costa Rica, jointly with Colombia, Panama and Ecuador, has created the “*Corredor Marino de Conservación del Pacífico Este Tropical*” (CMAR), considered to be a unique initiative in the world. The CMAR is defined as a regional conservation and sustainable use initiative, searching for an adequate management for biodiversity and coastal marine resources through an ecosystem approach and through the establishment of joint government regional strategies, supported by civil society, international cooperation and non government organisms. This initiative considers as nuclear areas the protected marine areas Malpelo and Gorgona in Colombia, Coiba in Panamá, Galapagos in Ecuador and Coco in Costa Rica. In this two million square kilometers corridor live hundreds of endemic species and in danger of extension like whales, marine turtles, dolphins and sharks. The main threats that these species face are illegal fishing and climate change.

In Costa Rica, as in other countries of the region, resource overexploitation, physical habitat alteration, pollution, biological invasions and climate change are recognized main causes for the loss of marine biodiversity. Simultaneously, these 5 threats have their origins in 5 sources of pressure: human population increase, resource consumption, insufficient knowledge, under valuation and deficient institutionalism. However, each threat is complex, since they are the result of an aggregation of multiple factors. For example, marine pollution covers innumerable toxic substances, excess of nutrients with diverse forms of sources, multiple sizes of solid waste and many different frequencies and amplitudes of noise.

In the context of the CMAR it is posible to identify 2 zones that are relevant both for Costa Rica and for the regions biodiversity: the Golfo Dulce and the Coco Island.

Golfo Dulce, in the Costa Rican Pacific, show morphological properties that tend to restrict water circulation inside its basin thus favoring deep anoxic waters: the mouth of the gulf has a depth of 70 m, while the interior basin reaches depths of 215 m. For this reason, its circulation resembles high latitude fjords. The term “*fjord*” is applied to an estuary or deep basin surrounded by high gradient terrain and in many cases, a threshold in its mouth. This is of great relevance because this would be the only tropical fjord in the American shores.

Golfo Dulce is home to a great diversity of marine life including dolphins, sea turtles, tropical fish including

marlin, parrotfish, dorado, red snapper, over 87 species of stomatopods and decapods, and is an important place for humpback whales and whale sharks to breed. The beaches surrounding Golfo Dulce serve as nesting grounds for hawksbill, Olive Ridley and leatherback ocean turtles. This area is the most pristine and conserved area of the country. Many of the surrounding forests (Golfo Dulce Forest Reserve, Piedras Blancas National Park and the Esquinas Sector) guard thousands of hectares of primary forest.

The Coco Island is located in the central part of the Eastern Pacific Ocean, at 532 km from south western pacific mainland of Costa Rica across the Panama Gulf, at 5° N and 87° W. The terrestrial area of the island is 23,85 km² and 1.997 km² of marine protected ecosystems. This island is of enormous importance for biodiversity as there has been 1,142 reported marine species (25% of the pacific ocean species), it is the place of most endemism in Costa Rica (42.5%). The Coco Island is the only oceanic island of Costa Rica, and is the breeding and feeding site for marine birds and contains one of the most developed coralline formations in the Costarrican ocean.

ECOLOGICAL CONTRIBUTION

Please indicate the extent to which the area(s) is/are ecological priority(s) for the national protected area system, based on contribution to ecological representation, connectivity, viability and/or irreplaceability within the protected area system. If possible, please refer to the national [ecological gap analysis](#) or other geographic prioritisation exercises and attach supporting documents.

Costa Rican coastal and marine ecosystems are largely under-represented in the PAS, including sandy and rocky beaches, rocky and soft sea bottoms, coral communities and sea grasses of the Pacific Ocean, upwelling zones, and congregation areas for whales, whale sharks, lobsters, and fish. New MPAs are also needed to protect coastal areas and most of the oceanic areas of biological importance. Currently, only 21 of the total number of conservation areas (i.e. 169) are MPAs, and these cover only 5,140 km², or 1% of the country's jurisdictional waters. The recently concluded Coastal and Marine Conservation Gap Analysis (GRUAS II) identified 34 areas (20,985 km²) that are in need of conservation, among which 12 areas (16,300 km²) are considered to be of high priority. Their management remains weak; for example, only a fraction of the MPAs have completed and updated their management plans. In addition, management skills within the PAs are weak and the financial sustainability of Costa Rica's MPAs is far from being achieved.

The submarine mountains of Coco contain a diversity of substrata and under water hills usually harboring high primary productivity, congregations of pelagic fish and diverse sessil invertebrate communities (corals, octocorals, ascidians, sponges, briozoans, etc.). The area is identified as of interest includes 1,311 km², which have no category of conservation.

Golfo Dulce has 1,153,4 km² of interest; of which 983,3 km² (85%) represent a conservation gap. It is a feeding site for marine birds and a nesting sites for marine turtles, a concentration site for cetaceans, *Rhincodon typus* and "piangua" banks. Its uniqueness resides in it containing an anoxic basin unlike any other in the tropics, with important coralline formations in danger of disappearing due to sedimentation.

Some important biological-ecological properties in Golfo Dulce are:

1. It is the most accessible marine site and less dangerous (marinas conditions) for dolphin observation. Great communities of spotted dolphins (*Stenella attenuata*) and the common bottle nose (*Tursiops truncatus*) are regulars in the area.
2. Its coral reefs jointly with those from the Chiriqui Gulf in Panama are the oldest of the American Pacific.
3. From December to March the presence of humpback whales (*Megaptera novaeangliae*) coming from north America are common from Caño Island to Golfo Dulce, and between July and September some community individuals of humpbacks from the south come with their young to Golfo Dulce.
4. It is the nesting site of many marine species in the rocky shores and their mangroves (e.g. Needle Fish, snappers, etc.).
5. It is common that pelagic species visit in these calm waters. Among them there are the large shark whales, fish schools and sometimes occasional orcas.
6. Golfo Dulce has in its external area (Platanares and Punta Banco) some important sand beaches for

Pacific turtle nesting (Ridley, Leatherback and Black).

When increasing the net of MPAs and incorporate the identified gaps for Golfo Dulce and Coco Island it will be consolidating, among others, the protection of:

- Shark whale (*Rhincondon typus*) congregation areas
- Hammer shark (*Sphyrra* spp.) congregation areas
- The area where the only occurrence of the shark *Odontaspis ferox*; the gobiid fish *Acanthemblemaria atrata* and of the fish *Plectrodromus leopardus* have been recorded for the Eastern Tropical Pacific.
- The area where the only occurrence of the **endemics** *Axoclinus coccorensis*; the gobiids *Chriolepis atrimelim*, *Gobiesox fulvus* and *Lythripinus cobalos* as well as the sea bass *Serranus tico* and the scorpion fish *Scorpoaena cocoensis* have been recorded for the Eastern Tropical Pacific.
- Congregation areas of marine mammals (humpbacks, blue whales, orca, false orca, spotted dolphin, tucuxi, bottle nose dolphin).
- Nesting areas for the golfin turtle or olive green (*Lepidochelys olivacea*).

OBJECTIVES AND RESULTS

Please provide a brief description of objectives and estimate of funding required for each, as well as the overall expected results.

OBJECTIVES	FUNDING REQUIRED	EXPECTED RESULT
Objective 1. By 2012, SINAC improves representation and ecological integrity of coastal and marine biodiversity, incorporating 1 new and expanded MPAs, using an ecosystem approach and consolidating the protection of 1 ocean site.	US\$ 71.300	Result 1.1. Coastal marine biodiversity representation and ecological integrity of MPAs has been improved. Result 1.2. 100 % of the surface area of the Oceanic site of world importance (Coco Island World Patrimony site). Result 1.3. New MPAs in their terrestrial portions have been marked with boundary stones.
Objective 2. By 2013, 2 MPAs recently created or expanded have official management plans	US\$ 93.000	Result 2.1. Newly created or expanded MPAs have new or updated official management plans
Objective 3. By 2015, 3 MPAs of existing MPAs in 2009, that are being monitored receive a score of acceptable or higher to maintain and improve protected biodiversity representation and ecological integrity	US\$ 522.000	Result 3.1. The MPAs have reached a score of at least "acceptable" in the monitoring of Effective Management
Objective 4. By 2012, 2 new or expanded MPAs have control and surveillance plans	US\$ 20.000	Result 4.1. MPAs have finished and official Control and Surveillance Plans

TIMEFRAME

Please indicate the estimated number of months or years required to implement the project.

Five years

FINANCIAL SUSTAINABILITY

Please indicate counterpart funding, institutional commitment, and/or sustainable financing mechanisms that will contribute to the project's sustainability.

The proposed project is part of a larger project called Forever Costa Rica, which seeks to help Costa Rica become the first developing country to meet the goals of the Convention on Biological Diversity's Program

of Work on Protected Areas (PoWPA), and in doing so creates a unique potential model for other developing countries. Forever Costa Rica contains, as a centerpiece, the definition of stable funding to achieve the nation's goals under the CBD and to cover recurring associated expenses. A private trust will be established with the beneficiary defined as "the public protected areas of Costa Rica". The trustee will be the Asociación Costa Rica por Siempre, a civil, private, nonprofit association domiciled in Costa Rica. This association has the objective of providing the goods and services needed to allow Costa Rica's implementation of its national and international commitments for the conservation of biodiversity, especially those included in the Program of Work on Protected Areas under the Convention on Biological Diversity.

The total fundraising goal is US\$50 million. Interest income from the US\$42 million (or annual flows from bilateral and multilateral funding sources) will be used to finance recurring costs originated by the project. In addition, a sinking fund of US\$8 million will be used for expanding and improving the marine protected area system during the life of the project.

The Nature Conservancy, the Linden Trust for Conservation and the Gordon and Betty Moore Foundation will raise at least US\$34 million from individual donors and nonprofit foundations, and the project will raise at least US\$17 million from bilateral and multilateral donors. As of 9/23/09 detailed costing exercises and the donor list are available upon request.

INSTITUTIONAL CONTEXT

Please indicate the partners to be involved in this project and their roles.

PARTNER NAME	ROLE IN THIS PROJECT	CONTACT PERSON NAME, TITLE, TELEPHONE, EMAIL	URL &/OR OTHER INFO ABOUT THE INSTITUTION
<i>Indicate who is submitting project here</i> Asociación Costa Rica Por Siempre	Implementing agency	Silvia Charpentier, Project Manager, scharpentier@racsa.co.cr	www.forevercostarica.org
<i>Indicate other partners here</i> Linden Trust for Conservation, Gordon and Betty Moore Foundation and The Nature Conservancy	Donor, External advisor	Zdenka Piskulich, FCR Project Director TNC, zpiskulich@tnc.org	

PARTICIPATION AND EQUITY

Please indicate if/how this project will contribute to the **full and effective participation**, as well as equitable sharing of costs and benefits, with indigenous and local communities.

The coastal human populations that use these resources will participate in biodiversity conservation through the design of the MPAs. The MPAs should have a zoning design that respond to the needs of the maintenance and improvement of wildlife and human populations.

ECOSYSTEM GOODS, SERVICES AND LIVELIHOODS

Please indicate the extent to which **ecosystem goods and services** will be secured, and **livelihoods** will be improved, as a result of this project.

ECOSYSTEM GOODS AND SERVICES PROVIDED	0	1	2	3	4
Carbon sequestration (1)					
Storm barriers, flood control and protection against sea level rise (2)					
Freshwater security (2)					
Food security (2)					X
Regulating spread of diseases (2)					
Cultural and spiritual access (2)					
Income generation from tourism (3)				X	
Income generation from sustainable resource harvesting (3)					X
<i>Insert another ecosystem good, and service or livelihood aspect here</i>					

1: Contributes to climate change mitigation

2: Contributes to climate change adaptation

3. Contributes to sustainable income generation

If carbon sequestration is checked, please indicate any existing information about carbon or carbon equivalent values existing in this area and how this project will ensure its storage. If specific figures are currently available, please include them here.

Optional: Please indicate any additional information to support these indicators and attach supporting documents.

SECTION III: ADDITIONAL PROJECT INFORMATION

IMPLEMENTATION OF THE CBD PROGRAMME OF WORK ON PROTECTED AREAS

Please indicate all the Programme of Work on Protected Area Goals that apply to this project.

ELEMENT 1: STRENGTHENING PROTECTED AREA SYSTEM AND SITES (click for more information)		
1.1	National protected area network design and completion	X
1.2	Protected area connectivity and integration	X
1.3	Regional (transboundary) protected area network design & completion	X
1.4	Management planning	X
1.5	Threat abatement Regional	X
ELEMENT 2: GOVERNANCE, PARTICIPATION, EQUITY AND BENEFIT SHARING (click for more information)		
2.1	Equity and benefit sharing	
2.2	Involvement of indigenous and local communities	X
ELEMENT 3: ENABLING ACTIVITIES (click for more information)		
3.1	Protected area policy improvement and integration	
3.2, 3.3	Professional capacity development	X
3.4	Sustainable financing	X
3.5	Public awareness	
ELEMENT 4: STANDARDS, ASSESSMENT AND MONITORING (click for more information)		
4.1, 4.2	Management Effectiveness assessment and adaptive management	X
4.3, 4.4	Monitoring and research	X

If goal 2.2 “Involvement of indigenous and local communities” is checked, please mention how this project will contribute to a greater [diversity of governance types](#) in the projected area system.

To be able to accomplish established conservation goals, different conservation mechanisms must be implemented not only considering protection of marine resources but also a rational and sustainable use of them.

An element to consider is the options offered to local populations to use existing natural resources in a MPA, especially if they are very restrictive categories as communities do not understand the benefits or aggregated value of the MPA’s existence. This is the reason why the new Management categories established must permit community involvement. Costa Rica has created two new management categories that are more permissive from the point of view of human intervention; such as Marine Reserves and Marine Management Areas with the main objective of biodiversity conservation and sustainable use of resources derived from the ecosystems.

The definition of the new MPAs will incorporate lessons from other Management models established in Costa Rica:

- Multiple Use Marine Areas. Various stakeholders are members of a Management committee with the main objective of closing the gap between productive activities and the protected area participating in the planning, use and protection of the marine resources.
- Marine Areas for Responsible Fishing. These are areas important as fishing areas, where fishing activities will be regulated with the support of coastal communities and other institutions present in the area.

Additionally, a series of forums will be organized as spaces for participation while defining the MPAs and the elaboration of their management plans.

Optional: Please indicate any additional information and attach supporting documents.

The Marine Conservation Corridor of the Eastern Pacific (CMAR) is a regional initiative to support the cooperation and sustainable use of the biological Diversity, currently with the Leadership of Ecuador, Costa Rica, Colombia and Panama, and supported by their interests and national priorities. The CMAR do not pretend to be a large protected area, or impede industrial or artisan fishing. The initiative

neither wants to exclude fishermen or other users of marine resources.. On the contrary, the Corridor promotes the sustainable use and good management, which will permit multiple benefits to users that depend on fishing.

The CMAR is completely consequential with respecting national sovereignty of each of its member countries that are responsible of their own territory and will maintain absolute control of their exclusive economic marine zones. This corridor represents a great opportunity for the 4 member countries to assume Leadership in conservation and sustainable development of their marine environment, through an innovative model of regional cooperation.

The quality and abundance of marine resources of the region will be for fishing or tourism attractions, recognized worldwide. This initiative will increment their recognition and will give firm steps towards guaranteeing that the benefits will be produced on the long term for local communities, member countries and humanity in general.

NATIONAL PLANNING

Please indicate any linkages between this project and priorities identified through other national sustainable development planning processes, including [National Biodiversity Action Plans](#), national REDD strategies, national climate adaptation planning, Poverty Reduction Planning (PRSPs), National Land-Use Planning, MDG planning, etc.

The project is consistent with the Environment Law No. 7554 (1995) and the Biodiversity Law No. 7788 (1998), which seeks to conserve biodiversity and the sustainable use of the country's resources and promote the fair distributions of costs and benefits. Also, the project is consistent with Costa Rica's National Strategy for Biodiversity Conservation and Sustainable Use (1999) and the National Development Plan (2006-2010), which provide the framework for ecosystem marine conservation and sustainable use. Similarly, the project is consistent with the National Marine Strategy (2008), which highlights the need for incorporating the conservation and sustainable use of marine resources as part of Costa Rica's development needs.

ATTACHMENTS

Please indicate the file names of any documents attached to this statement of interest.

Estrategia Nacional Marina 2008

http://www.tncinfocostarica.net/content/publicaciones/ambientes_marinos/Estrategia_Nacional_Marina.pdf

Análisis de vacíos marino 2008

Plan de Implementación de análisis de vacíos marino 2009

Mapas y fotos

Documento de Proyecto CRxS

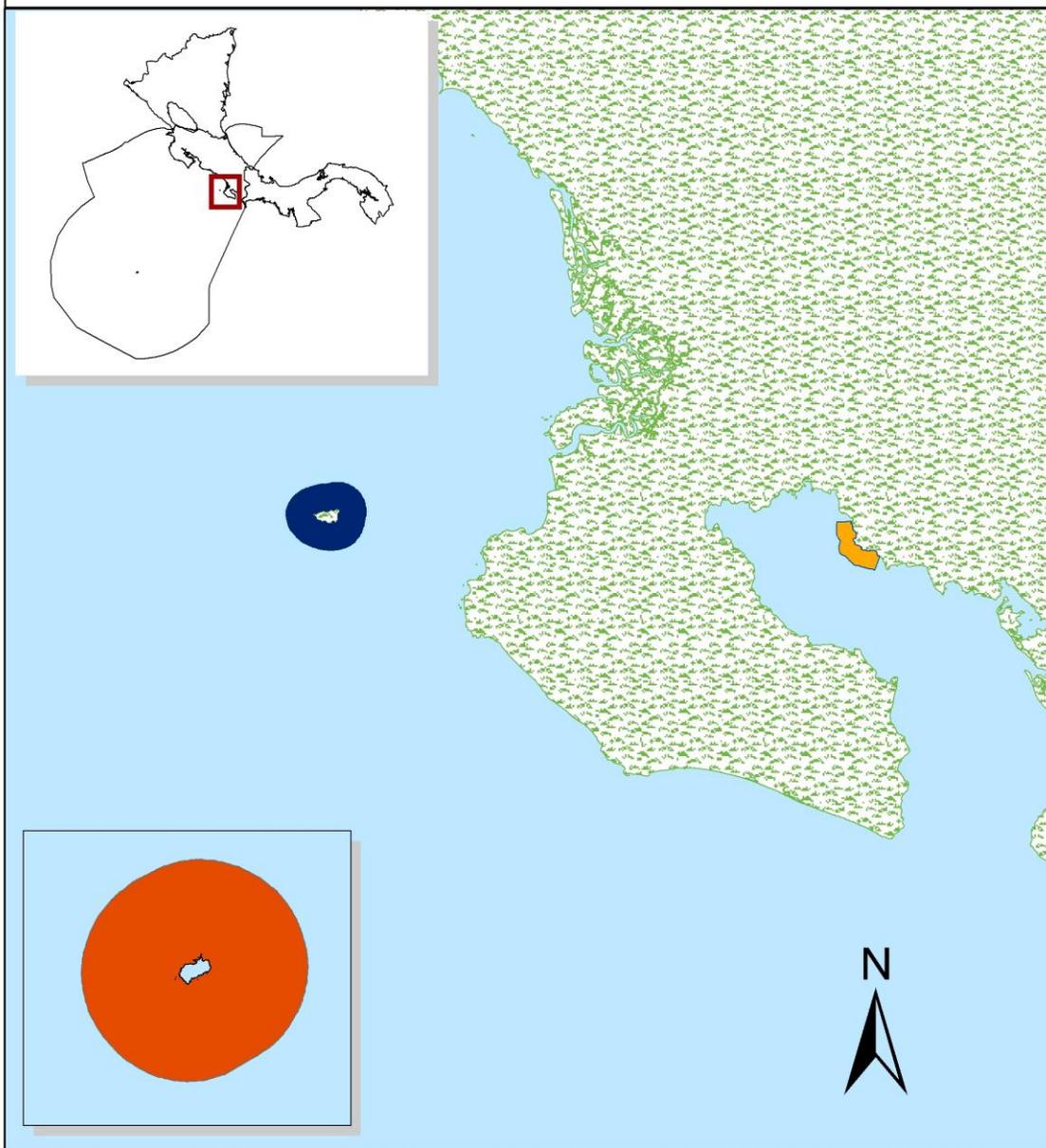
Ambientes Marinos Costeros de Costa Rica (2006)

http://www.tncinfocostarica.net/content/publicaciones/ambientes_marinos/Infome_ambientes_marino_costeros_Costa_

Modelo Conceptual y encadenamiento de resultados CRxS

IMPROVING ECOLOGICAL INTEGRITY OF COASTAL AND MARINE BIODIVERSITY IN MPAS AS ADAPTATION MEASURES FOR CLIMATE CHANGE

LIFEWEB PROJECT EXPRESSION OF INTEREST



Marine Protected Areas

-  Caño Island Biological Reserve
-  Cocos Island National Park
-  Piedras Blancas National Park

0 5,500 11,000 22,000 33,000 44,000 Km

