ADAPTATION FUND

FULLY DEVELOPED PROPOSAL FOR SINGLE COUNTRY

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme: Increasing socio-ecological resilience in the Uruguayan coastal zone and strengthening the adaptive capacity of its infrastructure: **REACC COSTAS**

Country: Oriental Republic of Uruguay (República Oriental del Uruguay)

Thematic Focal Area:

Type of Implementing Entity: Regional IE.

Implementing Entity: CAF, Corporación Andina de Fomento (Banco de Desarrollo de América Latina).

Executing Entities: CND, Corporación Nacional para el Desarrollo.

Amount of Financing Requested: 10,000,000 (in U.S Dollars Equivalent)

Project Formulation Grant Request (available to NIEs only): Yes ☐ No ☒

Amount of Requested financing for PFG: Not applicable (in U.S Dollars Equivalent)

Letter of Endorsement (LOE) signed: Yes ☐ No ☐

NOTE: LOEs should be signed by the Designated Authority (DA). The signatory DA must be on file with the Adaptation Fund. To find the DA currently on file check this page: https://www.adaptation-fund.org/apply-funding/designated-authorities

Stage of Submission:

☒ This proposal has been submitted before including at a different stage (concept, fully-developed proposal)

☐ This is the first submission ever of the proposal at any stage

In case of a resubmission, please indicate the last submission date: Click or tap to enter a date.

Please note that fully-developed proposal documents should not exceed 100 pages for the main document, and 100 pages for the annexes.

Project/Programme Background and Context:

Summary

1. Coastal erosion and coastal flooding are the main impacts of climate change on the Uruguayan coast. It is estimated that, already today, about 42% of the River Plate (*Río de la Plata*) coast and 32% of the Atlantic coast are subject to erosion, particularly during extreme events such as storms caused by wind and wave action. Flash floods are caused by a combination of meteorological and hydrological effects. The occurrence of high tides with large atmospherically induced storm surges has led to the deterioration and loss of beaches and dunes, as well as damage to coastal infrastructure.
2. These problems are aggravated by rising sea levels and the increasing frequency of extreme events such as intense storms, a direct consequence of climate change. The ENSO phenomenon is of particular concern, as it has the greatest impact on precipitations. As a result, the threat to coastal cities, residential communities, infrastructure, beaches, wetlands, and ecosystems is increasing. The number of people affected grows in relation to the return periods of extreme events (TR5 several hundred; TR500 several thousand).
3. The economic cost of erosion is already significant, reaching USD $45.5 million annually. This value is expected to increase by 25% by the end of the 21st century. It is evident that climate change will worsen existing challenges, such as drainage and river discharge problems, poor practices, and human-induced ecosystem degradation. These non-climatic factors add to the complex reality of a territory that is highly dependent on the tourism value chain.
4. The project has been conceived within the framework of the National Adaptation Plan for the coastal zone in the face of climate variability and change (NAP Costas), which has established a solid scientific evidence base on hazards and vulnerability and has carried out a broad multi-stakeholder and gender-sensitive consultation process to define priorities.
5. The project will be led by the Ministry of the Environment (*Ministerio de Ambiente*), through its National Directorate of Climate Change (*Dirección Nacional de Cambio Climático*, DINACC), which is the designated national authority before the Adaptation Fund and the institution responsible for implementing the NAP Costas. CAF, Development Bank of Latin America and the Caribbean, will be the implementing entity (IE) and CND, National Development Corporation (*Corporación Nacional para el Desarrollo*), will be the executing entity (EE), the same IE and EE as in the case of the binational project financed by the Adaptation Fund "Adaptation to climate change in cities and vulnerable coastal ecosystems of the Uruguay River (*Adaptación al cambio climático en ciudades y ecosistemas costeros vulnerables del Río Uruguay*)", with which this project will coordinate actions and capitalize on the experience acquired.
6. The project will work in the six departments of the Uruguayan coastal zone: Colonia, San José, Montevideo, Canelones, Maldonado and Rocha to increase the adaptive capacity of the population and the resilience of coastal ecosystems exposed to the risks of flooding and erosion, enhanced by climate change. Overall, a total of 521,544 direct and indirect beneficiaries (53% women) are expected to be reached through the project's actions and contribute to the conservation and rehabilitation of a total of 96.75 hectares. In addition, it is expected to contribute, through coastal planning measures, to better management and protection of the ecosystems of the entire project area.
7. This project is based on a comprehensive and participatory approach that considers gender and generational aspects, supported by scientific evidence and the collaboration of diverse stakeholders. It is oriented to promote the Ecosystem-based Adaptation (EbA) approach, seeking to transform the perception of the coast, promoting its care and resilience as a shared and accessible space for all people. It will focus on promoting democratic access to public space on the coast in the long term, recognizing its value as a fundamental natural and social resource. In this way, it aims to achieve sustainable and equitable coastal development in the context of climate change.
8. The project, in compliance with the National Climate Change Policy (NCCP) (*Política Nacional de Cambio Climático*)[1] and international commitments (NDCs), will work to strengthen evidence-based coastal planning considering climate change (Component 1), promote investments in green and hybrid infrastructure to restore and conserve coastal ecosystems, improve drainage, and protect homes and buildings (Component 2), and raise awareness and build the capacity of coastal stakeholders to ensure that they are aware of risks and adaptation measures, and actively engage in climate action (Component 3).

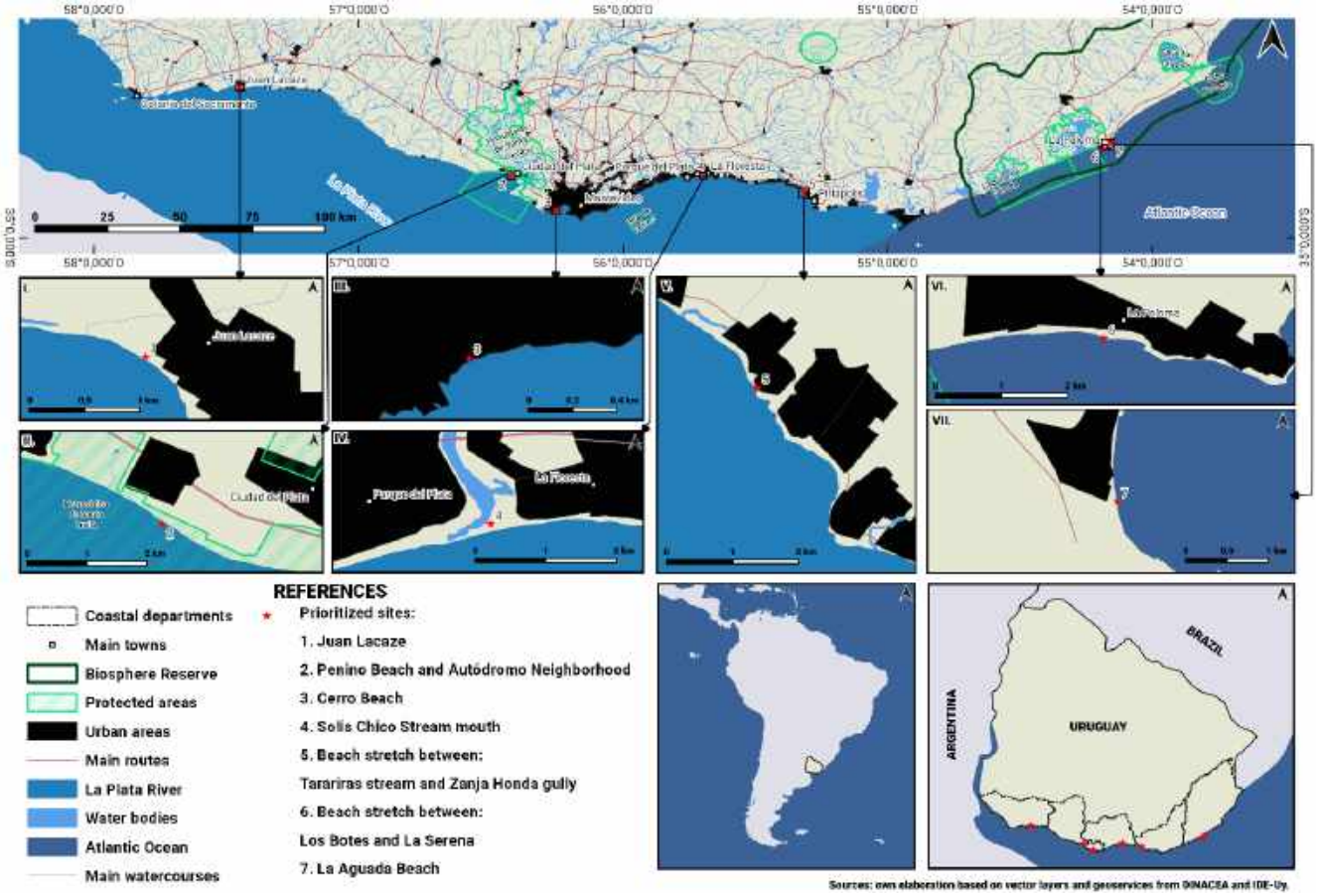
[1] National Climate Change Policy (*Política Nacional de Cambio Climático*). Strategic and programmatic instrument prepared by the Sistema Nacional de Respuesta al Cambio Climático y Variablidad. Executive Order No. 310 of November 3, 2017.

The Uruguayan coast

9. The territory of the Oriental Republic of Uruguay is divided into nineteen administrative departments, six of which are located along the coastal zone. The Uruguayan coastline on the River Plate and the Atlantic Ocean is approximately 714 km long, of which 478 km correspond to the River Plate and 236 km to the Atlantic Ocean. The predominant coastal formations are arc-shaped sandy beaches bounded by rocky points and dune ridges; coastal lagoons and wetlands are prominent along the ocean coast. The Uruguayan coastal zone contains very rich, diverse, and productive ecosystems, which provide goods and services that support activities such as fishing, tourism, navigation, port development projects and oil processing, and where urban and industrial establishments are located.

10. The following map shows the location of the six departments where the project will be implemented and the specific sites where investments in green and hybrid infrastructure will be focused (Component 2). These sites were selected following clear criteria. First, the pre-selection made by the intendencies in the framework of the National Adaptation Plan for the coastal zone (NAP Costas) was considered. Then, the results of the population and ecosystem vulnerability analyses carried out during the formulation of the concept note were kept in mind and the prioritization criteria established by the Adaptation Fund were considered. As a result, the priorities of the departmental governments were combined with those of the Fund, which led to the selection of the sites presented below. It is important to note that, according to the results of the vulnerability analyses – presented later in this section –, all these sites present significant levels of climate risk.

Figure 1. General location map of coastal departments and prioritized sites ("pilot sites").



Sources: own elaboration based on vector layers and geoservices from DINACEA and IDE-Uy.

A) Social, environmental and economic context

a) Demographic data in the project area

11. Uruguay has a land area of 17,621,500 hectares, the coastal zone is approximately 67,200 hectares long, of which 45,200 correspond to the River Plate and 22,000 to the Atlantic Ocean. Of the 6 coastal departments, 4 departments are entirely on the River Plate (Colonia, San José, Montevideo – where the capital of the country is located – and Canelones), Maldonado has territory on the River Plate and on the Atlantic Ocean, while Rocha is entirely on the Atlantic Ocean.

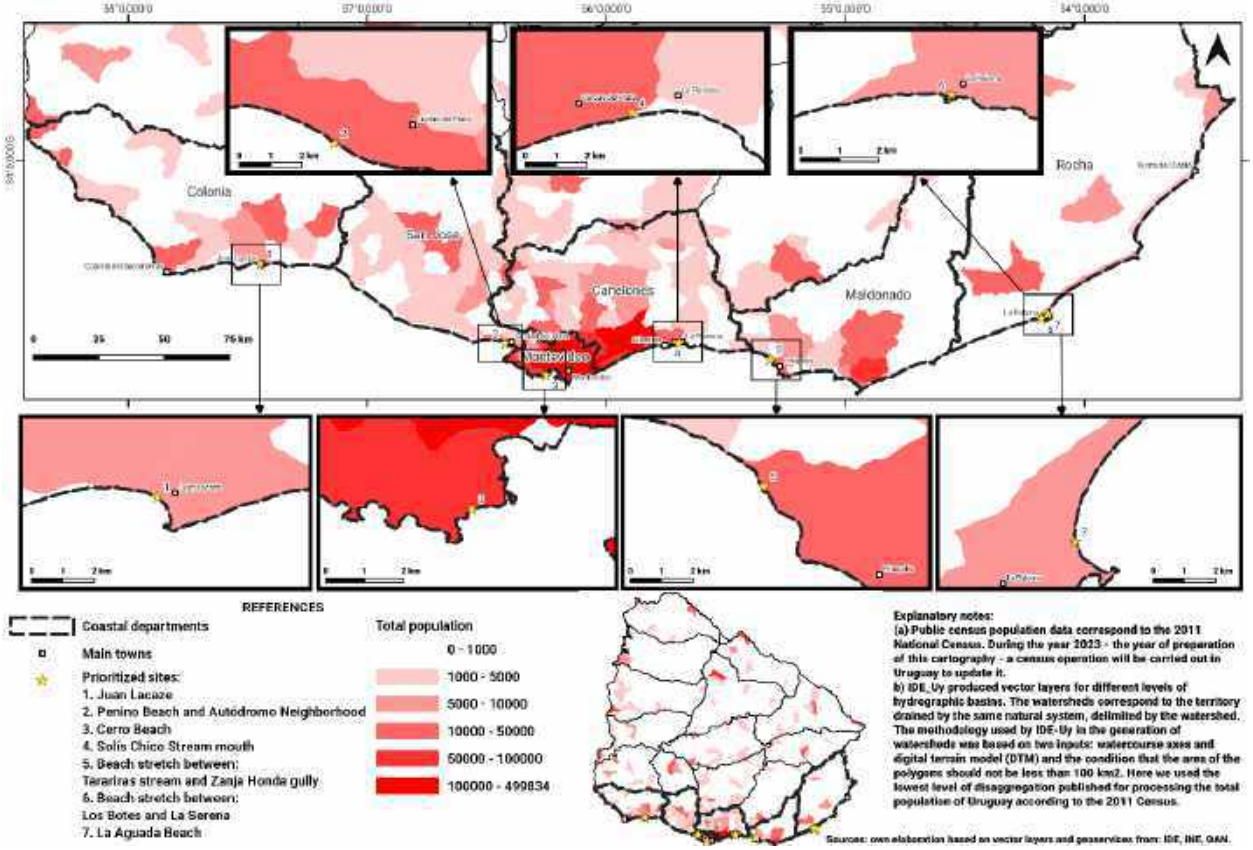
12. According to data from the 2011 Population Census (*Censo de Población 2011*), Uruguay has 3,286,314 inhabitants, 70% of whom live in the coastal departments.

13. The coastal area[2] represents 2.9% of the national surface and concentrates 49% of the national population, of which 38% corresponds to Montevideo, 5% to Maldonado, 4% to Canelones, 2% to Colonia, and less than 1% to San José and Rocha[3].

Table 1. Population data of the coastal departments.

Coastal departments		Montevideo	Canelones	Colonia	Maldonado	Rocha	San José	Country total
Area (hectares)		53,053	453,098	610,995	479,706	1,055,703	500,893	17,621,500
Population	In absolute terms	1,319,108	520,187	123,203	164,300	68,088	108,309	3,286,314
	As the percentage of the total population	40.1%	15.8%	3.7%	5.0%	2.1%	3.3%	100.0%
	As the percentage of the female population	53.4%	51.3%	51.1%	50.7%	51.1%	50%	52%
Population density per km^2		2,488.9	114.7	20.2	34.3	6.5	21.7	18.6

Figure 2. Population map of the coastal departments.



14. Education level: In 2019[4], the literacy rate of the population over 15 years of age was 98.8%. In turn, 29.9% of the population over 25 years of age had only completed primary school, while another 20.5% had tertiary education. Among the coastal departments, San José, Colonia and Rocha had the highest proportions of adults with primary education as their highest level of education (42%, 40% and 35.7% respectively), while Montevideo had the lowest with 19.8%. Similarly, this department had the highest proportion of the population with tertiary education (31.1%), while San José had the lowest (8.8%).

[2] Coastal space of the River Plate and the Atlantic Ocean whose boundary is established in the Ley de Regulación del Ordenamiento Territorial y Desarrollo Sostenible of the Espacio Costero del Océano Atlántico y del Rio de la Plata (Directriz Nacional del Espacio Costero) (Law No. 19772).
[3] Coastal Population Index Methodological Sheet (*Hoja Metodológica del Índice de Población Costera*), Observatorio Territorial, DINOT–MVOT.
[4] Data based on the ECH 2019 of INE, Observatorio Territorio Uruguay.

15. According to data from the *Encuesta Continua de Hogares*, ECH 2019, the female population generally has more years of education than the male population. Among the coastal departments analyzed, the population of Maldonado, Canelones and Montevideo has an average between 9 and 10 years of education. It should be noted that in all of these departments, the average number of years of education for women is almost one year higher than for men. This, in turn, has its correlation in the illiteracy rates by department, which are about half a point lower for women than for men. And the same trend is maintained for the female population in terms of tertiary education attained.
16. Health and life expectancy: For the year 2016[5], life expectancy at birth in Uruguay was 77.4 years, and in all departments this indicator is around 77 years on average, except in Rocha and San José, where it was lower, at 75.9 and 76.4 years, respectively. Following the national average (80.6 for women and 73.8 for men), women have a higher life expectancy in all coastal departments, with a difference of between 6 and 7 years depending on the department. Life expectancy at birth for women is higher in Colonia and Maldonado than the national average: 81 years in both cases.
17. Disability: The percentage of people with disabilities in seeing, hearing, walking or learning in Uruguay was 15.7% in 2011, according to the national census. Within the coastal departments, Rocha had the highest percentage with 19.4%, followed by Canelones and San José with 16.8% each. Maldonado had the least with 13.8% of the total population.
18. Informal settlements: In 2018[6], 330 irregular settlements were registered in Montevideo (54% of the country) and another 109 (18% of the country) in Canelones. The other 4 departments add another 38 settlements. In Montevideo alone, 122,777 people lived in 34,425 houses in irregular settlements. Although most of them are concentrated in the north of the departments on the outskirts of the cities, there is a small percentage living on the coast, including the largest settlement in the country (Santa Catalina).
19. Unsatisfied basic needs: According to the 2011 census, 33.8% of the population had at least one unsatisfied basic need. The largest deficit was concentrated in the lack of basic comforts such as heating or hot water for bathing, while the second most common factor was overcrowding. In addition, children and adolescents had a higher percentage of critical deficiencies than the adult population, and the Afro-descendant population had a higher percentage of UBN than the white population[7]. According to the 2006 Expanded National Household Survey (*Encuesta Nacional de Hogares Ampliada*, ENHA), the Afro-descendant population represents 9.1% of the total population.
20. Among the coastal departments, San José, Rocha and Maldonado had the highest percentages of people with at least one UBN, at 35.7%, 35% and 34.5%, respectively, while Montevideo had the lowest, at 26.8%.
21. Indigenous population: The reality of the groups that self-identify as indigenous in Uruguay is different from that of other Latin American countries since they are not territorialized or live in communities directly from natural resources. In the 2006 Expanded National Household Survey (ENHA), the population that self-identified as indigenous was 2.9% of the total[8].
22. Access to information technologies: The information collected in 2019[9] shows that almost 83.3% of the population in Uruguay uses mobile phones, and 82.9% has access to the internet. These figures are similar in the coastal departments, except for Colonia, where the population with access to the internet is the lowest (75.7%). In terms of how men and women are linked to Internet access and computer use, in all departments women show greater use of mobile phones, as well as greater access to the internet. In some cases, the differences are greater, such as in San José, where the percentage of women with internet access is 83.5% compared to 78.8% of men, or in Canelones and Rocha, where there are more women with cell phones than men (85.6% and 83.5%, respectively).

b) Main economic activities (livelihoods)

23. According to the World Bank, Uruguay's GDP in 2021 was US $61.41 billion and GDP per capita was equivalent to US $17,924. Montevideo contributes almost 50% of economic activity, Canelones 10%, Colonia and Maldonado around 5% and Rocha and San José about 2.5%.
24. According to data from the Central Bank of Uruguay (*Banco Central del Uruguay*), in 2021 the tertiary sector represented 71.4% of Gross Value Added (GVA), the secondary sector 20.7%, and the primary sector 7.9%.

[5] Data based on information from INE, Observatorio Territorio Uruguay.
[6] Based on the Programa de Mejoramiento de Barrios (PMB-MVOTMA), Observatorio Territorio Uruguay.
[7] The Socioeconomic Vulnerability Analysis accompanying this Concept Note includes sex-disaggregated data for some Unmet Basic Needs in the project intervention sites.
[8] Bucheli, M. & Cabella, W. (2007). Informe temático: Perfil demográfico y socioeconómico de la población uruguaya según su ascendencia racial. Encuesta Nacional de Hogares Ampliada 2006.
[9] Data based on the ECH 2019 of INE, Observatorio Territorio Uruguay.

Among the coastal departments, this composition differs: in Montevideo the participation of the primary sector is almost null, and the tertiary sector is more than 75% since it is an important financial and commercial center; Maldonado presents a similar structure with tourism as its main economic sector. Colonia and Canelones have a higher share of the industrial sector with more than 45% and 35% of GVA respectively, in the food and beverages, chemical products, machinery and equipment, and rubber and plastic products industries, among others. In Rocha and San José, the participation of each sector is more diverse: there is a greater participation of the primary sector (more than 20%), mainly in beef and dairy cattle production and cereals and oilseeds, but there is also an important participation of industry in San José and tourism in Rocha.

25. The tourism sector is very important for the economic activity of the project area in terms of generated income and employment. The tourism sector between 2015 and 2019[10] was equivalent to an average to 7.5% of the national GDP and had a 43% incidence of the country's exported service revenues, with the main destination being Maldonado, followed by Montevideo and Rocha. It also creates a lot of employment: by 2019, 7.2% of total jobs were tourism jobs (127,664; 45.1% women) and were composed of 40.4% of the gastronomic sector, 21.2% of the transport sector (land 16.8%, water 3% and air 1.4%), 16.6% of the accommodation sector and the remaining 21.8% was distributed among travel agencies and financial, recreational and cultural activities. Among the departments, in Maldonado it represented 12.3%, in Colonia 9%, in Rocha 7.2%, in Montevideo 6.9%, in Canelones 6% and in San José 3.6% of total jobs. Specifically, on the beaches of the pilot sites, domestic tourism alone (residents from other departments of the country) totals about 510,000 visitors between September 2022 and September 2023 (52% women, 45% of the total are between 18 and 39 years old), with an average stay of 4.8 hours and spend an average of 3.5 nights at the site[11].
26. Fishing is a highly developed sector in the project area. In 2021[12], there were 767 registered vessels, of which 713 were artisanal fleets with 1,590 crew members and 24% of the annual catch. 73% of the landings are marine fish and 16% are freshwater fish.
27. The national average per capita household income for the year 2022, according to the ECH, was equivalent to UYU $28,648 (almost USD $700). Only Montevideo was above the national average with UYU $36,525 (USD $888), Canelones and Colonia were the closest to the national average, together averaging around UYU $26,741 (USD $650), while Maldonado and San José averaged UYU $23,544 (USD $575) and Rocha was the lowest with UYU $22,212 (USD $540). However, if the poverty indicator is observed by income level and consumption basket for the year 2022, according to the ECH, Montevideo is the coastal department with the highest proportion of poor population (12.8%), followed by Rocha with 11.4%, both are above the national average which was 9.9%, then Maldonado, Canelones and Colonia resulted in 7%, 6.3% and 4.5% of the population respectively and San José resulted in the lowest number with 1.8%. As for the indicator of people living in poor households, by 2022 there were no significant differences by sex, with the coastal departments following the trend recorded at the national level, whose data reflect a proportion of 9.5% for men and 10.3% for women.

c) Key ecosystems

28. The coast of the River Plate and the Atlantic Ocean of Uruguay is made up of a mosaic of geomorphological formations and associated ecosystems, such as rocky points, sandy beach arches, ravines, coastal lagoons and wetlands, all of which are highly interrelated[13]. In a cross-sectional profile of a sandy coast, a healthy configuration implies a succession of ecosystems. First, there is the active littoral zone (ALZ), directly exposed to wave energy, where vegetation does not develop permanently and the fauna that inhabits it is adapted to these high-energy conditions. This is followed by the coastal dune ridge with herbaceous psammophilous vegetation. This ridge serves as a buffer against wave energy and acts as a first line of defense against extreme events. The vegetation that develops in association with the ridge allows the dune structure to reconfigure after the event[14]. Other dunes with a higher degree of stabilization (due to vegetation) develop behind the first ridge. There the vegetation reaches a greater extent, with an initial cover of shrubs and bushes and further into the area of arboreal vegetation (forests). Behind the coastal dune ridge and between the dune fields, there are topographically lower areas where wetlands, ponds or temporary or permanent lagoons develop. These low areas are configured as microhabitats for many species due to the higher moisture content than the sandy environment.

[10] Anuario Estadístico 2019, Ministerio de Turismo.
[11] Data obtained from cellular telephony through the Plataforma Territorio Inteligente, Observatorio de Turismo MINTUR-ANTEL.
[12] Ministerio de Ganadería, Agricultura y Pesca (MGAP) – Dirección Nacional de Recursos Acuáticos (DINARA) – Economía Pesquera, Anuario Estadístico Nacional 2022.
[13] Trimble, M., Ríos, M., Passadore, C., Szephegyi, M., Nin, M., García Olaso, F., ... & Laporta, P. (2010). Ecosistemas costeros uruguayos: una guía para su conocimiento. Ed. Imprenta Monteverde, Montevideo, Uruguay.
Gómez, A., Echevarría, L., Caporale, M., et al. (2016). Introducción al Manejo Integrado de Zonas Costeras y Marinas. Montevideo: MVOTMA – UdelaR.
[14] Panario, D. & Gutiérrez, O. (2005). La vegetación en la evolución de playas arenosas. El caso de la costa uruguaya. *Ecosistemas*, 14(2).

29. There are also watercourses along the coast that flow into the coastal zone. In this hydrological basin, there are various types of wetlands or marshes that play an important role in buffering floods, retaining solids and nutrients, and reducing downstream discharges. Watercourses connect the coastal zone to the upper reaches of the basin and contribute sediment to the coastal system. In turn, the beach arcs are geomorphologically connected by the coastal drift, which transports sediments (in this case sandy) along the entire coast, mainly in a NE direction from Cabo Polonio (Rocha) towards Brazil and in a SW or W direction from Cabo Polonio to Punta Gorda (Colonia), except for a stretch in a NE direction between La Paloma and La Pedrera (where La Aguada is included)[15].
30. The composition of the flora and fauna, as well as the physicochemical characteristics of the ecosystems, vary along the east-west axis of the country due to the salinity to which they are exposed (with higher salinity towards the east). Uruguay's coastline has a great diversity of fauna. A high percentage of the country's tetrapod vertebrates live along the coast (56% of amphibians, 70% of birds, 66% of reptiles and 47% of mammals). These percentages are particularly high when considering the country's reduced coastline, which represents 2% of the continental territory and is suffering from an accentuated process of habitat loss and fragmentation due to urbanization[16].
31. Human intervention has created anthropic ecosystems that, over time, have become part of the natural landscape of the Uruguayan coast. Although they do not perform the same functions as natural ecosystems, they do provide some ecosystem services[17]. These ecosystems consist of urban green and blue spaces, forests and agricultural crops.
32. Human activities that directly depend on ecosystems are related to artisanal and sport fishing in both marine and freshwater waters, the collection of reeds in wetlands and their use in construction, recreational and economic activities related to sun and beach tourism, the collection of plant materials and shells for handicrafts and sports activities, among other cultural services. In addition, ecosystems provide essential regulating services to sustain human life and activities. The use of the beach as a public space is part of the recreational, economic and cultural activities of the local population (seasonal tourism and recreation). The differentiated use of this public space from a gender perspective shows that it is also perceived by women as a place where care activities are carried out, when they supervise children and adolescents[18].
33. The historical human occupation of the coast (which had a very strong impulse in Uruguay in the 1940s) and the related anthropic activities have led to a generalized impact on coastal ecosystems, both by substitution (for example, the advance of coastal urbanization on areas previously occupied by ecosystems) and by degradation of their quality (through contamination, introduction of exotic species, deforestation, etc.), which in turn has caused a retreat of the coastline[19]. Of the 22 plant formations described along the Uruguayan coast, 13 are in a state of conservation concern: four have been identified as endangered, six as vulnerable and three as rare[20].. This loss and fragmentation of ecosystems, in turn, leads to a loss of connectivity for fauna[21].
34. The degradation of the beach ecosystem itself, as well as the surrounding ecosystems that are inextricably linked to it, has led to a situation of sand shortage, causing beach erosion problems all along the Uruguayan coast. The estimated loss for the present varies between 1,463 and 2,175 ha and is expected to increase by 21% by the end of the century, especially along the Rocha coast[22].
35. The selected sites have different degrees of anthropization and therefore different degrees of ecosystem degradation. In some cases, urban development has severely restricted the growth of the ecosystems, degraded their structure and composition and conditioned the possibilities of future recovery and their capacity to provide ecosystem services as a buffer against hydroclimatological events. The most extreme site in this regard is

[15] Panario, D. & Gutiérrez, O. (2006). Dinámica y fuentes de sedimentos de las playas uruguayas. In: Menafra, R., Rodríguez-Gallego, L., Scarabino, F. & Conde, D. (Eds). Bases para la conservación y el manejo de la costa uruguaya. Vida Silvestre Uruguay, Montevideo. Pp. 21-34.

[16] Brazeiro A, Toranza C & Bartesaghi L (2009): Proyecto Biodiversidad Costera. Convenio EcoPlata-UdelaR/Facultad de Ciencias. Resultado 7 del Proyecto URU 06/016: 2.3.3

[17] Foley, J., DeFries, R., Asner, C., Barford, G., Bonan, S. R., Carpenter, F. S., ... & Snyder, P. K. (2005). Global Consequences of Land Use. *Science*, 309, 570-574. Fernández, A. (2021). Guía de interpretación de información ambiental para el desarrollo de medidas de Adaptación Basadas en Ecosistemas en entornos urbanos. Informe final. Proyecto URU/18/002, "Integración del enfoque de adaptación en ciudades, infraestructuras y ordenamiento territorial". MA-UNDP.

[18] "Recomendaciones de género en la adaptación costera. Talleres en sitios pilotos: La Paloma, Piriápolis, Atlántida, Playa del Cerro y Kiyú. Plan Nacional de Adaptación al cambio Climático en la Zona Costera" (Guchin, M., August 2022).

[19] Gutiérrez, O. & Panario, D. (2006). Evolución de la desembocadura del Arroyo Pando (Canelones, Uruguay): ¿tendencias naturales o efectos antrópicos. In: Menafra, R., Rodríguez-Gallego, L., Scarabino, F. & Conde, D. (Eds.). Evolución de la desembocadura del Arroyo Pando (Canelones, Uruguay): ¿tendencias naturales o efectos antrópicos

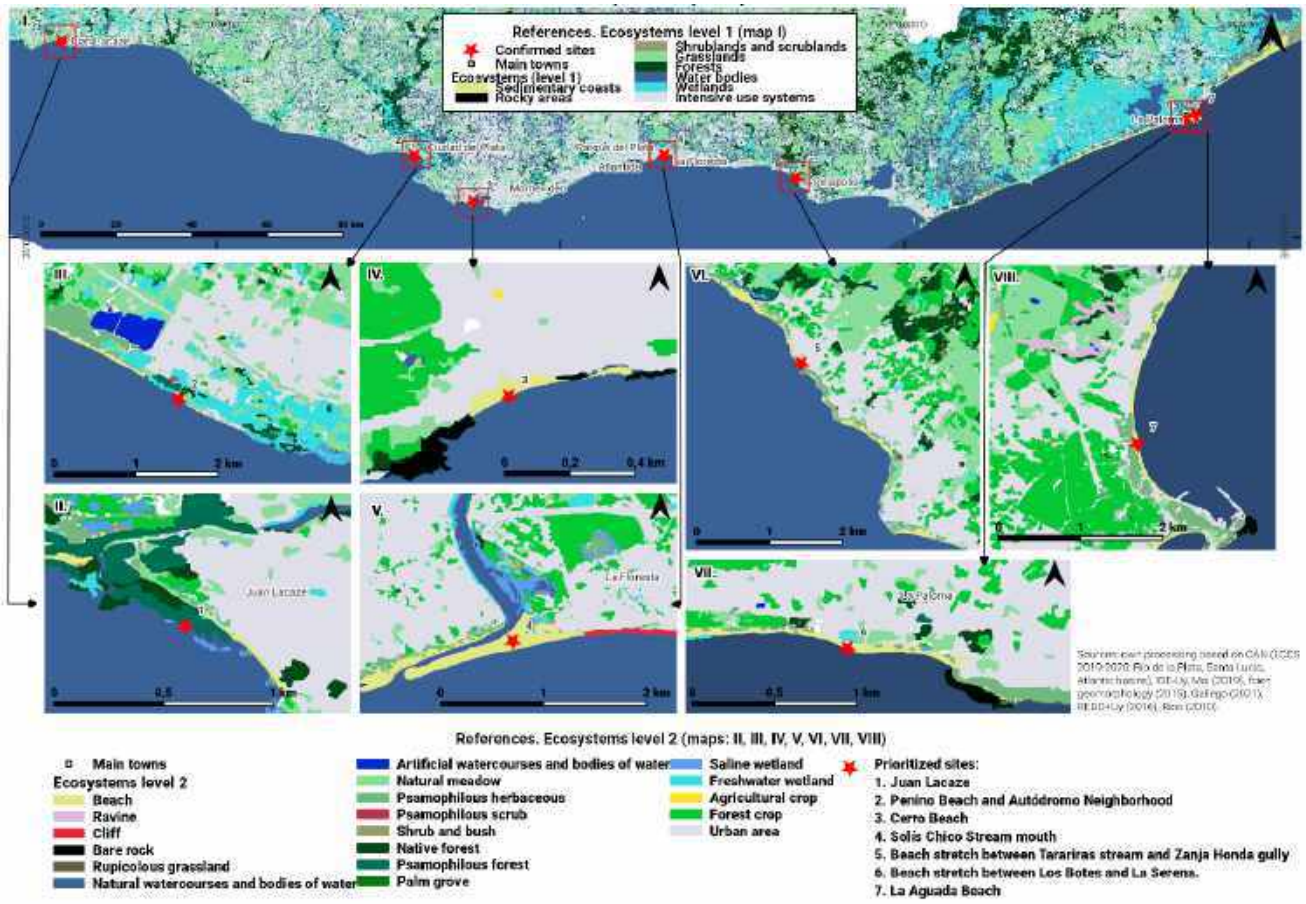
[20] Fagúndez C. & F. Lezama (2005). Distribución espacial de la vegetación costera del litoral platense y atlántico uruguayo. Informe Freplata. Ecology section, Faculty of Sciences-UdelaR. Montevideo.

[21] Bartesaghi, L. (2015). Fragmentación y conectividad del paisaje costero para vertebrados e invertebrados prioritarios para la conservación. Master's thesis in Biological Sciences. University of the Republic (Uruguay). Faculty of Sciences.

[22] IH-CANTABRIA 2019. Proyecciones de cambio climático del oleaje y residuo del nivel del mar en Uruguay. Proyecciones regionales del nivel medio del mar en Uruguay. Desarrollo de herramientas tecnológicas para evaluar los impactos, vulnerabilidad y adaptación al cambio climático en la zona costera de Uruguay. Producto realizado en el marco del NAP COSTAS, MVOTMA-CTCN-AECID, 36 pp.

Montevideo, where a boardwalk has been built immediately behind the coastal dune ridge.

Figure 3. Map of ecosystems in the prioritized sites.



36. In the sites prioritized in this project there are different types of ecosystem protection measures at different territorial scales. In Juan Lacaze, Department of Colonia, the coast has been protected by categorizing the area as natural rural land in the Local Land Use Plan (LUP) (*Plan Local de Ordenamiento Territorial*, PLOT). In Playa Penino and Autódromo, the natural rural land classification ("*Plan Local de Ordenamiento Territorial y Desarrollo Sostenible de Ciudad del Plata y su área de influencia*") is combined with the previous declaration of the entire area as a nature reserve at the departmental level[23]. This site, in turn, borders a national protected area, the Santa Lucía Wetlands Managed Resource Protected Area (*Área Protegida con Recursos Manejados Humedales de Santa Lucía*)[24], which protects the watershed that supplies drinking water to more than half of the country's population. In the mouth of the Arroyo Solís Chico, in Canelones, the determination of natural rural land in the LUP coincides with the identification in the same plan of the coastline and the dune system, as well as the mouth of the Solís Chico Creek with its associated marshes, as areas of ecosystemic value relevant for conservation. At the Department of Maldonado site, there is an initiative by a local neighborhood organization to protect small watercourses and vegetated areas that are considered biological corridors and to create an urban nature reserve in Playa Hermosa, although none of these measures have been implemented. The selected stretches of beach in the Department of Rocha are included in the Bañados del Este Biosphere Reserve (*Reserva de Biósfera Bañados del Este*)[25] and the national protected area Laguna de Rocha Protected Landscape (*Paisaje Protegido Laguna de Rocha*)[26] is located adjacently to the west.

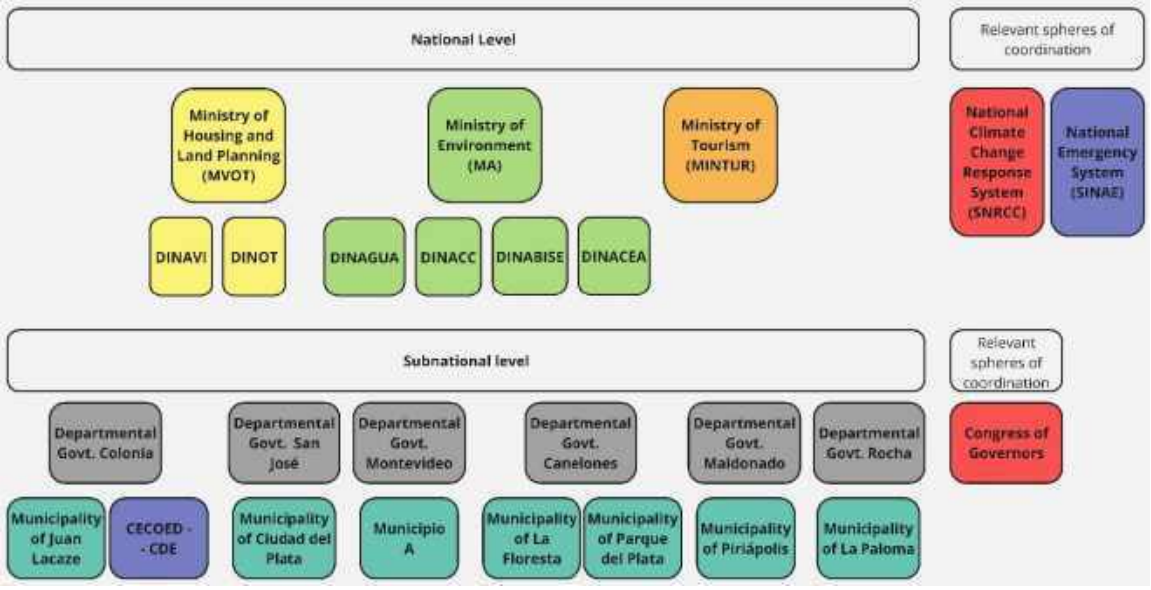
d) Coastal governance

37. This section describes the key governmental and non-governmental actors for the project and tentatively identifies those that should be considered to improve coastal governance.

[23] Resolution 774/996 of the Intendancy of San José.
[24] https://www.gub.uy/ministerio-ambiente/politicas-y-gestion/area-protegida-recursos-manejados-humedales-santa-lucia-canelones-montevideo
[25] https://www.probides.org.uy/reserva-biosfera.php
[26] https://www.gub.uy/ministerio-ambiente/politicas-y-gestion/paisaje-protegido-laguna-rocha-rocha

38. **Key governmental actors**: There are three levels of government in Uruguay: the national government, departmental governments (represented by the departmental intendancies as the executive body, and the departmental boards as the legislative body), and local municipalities. The intendancies are responsible for coastal zone management. The level of coordination with the municipalities for the implementation of actions in the territories is variable. Municipalities depend on higher levels of government for their budget allocations and authorizations from the intendancies to implement actions in the coastal zone, which often limits their capacity to act.

Figure 4. Key governmental actors for coastal management of climate change issues relevant for the project. *Acronyms: DINAVI (Dirección Nacional de Vivienda): National Housing Directorate; DINOT (Dirección Nacional de Ordenamiento Territorial): National Land Management Directorate; DINAGUA (Dirección Nacional de Aguas): National Water Directorate; DINACC (Dirección Nacional de Cambio Climático): National Climate Change Directorate; DINABISE (Dirección Nacional de Biodiversidad y Servicios Ecosistémicos): National Biodiversity and Ecosystem Services Directorate; DINACEA (Dirección Nacional de Calidad y Evaluación Ambiental): National Directorate of Environmental Quality and Evaluation; DNH: National Hydrographic Directorate; CECOED (Centro Coordinador de Emergencias Departamentales): Departmental Emergency Coordination Center.*



39. The National Climate Change Response System (*Sistema Nacional de Respuesta al Cambio Climático*, SNRCC) was created in 2009 to address climate change at the national level. This is a horizontal inter-institutional system with the participation of several ministries[27] and the Congress of Governors (*Congreso de Intendentes*), which brings together the intendents of all the departments. The SNRCC is chaired by the Ministry of Environment through DINACC. Within the framework of the SNRCC, a specific working group called "Adaptation in the Coastal Zone (*Adaptación en la Zona Costera*)" was created, coordinated by DINACC, and also composed of DINABISE, DINACEA, DINAGUA (Ministry of Environment), DINOT (MVOT), MINTUR (Ministry of Tourism), the University of the Republic (UdelaR) and the Spatial Data Infrastructure (*Infraestructura de Datos Espaciales*, IDEUy), a decentralized body under the National Presidency, which integrated the work within the framework of the NAP Costas.

40. In the case of coastal management carried out by the intendencies and municipalities, the Ministry of Environment (ME) (*Ministerio de Ambiente*) is both the technical reference for the support of the design of coastal and rainfall management measures (through DINAGUA, DINACC and DINABISE), as well as responsible for the control and authorization of activities, constructions or works in the coastal defense strip (through DINACEA). The Ministry of Housing and Land Management (*Ministerio de Vivienda y Ordenamiento Territorial,* MVOT) also provides technical assistance through DINOT for planning and land management activities, and through DINAVI for urban redevelopment.

41. In the field of integrated risk management and response to emergencies and disasters – often, but not exclusively, related to floods – inter-institutional coordination at the national level is carried out within the framework of SINAE. At the departmental level, the existing areas that depend on or are linked to the SINAE

[27] Under Decree No. 79/010, the SNRCC Coordination Group is composed of representatives of: the Ministry of Housing, Land Management and Environment; Ministry of Foreign Affairs; Ministry of National Defense; Ministry of Industry, Energy and Mining; Ministry of Livestock, Agriculture and Fisheries; Ministry of Public Health; Ministry of Tourism and Sports; Ministry of Economy and Finance; Office of Planning and Budget; National Emergency System; Congress of Governors.

are the CDEs and CECOEDs, composed of ministerial and intendancy and municipal representatives.

42. At the national level, Uruguay has Early Warning Systems (EWS) to reduce the impact of floods in the Uruguay River, Río Negro (regulated basins), and in the basins of the Yi River (Durazno), Cuareim (Artigas), and Santa Lucía (this is a preliminary EWS). The installed systems have been developed by DINAGUA from an end-to-end point of view, following the four recommended components: 1. Awareness of flood risks, 2. Detection, monitoring and forecasting, 3. Dissemination and communication, and 4. Preparation and response. The Delft-FEWS tool, an open data management platform that functions as a flood forecasting and warning system, has been integrated for these river basins. To date, no EWS has been developed in Uruguay to reduce the risk of coastal flooding.
43. DINAGUA also prepares urban flood risk maps and estimates the population in flood-prone areas, which is defined as the population exposed to a flood event with a 100-year return period. This information is updated annually with the publication of the National Atlas of Floods and Urban Storm Drainage (*Atlas Nacional de Inundaciones y Drenaje Pluvial Urbano*).
44. The gender directorates in each department are key actors in the implementation of the Gender Action Plan. At the national level, the Gender and Climate Change Action Plan (*Plan de Acción en Género y Cambio Climático,* PAG-CC Uy) is articulated with the National Gender Council (*Consejo Nacional de Género*). Since 2018, there is the Gender and Climate Change Working Group (*Grupo de Trabajo de Género y Cambio Climático*), fmade up of representatives of the gender mechanisms of the agencies that are part of the National Climate Change Response System (SNRCC). Since 2019, there is a National Gender and Climate Change Strategy (*Estrategia Nacional de Género y Cambio Climático*, ENGCC), which established the approach and methodology to integrate the gender perspective in key instruments of climate change policy, such as the NDCs and their Monitoring, Reporting and Verification system; the National Adaptation Plans; the National Greenhouse Gas Inventory (*Inventario Nacional de Gases Efecto Invernadero*) and the Green Climate Fund Country Program (see Annex 3 – Gender Analysis for more information.).
45. Consultations with intendents (see Section H) identified institutional strengthening needs in risk prevention, gender and generational mainstreaming, management of environmental and social safeguards, and monitoring of the impact or effectiveness of adaptation measures.
46. The need to work on planning instruments: To strengthen the bases for climate action on the coast, it is essential to work on the regulation of the National Coastal Space Directive (*Directriz Nacional del Espacio Coster*o, DNEC). This directive has the status of a Law (19772)[28] and its regulation is a commitment that Uruguay han undertaken in the Second NDC[29]. The most appropriate format and technical criteria for the application of the different articles have not yet been defined, nor what their application implies in terms of management by the Ministry of the Environment. On the other hand, although most of the Land Use Plans (LUP) have incorporated the consideration of climate change, there is no uniformity in the criteria and, in general, they are not sufficiently concrete in terms of effective adaptation measures to be implemented in the framework of the NAP Costas.
47. **Key non-governmental actors:** At the local level, people living along the coast have organized themselves both to carry out conservation and restoration actions and to make their demands known to the relevant institutions. Some of the civil society organizations active in the prioritized sites are *Vecinos por la playa* in Playa del Cerro (Montevideo), *Liga de Fomento de La Floresta* (Canelones), *Organización vecinal Playa Verde* (Maldonado) and *Acción Vecinal de La Paloma* (Rocha). Section H lists the organizations consulted in the preparation of this project. Some of these organizations are also part of the *Red Unión Grupos de la Costa*, a network of 47 non-governmental organizations from the six coastal departments. This network has expressed that institutional and private interventions in the coastal zone degrade the quality and size of natural coastal ecosystems, affecting their resilience.
48. Uruguayan regulations provide for the participation of social organizations in several specific instances of consultation, such as the preparation of land-use planning instruments, the creation of protected areas, and the approval of environmental permits for projects that are expected to have significant impacts. There are also permanent areas of participation where social organizations meet with government institutions and academia, such as the protected areas advisory commissions, watershed commissions and fishing councils. Specifically, in the areas where this project will be developed, local organizations permanently participate in the Specific Advisory Commission of the Santa Lucía Wetlands Protected Area (*Comisión Asesora Específica del Área Protegida Humedales de Santa Lucía*) and the Laguna del Cisne Basin Commission (*Comisión de Cuenca de la Laguna del Cisne*), within which a specific working group has been created to address the problems of the

[28] Law No. 19772 – Regulación del Ordenamiento Territorial y Desarrollo Sostenible del Espacio Costero del Océano Atlántico y del Río de la Plata: https://www.impo.com.uy/bases/leyes/19772-2019

[29] Action No. 35. By 2030, Law 19.772 referring to the National Guideline for Territorial Planning and Sustainable Development of the Coastal Space of the Atlantic Ocean and Río de la Plata will have been regulated.

Arroyo Solís Chico. However, participation in these areas is not mandatory.

49. Other ways in which the organizations participate in coastal management are by coordinating with intendancies and municipalities to define actions, when these institutions allow communication channels, as well as by participating voluntarily in the implementation of actions, for example, in the restoration of coastal dunes and revegetation.

e) Climatic context on the Uruguayan coast

Observed climate

50. Uruguay is the only South American country that is completely in the temperate zone, with tropical and extratropical climatic characteristics. It is under the strong influence of the South Atlantic High-Pressure System, which controls winds and precipitation in the national territory[30].

51. **Temperature:** The average annual temperature in Uruguay is 17.5ºC, ranging from about 20ºC in the northeast to about 16ºC on the Atlantic coast. This **average temperature has increased by about 0.8ºC over the last 65 years** (comparing the decades 1961-1980 and 1995-2015), with greater warming in the eastern region throughout all seasons[31].

52. During the last decade, there have been significant changes in sea surface temperature (La Plata River and Exclusive Economic Zone, Atlantic Ocean shelf). Based on the linear model (NOAA OI. V2[32]), from 1982 to 2018, the **sea surface temperature increased by 0.46ºC every decade**[33]. The confluence of the Brazilian and Falkland currents (37º-38º S) controls the mean conditions and variability of this oceanic region, while there is a south-north gradient in sea surface temperature (SST) with cold waters off Buenos Aires and warm waters off southern Brazil.

53. **Precipitation:** Regarding average **rainfall, an increase in the order of 10-20% has been observed during the spring, summer and autumn seasons (1961-2017)** in most of the country, with larger changes in the eastern region concentrated in the fall (50 mm). Regarding short duration extreme rainfall, although the results are inconclusive due to their high variability, they seem to indicate an increase in the number of extreme rainfall events. The quarterly wind climatology in Uruguay is determined by the position of the semi-permanent South Atlantic anticyclone. The trend of surface winds in the Atlantic Ocean basin has shown a southward shift of easterly and westerly winds that is mainly due to ozone depletion[34]. In Uruguay, these **changes have modified the seasonal pattern of winds in coastal areas**[35]**.**

54. **Sea level:** At the national level, several studies[36] have estimated the **sea level rise** in Montevideo at 11 cm, of which 2-3 cm correspond to the last three decades. The variation is even greater in the other tide stations along the Uruguayan coast (La Paloma, Punta del Este, Colonia).

Projected climate

55. Barreiro et al. (2019)[37] used ten models to best represent the climate of Uruguay; each was run for the SSP245, SSP370 and SSP585 scenarios for two time horizons: short-term (2020-2044) and long-term (2075-2099).

56. **Temperature:** When comparing the observed and simulated evolution of the mean annual temperature in Uruguay for the period 1961-2014 with the projections for the end of the 21st century, an **almost linear increase in the mean annual temperature** can be observed.

57. **Precipitation:** Uruguay's **total annual rainfall** shows **high variability** over the year, ranging from -5 to 10% for the short-term horizon and -7 to 35% for the long-term horizon. Future projections show a **gradual positive trend with an increasing occurrence of extreme events**. The interannual phenomenon with the greatest influence on rainfall in Uruguay is ENSO. The CMIP5 model shows that **extreme events associated with ENSO tend to increase in frequency** as global temperature increases. In addition, the extreme events associated with La Niña could become more frequent, especially three-month drought events on a short-term horizon.

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[30] Barreiro, M., F. Arizmendi, & R. Trinchín (2019b), Variabilidad observada del clima en Uruguay. Product carried out in the framework of the Plan Nacional de Adaptación Costera and the Plan Nacional de Adaptación en Ciudades, MVOTMA – Faculty of Sciences Agreement, 52 pp. Funded by UNDP URU/18/002 and AECID-ARAUCLIMA 2016.

[31] Ibid.

[32] Ibid.

[33] Cited in NAP Costas as Ortega 2019, pers.comm.

[34] Barreiro, M, F. Arizmendi, R. Trichín, Y. Montesino Y, & R. Santana (2020), Variabilidad de vientos regionales y relación con lluvias en Montevideo y nivel del mar en la costa. Agreement MVOTMA – Faculty of Sciences, 30 pp. Funded by projects PNUD-URU/16/G 34 and AECID-ARAUCLIMA 2016.

[35] Ibid.

[36] FCIEN (2009), Escenarios climáticos futuros y del nivel del mar, basado en los modelos climáticos globales y efecto de los vientos y caudal sobre las fluctuaciones del nivel del mar. Report Nº II: Information on the results of outputs 3, 6 and 8 of the FCien Convention – Project URU/07/G32, Montevideo June 2009.

[37] Barreiro, M., F. Arizmendi, & R. Trinchín (2019). Variabilidad observada del clima en Uruguay. Product carried out in the framework of the Plan Nacional de Adaptación Costera and the el Plan Nacional de Adaptación en Ciudades, MVOTMA – Faculty of Science Agreement, 52 pp.

58. **Sea level:** The projected average sea level rise for the RCP8.5 scenario is 80 cm by the end of the century.

Observed impacts

59. It is estimated that 191 km of the River Plate coast (from Nueva Palmira to Punta del Este) present some type of **coastal erosion** process, manifested in active cliffs, ravines, headlands, and platforms; all these geographical features represent 42% of the Uruguayan coast[38,39]. In addition, 32% of the Atlantic coast (Punta del Este – Barra del Chuy, 74 km) is subject to erosion, especially during extreme events such as storms caused by wind and wave action[40].

60. Sea level rise (1.1 mm per year-1)[41], a deficit in the sediment balance and the consequences of some coastal engineering works during the 1970s and 1980s would be the main causes of coastal erosion processes in Uruguay. In terms of coastal cliffs, the shoreline retreat ranges from 0.5 to 1.1 m per year-1. In some cases, the effects of storms and increased rainfall are combined, resulting in events with a high energetic concentration of waves and fluvial discharges that end up eroding unconsolidated materials.

61. Along the coasts of the River Plate and the Atlantic Ocean, **flash floods** are caused by a combination of meteorological and hydrological effects. The occurrence of high tides with large atmospherically induced storm surges has raised the average sea level to three meters above its normal level, causing the loss of beaches and dunes, damage to coastal infrastructure and restrictions to maritime transportation. In terms of **ecosystem** risk in the event of flooding, the area currently affected is approximately 500 ha of ecosystems considered vulnerable.

Projected impacts

62. Climate variability and change will exacerbate the impacts of current threats to the coastal zone, either by amplifying current stressors or by directly destroying habitats and species loss[42].

63. **Sea level rise** (RCP8.5 = 80 cm by the end of the century) and the **possibility of more intense storms** pose an increasing threat to **coastal cities, residential communities, infrastructure, beaches, wetlands and other ecosystems**. The number of people affected increases with the return periods of extreme events (TR5 several hundred; TR500 several thousand). The current expected annual damage from **erosion** is about USD $45.5 million, a value that is expected to increase by about 25% by the end of the 21st century. Also, by the end of the 21st century, the damage caused by **structural coastal erosion due to mean sea level rise** could be as significant or even more significant than the annual coastal erosion caused by extreme events in the six coastal departments. In Montevideo, **coastal retreat** of 1.7 m is expected for every centimeter of sea level rise[43]. In each scenario, the greatest damage is observed in the residential sector, which accounts for 50% of the damage to all built assets. The next most affected category is services.

64. It is worth noting that for a time horizon until 2050 and in a pessimistic scenario (RCP 8.5), the **coastline in all Uruguayan beaches will recede ≤ 5 m.**; while at the end of the 21st century and for an average increase in mean sea level, a great differentiation is observed in the different stretches of coastline, especially in the fine sand and shallower beaches where the value can vary between 5 and 20 m. From the perspective of the **recreational services** provided by the country's 205 beaches, it has been observed that at least 20 of them will be significantly affected, including the impacts that will be caused to the resident population and the internal and receptive tourism of these coastal resorts.

65. The risk to the **ecosystem** in the event of flooding shows an increase in impact of 17% by 2050 and 40% by the 2100 horizon.

66. Each of these impacts is described in more detail in the following sections. The following figure summarizes the main climate hazards and impacts and aims to visually show those main hazards and impacts expected in a diverse coast like the Uruguayan one.

[38] Goso Aguilar, C.A., & R. Muzio (2006). Geología de la costa uruguaya y sus recursos minerales asociados. In: Menafra R, Rodríguez-Gallego L, Scarabino F & Conde D (eds). Bases para la conservación y el manejo de la costa uruguaya. VIDA SILVESTRE URUGUAY, Montevideo. Pp: 9-19.

[39] Goso Aguilar, C., V. Mesa, & M. C. Alvez (2011), Sinopsis geológico-ambiental de la costa platense y atlántica de Uruguay. In: Problemática costera en Provincia de Buenos Aires, Uruguay y Río Grande del Sur. p.: 59–76. Eds: Marcomini S and López R. Publisher: Croquis, Buenos Aires.

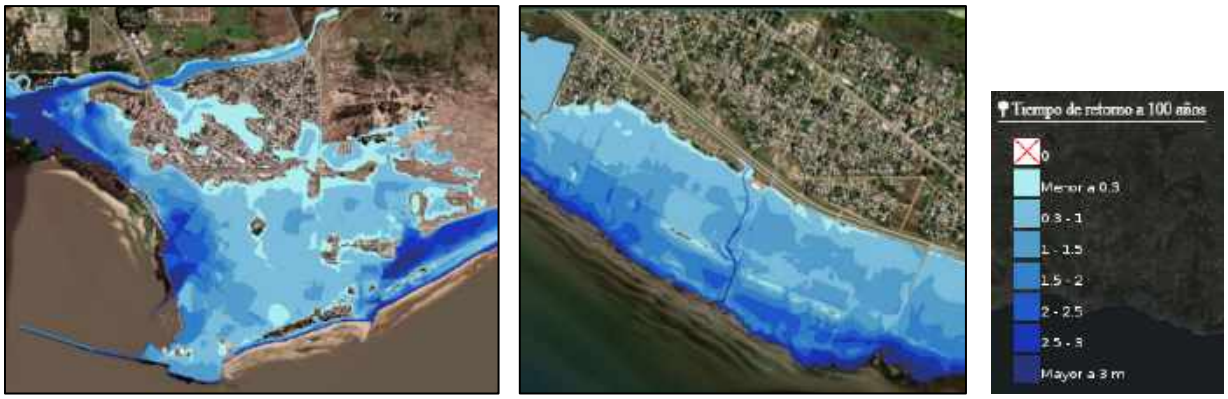
[40] Ibid.

[41] Nagy, G., M. Gómez-Erache and V. Fernández (2007). El aumento del nivel del mar en la costa uruguaya del Río de la Plata: Tendencias, vulnerabilidades y medidas de adaptación. Medio Ambiente y Urbanización. Cambio Climático Vulnerabilidad y Adaptación en Ciudades de América Latina, IIED- AL 67: 77-93.

[42] Gómez-Erache, M. (2013), Condiciones de referencia para la implementación del monitoreo nacional del Río de la Plata y su Frente Marítimo. UNDP-GEF RLA/99/G31. 65 pp.

[43] Gutierrez, O., D. Panario D, G.J. Nagy, M. Bidegain, C. Montes (2016), Climate teleconnections and indicators of coastal systems response. Ocean & Coastal Management, Volume 122: 64-76.

Figure 5. TR100 horizon 2100 RCP8.5 flood curves for two of the sites most threatened by coastal flooding: Juan Lacaze in the Department of Colonia (left) and Playa Penino in the Department of San José (right)[44].



Impacts on the population

67. According to DINAGUA data, almost 100,000 people and more than 34,000 homes are located in flood-prone areas in the country, with Juan Lacaze being one of the areas with the highest percentage of population at risk of flooding (3,167 people, 51.7% women – representing almost 25% of its population). In order of importance, of the prioritized sites, the population most exposed to coastal flooding after Juan Lacaze are the neighborhoods of Cerro with 853 people (52.4% women) and Autódromo and Penino with 823 (50% women).
68. The effects of coastal flooding and erosion have a series of impacts on the quality of life of the coastal population and socio-economic repercussions associated with the loss of coastal habitats: loss of natural resources, damage to coastal infrastructure, decline in tourism and recreation and transport activities, and even risk to human lives and property.
69. In particular, flooding directly damages the quality of life, homes and workplaces of the people living closest to the coast. According to the projections made by IH Cantabria (2019), the number of people affected increases in relation to the return periods of the extreme events considered (TR5 several hundreds; TR500 several thousands). Future projections for 2100 show that the number of potentially affected people is higher in the RCP8.5 scenario, increasing by 300% with respect to the current situation.
70. On the other hand, coastal erosion and rising sea levels lead to the loss of beaches, which directly affects those who depend on the tourism industry based on the “sun and sand” concept, as well as those who make use of the coast as a public space for recreation and maintaining social ties throughout the year (especially women and children)[45]. Many resort towns depend heavily on this economic activity, and any downturn in the tourism sector can have a significant and negative impact on the economy, threatening many jobs.

[44] The quantification of the local-scale impact of sea level rise projections in Uruguay was performed by IH-CANTABRIA using historical sea level databases (IMFIA, 2018), as well as high-resolution risk dynamics projections. The methodology is described in the document “Desarrollo de herramientas tecnológicas para evaluar los impactos, vulnerabilidad y adaptación al cambio climático en la zona costera de Uruguay” (IH-Cantabria, 2019).

[45] Dirección Nacional de Cambio Climático, Ministerio de Ambiente de Uruguay (2022). Recomendaciones de género en la adaptación costera Talleres en sitios pilotos: La Paloma, Piriápolis, Atlántida, Playa del Cerro y Kiyú. Report prepared by M. Guchin, in the framework of the Plan Nacional de Adaptación al cambio Climático en la Zona Costera.

Figure 6. Main hazards and impacts on the Uruguayan coastline.

Impacts on ecosystems

71. Rising sea levels and storm surges accentuate the erosion of gullies and erode sandy beaches, resulting in a loss of both beach width and slope, as well as the associated vegetation that sustains the structure of the coastal dune ridge. The study conducted by IH Cantabria (2019) for Uruguay estimates, for the 2100 horizon, an average eroded area of 1,156 and 1,232 hectares in the RCP4.5 scenario associated with the setbacks with a return period of 25 and 50 years, respectively. This eroded area is greater in the RCP8.5 scenario, with values of 1,475 and 1,619 hectares.
72. The discontinuities that occur in the structure of the coastal dune ridge imply, on the one hand, the transport of sand out of the coastal system, creating a sediment deficit[46]. On the other hand, they increase the risk for other ecosystems located behind the ridge, since these discontinuities allow the sea to enter the territory, flooding the ecosystems with salt water (as well as human infrastructures) that were previously protected by the ridge.
73. In turn, the increase in precipitation implies an increase in rainfall runoff, which, given the current level of soil impermeability and the degradation (or disappearance) of buffer ecosystems, such as wetlands, reaches the coastal dunes, breaks them (creating discontinuities such as those mentioned above) and flows onto the beaches. This increase in rainfall runoff to the beaches, in turn, causes a rise in the water table, humidifying the beaches[46] and reducing the ability to recover after extreme events, and affecting the macrobenthic community that inhabits this area[47]. Broadly speaking, these freshwater discharges alter the coastal biological communities (associated with sandy or rocky substrates) adapted to higher salinity levels.
74. The increase in rainfall also implies an increase in the flow of water into natural watercourses, which deepens the lateral movements of the mouths and affects the ecosystems and human infrastructure in these new areas reached by the water.
75. The degradation of ecosystems in turn affects the species that depend on them. Species with specific habitat requirements will be the most affected. For Uruguay, there are precedents for assessing the impact on terrestrial vertebrate species[48]. In general terms, the studies have analyzed the geographic distribution of species, changes in their phenology, vulnerability of eggs or early stages, changes in the sex ratio of offspring, reduction in body size, susceptibility to UV radiation, susceptibility to diseases and invasive exotic species, tolerance to fire and the effects of habitat and microhabitat degradation.
76. Changes in climatic conditions converge with other non-climatic threats to ecosystems to form the so-called *triple whammy*[49], which includes impacts associated with increased urbanization and industrialization, increased use of resources such as water, space and food from the sea, and increased vulnerability (or sensitivity) and decreased resilience and resistance of ecosystems to the effects of climate change[50].

Impacts on infrastructure at prioritized sites

77. The impact of climate change on infrastructure at the national level has been studied by the NAP Costas[51], which concludes that in each of the scenarios it is clear that, in the face of flooding, the greatest damage is suffered by residential assets, followed by services, and that climate change will have effects on the coastal zone such as severe disruptions in urban agglomerations, impacts on land-based infrastructure (ports, roads, breakwaters, coastal wadis) and erosion of the coastline, causing beaches to recede, affecting livelihoods and coastal populations[52].
78. In the pilot sites, the main impacts on infrastructure vary according to the type of hazard: in Juan Lacaze (Colonia) and Playa Penino and Barrio Autódromo (San José) the main impact is flooding in homes and buildings, caused by both rainfall events and by south-easterly storms, with areas identified as medium risk and high risk[53].
79. In Juan Lacaze most of the area is at medium risk, especially in front of the coast and under the influence of the

[46] Goso Aguilar, C., Mesa, V. & Alvez, M.C. (2011). Sinopsis geológico-ambiental de la costa platense y atlántica de Uruguay. In: López, R.A. & Marcomini, S.C. Problemática de los ambientes costeros, Sur de Brasil, Uruguay y Argentina. Buenos Aires: Croquis. Pp. 59-76.
[47] Limongi, P. (2017). La macrofauna bentónica como indicadora de integridad ecológica en una playa oceánica de uso turístico: playa El Rivero, Punta del Diablo, Uruguay. Graduate thesis, University of the Republic (Uruguay). Faculty of Sciences
[48] Ríos, M., Cortes, G., Laufer, G., Pereira-Garbero, R., Bergós L. & Soutullo, A. (2012). Impactos proyectados del cambio climático en Uruguay sobre los vertebrados terrestres. IIBCE, MEC. Unpublished. 39 pp.
Toranza, C. (2011). Riqueza de anfibios de Uruguay: determinantes ambientales y posibles efectos del cambio climático. Master's thesis University of the Republic (Uruguay). Faculty of Sciences – PEDECIBA.
Vaz Canosa, P. (2022). Evaluando la vulnerabilidad al cambio climático de los anfibios y reptiles nativos de Uruguay. Master's thesis. University of the Republic (Uruguay). Faculty of Sciences – PEDECIBA.
[49] Defeo, O. & Elliott, M. (2020). The "triple whammy" of coasts under threat – Why we should be worried. Mar. Pollut. Bull. 111832.
[50] Orlando Chifflet, L. (2021). Efecto de la urbanización y el cambio climático en los ecosistemas de playas arenosas. PhD thesis. University of the Republic (Uruguay). Faculty of Sciences – PEDECIBA.
[51] NAP COSTAS EVALUACIÓN DE IMPACTOS OCASIONADOS POR EL CAMBIO CLIMÁTICO EN LA COSTA DE URUGUAY Instituto de Hidráulica Ambiental (IH), University of Cantabria, Spain.
[52] Atlas de riesgos e impactos en la costa, User's Manual IH Cantabria
[53] Source: Mapa de riesgo de inundaciones 2021 Juan Lacaze. Plan de Ordenamiento territorial y Desarrollo Sostenible de Ciudad del Plata, map N°12 Zona Litoral, Barrios Penino and Autódromo, detail of sectors at risk of flooding.

Cañada Blanco upstream of the bridge on Route 54, where there are also three blocks at high risk. Drainage systems with sluice valves are currently in operation in these areas, and the intendancy is planning to extend the culvert bridge to be built in 2024.

80. In San José, the existing buildings in the area are mostly single storey, with a high dispersion in the cadastral parcels[54] and irregular population outside the parcel. In both cases, the greatest impact of climate change will be related to flooding: the Autódromo neighborhood is at high risk of flooding, while the Penino neighborhood has areas at medium and low risk.
81. In Montevideo, the main infrastructure risk is related to the loss of the beach. The structural retreat of the beach was estimated to be between 30.72 and 42.26 meters for 2100 RCP 8.5 (from an average erodible width of 45 meters)[55]. The loss of beach would expose the boardwalk and adjacent houses to extreme southeasterly events.
82. In the case of Canelones, in the mouth of the Solís Chico Creek, the sedimentary dynamics have shown significant changes in the last decade. On the one hand, there is erosion in the east (La Floresta), where there are long-standing houses located in a collapse risk zone, and on the other hand, the shifting of the stream bar to the west (Parque del Plata) causes the loss of beachfront, sand encroachment on houses, large dunes in the streets and clogging of rainwater discharges. The main impact is on houses and access roads. It should be noted that storm drains contribute to the erosion of the border of La Floresta, and their discharges are located on the slope of the ravine.
83. The priority site in Maldonado, the beach arches between the Cañada Zanja Honda and the Arroyo Tarariras, does not yet have a risk map, which is currently being prepared. Its main problems are related to the exposure of houses to flooding in the vicinity of nearby watercourses (there are 4 streams between the Cañada Zanja Honda and the Arroyo Tarariras). The beach arches are susceptible to erosion in almost the entire area, with the exception of some areas of the Verde beach arch. There is a main road adjacent to the coast that separates it from the houses, and it is sometimes covered with sand, and as the coast recedes it will be more exposed to damage from extreme events, as will the houses.
84. In the prioritized site of La Paloma (Rocha) the infrastructure is affected by flooding in the first line of buildings closest to the coast and by the structural retreat of the beach, which causes the exposure of the boardwalk and the buildings to storms. In the eastern beach arc of La Aguada, the retreat associated with the MSLR in the year 2050 is between 12.14 and 16.62 meters, while in the year 2100 (RCP8.5), the cell would be completely eroded[56]. Currently, the coastal boardwalk is regularly invaded by dunes due to its proximity to the coast, while the western beach arc has a greater distance between the beach and Villa Mayor Avenue. In both cases, drainage is an aggravating factor in the loss of the beach.

f) <u>Non-climatic drivers</u>

85. Among the non-climatic factors in the dynamics of each of the prioritized sites, one of the most relevant is the **change in land use**, which in general implies the impermeabilization of areas due to urban growth, which in turn represents a limit to the recirculation of sand by wind action and reduces the contribution of sediments from natural watercourses.
86. The presence of **buildings and rigid structures** on the coast is a constant in practically all the study sites, not only because of buildings but also because of roads very close to the coast that sometimes invade dune spaces and present a limit to sand recirculation. This is the case of Route 1 in San José, which represents a barrier to natural drainage. Within the water, other modifications on the coast with greater or lesser impact depending on the case are the construction of **gray infrastructure**, such as breakwaters or jetties, which have a direct influence on current patterns, as is the case of the breakwaters in La Floresta (Canelones) – 8 breakwaters built between 1970 and 1980 to the east of the mouth of the Arroyo Solís Chico –, the Juan Lacaze Marina (Colonia), the Port of La Paloma (Rocha) and the Port of Montevideo.
87. Towards the end of the 19th century, forestation with **exotic tree species** began in Maldonado **to fix the dunes** to prevent the flow of sand towards cities and crops. This model was extended to the other departments of the country[57]. These implanted forests altered the sediment dynamics of the beaches, although in many cases they have also acquired a cultural value for the population, as is the case in Juan Lacaze and Parque del Plata (mouth of the Arroyo Solís Chico). More recently, dune fixation has occurred due to the implantation (intentional or not) of **exotic herbaceous vegetation** with invasive behavior, mainly *Carpobrotus edulis* and *Cynodon*

[54] Source: Pilot case Playa Pascual, project "Desarrollo de herramientas tecnológicas para la evaluación de los impactos, la vulnerabilidad y la adaptación al cambio climático en la zona costera de Uruguay". IH Cantabria, MVOTMA, CTCN, 2019.
[55] Source: Pilot cases. Playa del Cerro (Montevideo), project "Desarrollo de herramientas tecnológicas para la evaluación de los impactos, la vulnerabilidad y la adaptación al cambio climático en la zona costera de Uruguay". IH Cantabria, MVOTMA, CTCN, 2019.
[56] Source: Pilot cases. La Aguada beach (Rocha).
[57] Alonso-Paz, E. & Bassagoda, M.J. (2006). Flora y vegetación de la costa platense y atlántica uruguaya. In: Menafra, R., Rodríguez-Gallego, L., Scarabino, F. & Conde, D. (Eds.). Bases para la conservación y el manejo de la costa uruguaya. Vida Silvestre Uruguay, Montevideo. Pp. 71-88.

dactylon [58].

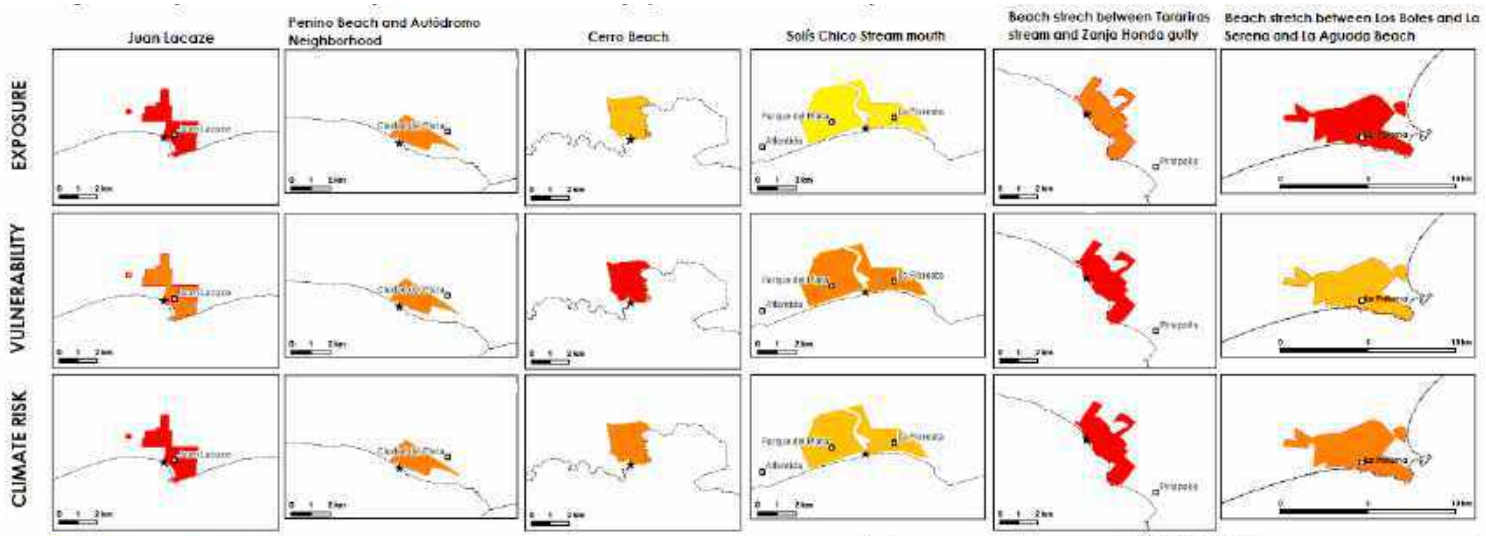
88. **Urbanization** itself has also advanced over these areas of previously mobile dunes with herbaceous vegetation, replacing the natural ecosystem and making the soil impermeable, with consequences on the increase of surface rainfall runoff that finally discharges onto the beaches. This is observed in the selected sites in the departments of Colonia, Montevideo, Canelones, Maldonado and Rocha. In addition to this, land is filled for construction (for leveling or elevation of land), often directly over wetlands, drying them out and blocking natural drainage[59]. In addition, many coastal localities do not have adequate sanitation, which entails contamination risks for the ecosystems and the population. There are diagnoses in this regarding the case of La Paloma[60]. Likewise, the increase in the **influx of people** to the beach areas generates impacts on flora and fauna, as well as on the coastal dunes if pedestrian passage is not carried out in an orderly manner. This process is observed all along the country's coast. Although there is a prohibition in this respect, in many cases **motorized vehicles** access the beach area, aggravating the impact on these ecosystems. Urbanization in these areas, in turn, limits the capacity of coastal geoforms to adapt to rising sea levels, preventing their migration towards the territory[61].
89. At the mouths of watercourses on sandy beaches, there is **lateral migration** that occurs due to natural conditions, but in many cases, it has deepened due to **anthropic modifications** both in the basin and on the margins of the mouth[62], as observed at the mouth of the Arroyo Solís Chico. The aggravation of lateral migration affects both the ecosystems located near the banks and the human infrastructure built in these areas. Faced with this problem, in some cases sections of the watercourse or its mouth have tended to be channelized, which in turn generates impacts due to the alteration of the natural migration dynamics[63].
90. The dynamics of natural drainage is modified by **drainage pipes** that concentrate flows at single points of rainfall discharge on the coast and with normally higher velocities given the material of the pipes, eroding the surrounding beach area, as in the case of Playa del Cerro (Montevideo) and Playa La Aguada (Rocha).
91. Deficiencies in urban planning and public policies have led to the **urbanization of flood-prone areas** in some cases in a planned manner, as is the case of Juan Lacaze (Colonia) and Barrio Autódromo and Penino (San José), in some places aggravated by **settlements** of people with socioeconomic vulnerability. The risks already present in these localities are increased by climate change, requiring adaptation measures according to the level of risk. Given the high dependence on tourism as a source of income, the loss of beaches has direct consequences on the livelihoods of the local population.
92. In general terms, **poor urban management practices** are an aggravating factor to local conditions; the presence of **solid urban waste** in gullies hinders the proper functioning of drainage and can cause flooding in low return period events; the construction of **private landfills** modifies the natural dynamics of watercourses and coastlines; among others.

g) <u>Risk to the population linked to the prioritized sites</u>

93. The Exposure, Vulnerability and Climate Risk maps developed as part of the Vulnerability Analysis that accompanied the formulation of this proposal (Figure 7) show the vulnerability of the resident population of the pilot sites to flood and coastal erosion hazards. The Climate Risk Index is the result of the analysis of the hazards, exposure, sensitivity and adaptive capacities (shown in the lower part of the same figure) of the resident population in the face of climate change.

[58] https://www.gub.uy/ministerio-ambiente/comunicacion/publicaciones/lista-especies-exoticas-invasoras-uruguay
[59] Gadino, I., Brazeiro, A., Panario, D., Roche, I. & Gutiérrez, O. (2012). El modelo actual de desarrollo turístico al oeste del Balneario La Paloma, Rocha, Uruguay. Tendencias, riesgos y propuestas. *Sustentabilidade em Debate – Brasília*, 3(2), 21-40.
[60] Kruk, C., Dobroyan, M., González, L., Segura, A.M., Balado, I., Trabal, N., De León, F., Martínez, G., Rodríguez, A., Piccini, C., Chalar, G. & Verrastro, N. (2018). Calidad de agua y salud ecosistémica en playas recreativas de la Paloma, Rocha. *Revista Trama*, 9(9), 1-10.
[61] Roy, P. S., Cowell, P. J., Ferland, M. A. & Thom, B. G. (1994). Wave-dominated coasts. In: Carter, R.W.G. & Woodroffe, C.D. (Eds). Coastal evolution: Late Quaternary shoreline morphodynamics. Cambridge: UK. Pp: 121-186.
[62] Gutiérrez, O. & Panario, D. (2005). Calidad de agua y salud ecosistémica en playas recreativas de la Paloma, Rocha. Revista Trama, 9(9), 1-10. *Xeográfica*, 5, 107-126.
Texeira, L., Chreties, C., Solari, S. & López, G. (2012). Estudio de la desembocadura del arroyo Solís Chico. Final report. MTOP (DNH) – UdelaR (Fing-IMFIA) Agreement.
Fernández, G. (2011). Evolución del arroyo Valizas periodo: 1943-2006: Laguna de Castillos – Rocha – Uruguay. Master's thesis, University of the Republic (Uruguay). Faculty of Sciences.
[63] Gutiérrez, O. (2010). Dinámica sedimentaria en la costa uruguaya: evolución y tendencias de playas urbanas en el marco del cambio global. Master's thesis, University of the Republic (Uruguay). Faculty of Sciences.

Figure 7. Exposure, vulnerability and climate risk of the population linked to the prioritized sites.



Threat indicators		Exposure indicators	
Coastal flooding curves, TR100 scenario horizon 2100 RCP8.5	Structural retreat (m) and rate of structural retreat of the shoreline due to coastal erosion, TR100 scenario horizon 2100 RCP 8.5	Number of population and housing in flood zones	Loss of valuation of beach protection and recreation due to coastal erosion

Vulnerability indicators			
	Sensitivity indicators		
	Habitat conditions: -Insecure housing tenure -Overcrowding -Lack of access to drinking water -Irregular settlements	-People over 15 years of age with no formal education -Female single-parent households -Dependency rate of children and the elderly	-Jobs in the tourism industry
	Adaptive capacity indicators		
	Strength of institutional teams	Risk and climate change land-use planning instruments	Flood maps

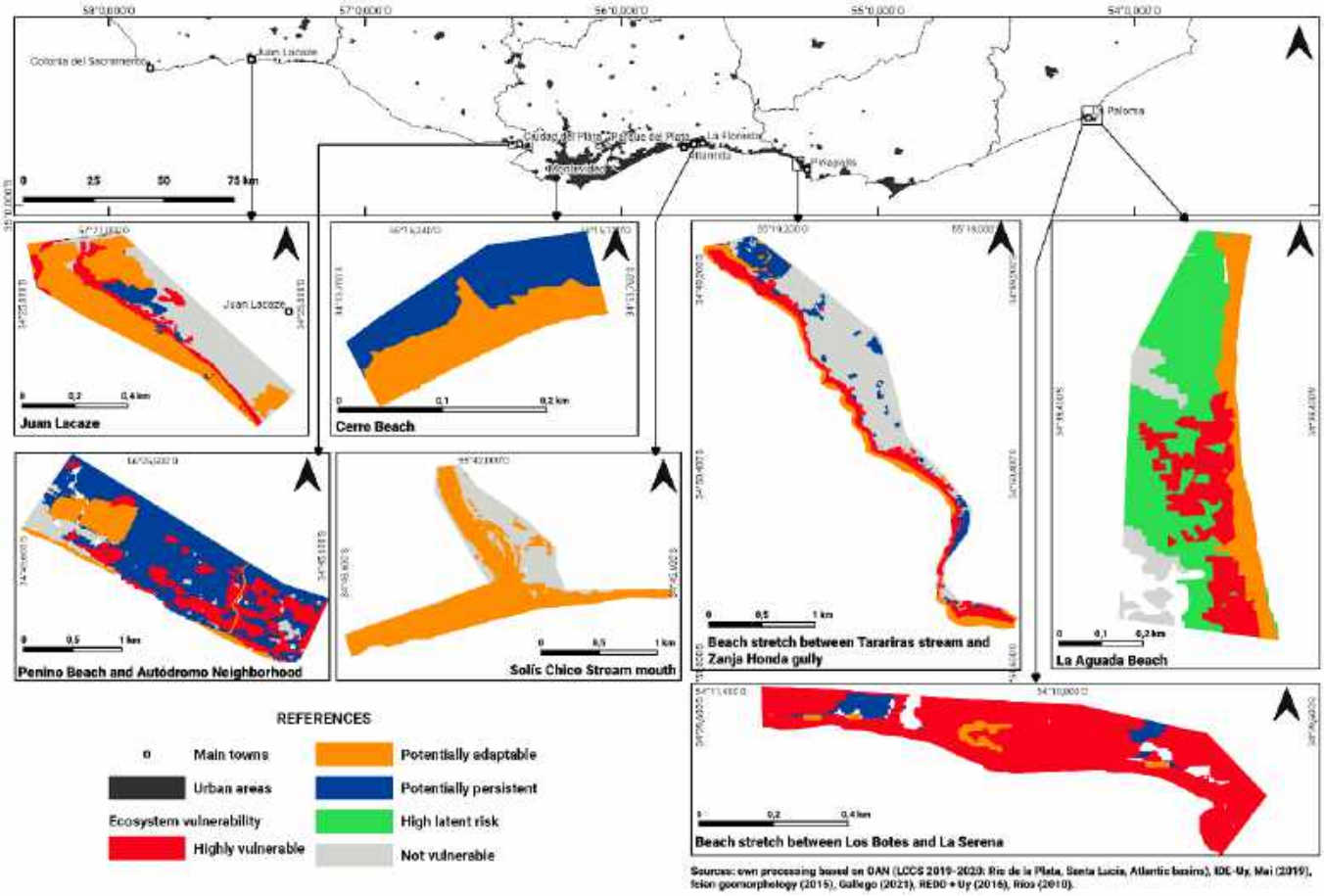
94. Juan Lacaze, Playa Verde, Playa Hermosa and Playa Grande are the localities with the highest risk to climate change, since they had high levels of exposure to flooding in the case of Colonia and coastal erosion in Maldonado, but also high levels of vulnerability since they had high sensitivity and medium adaptation capacities. Then follow in a medium-high risk level: Cerro, Penino and Autódromo neighborhoods and the localities of La Paloma and La Aguada. San José has high exposure to floods and high sensitivity, but also high adaptive capacities since it has a flood risk map and an updated Local Land Use Plan. Montevideo, although it has medium exposure to flooding and erosion also has medium sensitivity and low adaptive capacities. Finally, Rocha has high exposure to coastal erosion but low sensitivity and adaptive capacities. Lastly, the localities of La Floresta and Parque del Plata represent a medium level of risk to climate change due to their low exposure to erosion and flooding[64] in this analysis despite having medium sensitivity and low adaptive capacities.

h) Ecosystem risks linked to prioritized sites

95. Figure 8 shows the climate change vulnerability map of the ecosystems of each of the prioritized sites, which was constructed in the framework of the ecosystem vulnerability study that was part of the formulation of this concept note. Vulnerability is the result of the analysis of exposure to sea level rise, risk of pluvial flooding and erosion, the presence of non-climatic hazards as aggravating factors for the condition of the ecosystems and the adaptive capacities. The vulnerability categories correspond to: 1. Highly Vulnerable Ecosystems: ecosystems in aggravated condition, with low adaptive capacity and exposed to climate change (red color); 2. Adaptive Potential: ecosystems in aggravated and exposed condition, but highly adaptable (orange color); 3. Persistent Potential: ecosystems exposed and with low adaptive capacity, but their condition is not aggravated by other non-climatic threats (blue color); 4. Latent High Risk: ecosystems with low adaptive capacity and in aggravated condition but not exposed to climatic threats (green color).

[64] The information available on sea level rise inundation curves is limited and therefore the flood exposure is underestimated.

Figure 8. Exposure, vulnerability and climate risk of the ecosystems linked to the sites prioritized by the project**.**



96. In the case of Juan Lacaze, the exposed area is so large that none of the ecosystems has the adaptive capacity to avoid flooding. A similar situation, although less unfavorable due to the lower degree of urbanization, occurs in Playa Penino and Autódromo. In Playa del Cerro, the ecosystems have been strongly transformed and reduced in their diversity. At the mouth of the Arroyo Solís Chico, the information available on flood curves due to sea level rise is limited and therefore the exposure of ecosystems is underestimated. At the same time, the multiplicity of actions planned by the Intendancy of Canelones means that the adaptive capacity of the ecosystems is good in all cases. In the stretch of beach in the department of Maldonado, the condition of the ecosystems is affected by urbanization and its associated management in the upper zone of the basin, especially in this case due to the steep slopes that reach the coastal zone. In the case of La Paloma, the stretch between Los Botes beach and La Serena beach is the one with the highest concentration of ecosystems with the highest vulnerability, especially aggravated by the lack of adequate rainwater drainage in the urban area.

i) <u>Barriers to adaptation</u>

97. The main barriers to promoting changes toward a more resilient coast are:

- **Limited technical criteria shared among the different levels of government in the mainstreaming of climate change in planning instruments**: The Second Nationally Determined Contribution, NDC, indicates that adaptation planning at the national level stimulates adaptation planning at the departmental level. The maturity of adaptation planning instruments varies among subnational governments. In this sense, different technical criteria and degrees of development are observed in the consideration and prioritization of the most appropriate adaptation measures or the standards to be followed for the design and implementation of certain measures. Advancing in these criteria requires technical studies, as well as the articulation and facilitation of discussion spaces to achieve inter-level governmental and multidisciplinary agreements on the most appropriate standards. To address this barrier, the project will seek to support the regulation of the National Coastal Space Guideline (*Directriz Nacional del Espacio Costero*), advancing in the definition of shared criteria at the national level and developing technical guidelines that contribute to

unify definitions and provide technical standards to identify and design adaptation measures in a more appropriate manner.

- **Limited data quality, access to data and tools for monitoring and recording climate change impacts:** The recording systems, metrics and procedures for processing and analyzing data and evaluating the adaptation processes, results and effectiveness of the measures being implemented at the country level have limitations. Currently, Uruguay has made progress in installing cameras and equipment to monitor impact variables on the coast, has developed historical databases and high-resolution dynamic projections that allowed progress in quantifying the impact on a local scale, and has improved information systems on variables associated with marine dynamics. However, there is still no national system of metrics or platforms to combine the information collected, analyze it, process it and measure the effectiveness of the different actions implemented and promote decision-making in integrated coastal management based on evidence. On the other hand, although the country has made some progress in the development of methodologies for assessing losses and damages due to climate change, these have been for some specific sectors and are not relevant for this project (e.g., transportation sector), have only been done at the national level and have not incorporated a gender perspective.
- **Limited financing**: As the Second NDC identifies, most coastal adaptation measures do not present, at least in the short term, economic benefits or profitability that would encourage the private sector to finance them. In addition, the assets to be affected to reduce vulnerability are mostly public goods (beaches, boardwalks, coastal infrastructure). In this context, state financing – which is limited – is essential to implement the necessary measures, as well as the development of innovative financial incentives to involve households with repayment capacity in the co-financing and implementation of adaptation measures in the coastal zone. To this end, the project promotes the use of financing for the implementation of the necessary adaptation measures to benefit the most vulnerable coastal ecosystems and population. This includes the development of a concessional financial mechanism – revolving fund – to promote the adoption of adaptation measures in vulnerable homes and buildings to cope with the impacts of flooding. Similarly, to advance in the adaptation of the entire Uruguayan coast, it is necessary to promote financial instruments that can promote concessional financing through loans to the government to comply with the necessary measures prioritized in the NAP Costas.
- **Limited awareness and knowledge of key aspects of coastal adaptation by key actors**: Although progress has been made in training and raising awareness among **departmental governments, municipalities** and **the population** about the observed and expected impacts of climate change on the coast of Uruguay, there is still a clear need to continue and deepen this process. Limitations still present include different degrees of knowledge and criteria in the design and implementation of adaptation measures, limited awareness at the local and national level in other areas of government – not related to coastal management –. In addition, there is limited knowledge and capacity of departmental governments in the prevention stage of coastal flood impacts on people, in the management of ecosystem or livelihood impacts, as well as in the management of environmental and social safeguards, gender and generational mainstreaming, and the monitoring of the impacts and effectiveness of the implemented measures. At the level of political decision-makers, adequate communication strategies are required to ensure that evidence of the best adaptation measures for the observed and expected impacts of climate change are adopted in current decision-making, considering the return period, and thus allowing current decisions to reduce the vulnerability of the coast and to be maintained in the future. At the local level, there are varying levels of knowledge about the best adaptation measures by the population, who observe and suffer from climate impacts.
- **Limited identification of good practices**: Lessons learned from the NAP Costas processes highlight the importance of instances of dissemination of learning and sharing of good adaptation practices among those involved in integrated coastal management, attending to the different degrees of maturity in the implementation of these measures and experiences. The project will seek to identify good practices, disseminate them and generate spaces for the exchange of knowledge, as well as collective learning to promote a virtuous circle that allows scaling up coastal climate action.

Project/Programme Objectives:

General objective:

98. In compliance with the provisions of the NAP Costas, the project aims to increase the adaptive capacity of the population and the resilience of coastal ecosystems to the risks of flooding and coastal erosion caused by sea level rise and an increase in the frequency and intensity of extreme events.

Specific objectives:

99. Strengthen coastal planning based on evidence of climate change impacts.
100. Reinforce green and hybrid infrastructure at prioritized coastal sites to increase the resilience of the population and coastal ecosystems to flooding and coastal erosion impacts.
101. Build the capacities and knowledge of coastal actors and promote their involvement in climate action.

Project/Programme Components and Financing:

Project/Programme Components	Expected Concrete Outputs	Expected Outcomes	Amount (US$)
1. Strengthening evidence-based coastal planning considering climate change	Output 1.1 Planning instruments with mainstreamed CC Output 1.2 Improved systems for recording and monitoring CC impacts Output 1.3 Early Warning System installed	Strengthened evidence-based coastal planning considering climate change. Reduced exposure to climate hazards (flooding and erosion)	1,977,450
2. Reinforced green and hybrid infrastructure to increase coastal resilience	Output 2.1 Coastal ecosystems conserved and restored. Output 2.2 Improved and sustainable drainage and stormwater systems Output 2.3 Flood-protected housing and buildings Output 2.4. Enhanced hybrid infrastructure for sustainable ecotourism development	Reduced coastal erosion. Reduced coastal flooding. Preserved recreation and care spaces	5,340,680
3. Stakeholders build capacity, understand climate risks and engage in climate action	Output 3.1 Decision-makers, technicians sensitized and involved in coastal adaptation. Output 3.2 Local population sensitized and involved in coastal adaptation. Output 3.3 Improved knowledge management Output 3.4 Capacities of the population strengthened for economic autonomy by revaluing the coastal area	Local population sensitized and capable of responding to flooding and implementing practices to prevent coastal erosion. Strengthened institutional capacities to reduce flood and coastal erosion induced risks	1,023,870
6. Project/Programme Execution cost			875,000
7. Total Project/Programme Cost			9,217,000
8. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)			783,000
Amount of Financing Requested			10,000,000

Projected Calendar:

Indicate the dates of the following milestones for the proposed project/programme

Milestones	Expected Dates
Start of Project/Programme Implementation	September 2024
Mid-term Review (if planned)	September 2026

Project/Programme Closing	August 2028
Terminal Evaluation	June 2028

PART II: PROJECT / PROGRAMME JUSTIFICATION

A. Describe the project/programme components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience. For the case of a programme, show how the combination of individual projects will contribute to the overall increase in resilience.

102. The measures proposed in this project respond to an analysis based on studies and diagnoses carried out during the implementation of the NAP Costas process, complementary analyses of the prioritized sites, and the needs expressed by the national government, local governments and representatives of the local population who were consulted during the formulation process. Figure 9 lists the adaptation measures proposed in the project, to help understand their location and logic in Uruguay's coastal environment. This is followed by a description of the project components and activities. One of the proposed activities, Activity 2.3.1 – Facility or revolving fund to promote adaptation of houses and buildings to flooding – has been classified as an Unidentified Sub-Project (USP). More details can be found in the description of this activity.

Figure 9. Adaptation measures proposed by the project.

Component 1 - Strengthened evidence-based coastal planning considering climate change	Component 2 - Reinforced green and hybrid infrastructure to increase coastal resilience	Component 3 - Stakeholders build capacity, understand climate risks and engage in climate action
Output 1.1 Planning instruments with mainstreamed climate change Activity 1.1.1 Mainstreaming climate change into planning instruments Activity 1.1.2 Development of technical guides to provide guidelines for concrete adaptation measures ***Output 1.2 Improved systems for recording and monitoring climate change impacts*** Activity 1.2.1 Strengthening systems for recording and monitoring climate change impacts. Activity1.2.2 Development of a loss and damage assessment system for the tourism sector on the coast. ***Output 1.3 Early Warning System for coastal flooding installed*** Activity 1.3.1 Development of people-centered, end-to-end coastal flood risk EWS.	***Output 2.1 Strengthened coastal ecosystems to respond to erosion and flooding impacts*** Activity 2.1.1 Recovery of dune ridge structure Activity 2.1.2 Conservation and regeneration of beach vegetation Activity 2.1.3 Management of access to and use of the beach Activity 2.1.4 Conservation and restoration of vegetation on watercourse margins and coastal wetlands ***Output 2.2. Improved and sustainable drainage and stormwater systems*** Activity 2.2.1 Redirection and/or adequacy of stormwater discharges on the beach Activity 2.2.2 Bioretention Activity 2.2.3 Accumulation ditches, adequacy of channels and buffer ponds Activity 2.2.4 Floodable parks ***Output 2.3 Flood-protected housing and buildings*** Activity 2.3.1 Implementation of a financial mechanism to promote retrofitting in housing and other buildings in flood risk areas ***Output 2.4 Enhanced hybrid infrastructure for sustainable ecotourism development*** Activity 2.4.1 Design and development of sustainable ecotourism project	***Output 3.1 Decision-makers, technicians and operators sensitized and involved in coastal adaptation*** Activity 3.1.1 Communication strategy Activity 3.1.2 Awareness-raising for high-level policy-makers Activity 3.1.3 Awareness-raising and training for local technicians ***Output 3.2 Local population sensitized and involved in coastal adaptation*** Activity 3.2.1 Develop and socialize a Dissemination Plan and Participatory Strategy by intervention site Activity 3.2.2 Raising awareness and strengthening participation instances to involve young people in adaptation measures Activity 3.2.3 Awareness raising and training for communicators Activity 3.2.4 Awareness and involvement of the local community Activity 3.2.5 Awareness-raising for MSMEs / productive sectors ***Output 3.3 Improved knowledge management*** Activity 3.3.1 Identification of good practices and lessons learned Activity 3.3.2 Knowledge management exchanges between intendancies Activity 3.3.3 Coastal Space Management Congress ***Output 3.4 Capacities of the population strengthened for economic autonomy by revaluing the coastal space*** Activity 3.4.1 Coordination with educational spaces to incorporate local tourism topics Activity 3.4.2 Program to strengthen women's employment in coastal zones

Component 1 – Strengthen evidence-based coastal planning considering climate change

Output 1.1 Planning instruments with mainstreamed climate change

103. The activities of this Output will be carried out with special consideration of the advances and approaches of the binational project on the Uruguay River, which is working on the integration of the climate change perspective in planning instruments (Output 1 of said project).

104. As stipulated in the Gender Action Plan (Act. G.1.1.1.1.a. of said plan), all guiding instruments and documents that are revised, developed or updated as part of Activities 1.1.1 and 1.1.2 will include, where appropriate, specific sections or chapters to incorporate specific aspects on gender and generational mainstreaming. Both departmental gender directorates and key informants with knowledge on the subject will be convened. The operational guides and guidelines, as well as their dissemination, will be prepared using inclusive language. The validation process will be planned and implemented based on the inclusion criteria detailed in the GAP (Annex 4). The detailed Act. G.1.1.2 of the GAP includes the working meetings that will be held with the Departmental Gender Directorates (*Direcciones Departamentales de Género*) and with representatives of civil society to socialize the guidelines and documents.

Activity 1.1.1 Mainstreaming climate change into planning instruments

Sub-Activity 1.1.1.1.1 Technical inputs to contribute to the regulation of the National Coastal Space Directive

105. The purpose of this activity is to support the regulation of the National Coastal Space Directive (DNEC). This directive has the status of Law (19772)[65] and its regulation is a commitment assumed by Uruguay in the Second NDC[66]. To regulate it, it is necessary to advance in the definition of technical criteria in the different articles of the law, and to evaluate what its application implies in terms of management by the Ministry of the Environment.

106. Regarding technical work, the need for definitions is particularly relevant for articles 5, 6, 7 (letters “e” and “d”) and 10 of the Law, which deal respectively with the identification, characterization and consideration of **coastal ecosystems**, the identification and delimitation of **vulnerable components** for their due protection, and the extension of the **coastal defense strip**[67] up to the limit of the defined area, for the vulnerable components indicated in article 6, when they cover surfaces larger than the referred coastal defense strip and are located within the scope of application of the law.

107. Defining the criteria for each of these concepts will provide concrete guidelines for the national and departmental governments to characterize the environments, to establish the requirements for environmental impact studies and strategic environmental assessment, and to consider the additional workload that this will imply for the various enforcement authorities. Ultimately, this work will serve to increase the protection of ecosystems and their services and make them more resilient to climate change.

108. The planned stages are: 1) Construction of ecosystem maps and survey of vulnerable components; 2) Analysis by specialists of the change in criteria brought about by the new Directive and its impacts in terms of management and additional workload for the enforcement authorities; 3) Validation process with groups of experts, local managers and local population; 4) Generation of operational guides and guidelines for the application of the law; and 5) Preparation of recommendations for policy makers and their dissemination.

Sub-activity 1.1.1.2: Support local coastal planning instruments with climate change considerations

109. The project will support the mainstreaming of climate change impacts and risks considerations into local beach planning and management instruments in the sites prioritized for intervention. This includes:

- **Study for the identification of minor rainfall discharges** in the prioritized site in the department of Rocha, complementing the survey conducted by the Ministry of Environment for larger discharges, and **characterization of the vegetation** associated with streams and those minor discharges identified.
- Develop at least one **plan for the protection, restoration and enhancement of streams** (such as Cañada Las Ranas, in Rocha) and minor discharges in the prioritized site in the department of Rocha, in order to guarantee the buffer function and discourage their contamination and garbage disposal. These plans will dialogue with Component 2 investments such as those related to the conservation and restoration of vegetation along watercourses and coastal wetlands.

[65] Law No. 19772 – Regulación del Ordenamiento Territorial y Desarrollo Sostenible del Espacio Costero del Océano Atlántico y del Río de la Plata: https://www.impo.com.uy/bases/leyes/19772-2019

[66] Action No. 35. By 2030, Law 19.772 referring to the Directriz Nacional de Ordenamiento Territorial y Desarrollo Sostenible del Espacio Costero del Océano Atlántico y del Río de la Plata will have been regulated.

[67] Defined by Article 153 of the Código de Aguas, Decree-Law No. 14,859 of December 15, 1978, as amended by Article 193 of Law No. 15.903 of November 10, 1987.

- Develop a **Playa del Cerro Management Plan** to regulate the uses of the beach and contribute to reducing erosion and flooding. This development would begin with a detailed analysis of the environment, considering topography, climatic patterns, and human impacts, to inform specific strategies to address erosion at Playa del Cerro, and would continue with a community consultation process to gather local perspectives, ensuring acceptance and collaboration in the implementation of the plan and strengthening its long-term effectiveness.
- **Establishment of hydrobiological trusteeships** for the protection of watercourses associated with the prioritized site in the department of Maldonado: the catchment basins of Arroyo Tarariras and Cañada Zanja Honda and the four smaller watercourses located between these two, where women represent 48.7% of the population.
- It consists of the incorporation in land-use planning instruments of the figure of hydrobiological guardianship[68] for the protection of watercourses from the headwaters of its basin to its discharge zone. The protection includes both the watercourses and their contiguous area. Uses that modify native ecosystems will be restricted in these protected areas and ecosystem restoration measures will be implemented (particularly forest restoration). Guidelines will also be generated for the management of landscaping in private properties and public green spaces within the protected area, regulating felling, pruning, irrigation, and fertilization. This activity is intended to reduce rainwater runoff into beach areas and protect watercourses and their margins as biological corridors. The delimitation of the protected areas will be based on hydraulic studies and ecosystem studies at an appropriate scale for each watercourse included in this activity. The areas where each type of measure will be implemented will be identified and an evaluation will be made of whether the incorporation of hydrobiological guardianship will be included in the Local Land Use Plan currently being prepared for the Piriápolis area or whether it would be more effective to integrate it into another land use planning instrument.

  The beneficiary population would be the permanent inhabitants of Playa Verde, tourists and visitors to the beach. The implementation would be carried out by the Intendancy of Maldonado, the Municipality of Piriápolis, and local environmental organizations with experience in the area, such as the *Organización vecinal Playa Verde*.

110. Location: The entire coastal area of the country.
111. Beneficiary population: The country's coastal population and ecosystems. According to the reviewed statistics, about 50% of the coastal population in Uruguay are women.
112. Institutions responsible/actors involved: Ministry of Environment, MVOT/DINOT, expert groups, departmental governments.

Activity 1.1.2 Development of technical guides to provide guidelines for concrete adaptation measures

113. This activity will work to produce guidelines and standards for implementing adaptation measures on the coast, in order to facilitate Land Use Plans (LUP) to standardize criteria and be sufficiently concrete for the effective implementation of such measures. Identified topics:
    - Guidelines for the infrastructure sector, which needs technical guidelines for construction and zoning with climate change considerations.
    - Guidelines for the management of landscaping in private properties and public green spaces, regulating pruning, irrigation and fertilization.
    - Options and recommendations for rainwater capture in buildings, considering their potential mitigating effect on coastal runoff.
    - Evaluation of appropriate ecological materials or wood treatments for coastal infrastructure.
114. This activity will contribute to achieving the objectives of the country's 2nd NDC related to deepening the proper incorporation of adaptation to climate change and variability into planning instruments (see more details on alignment with the NDCs in section D).
115. The gender and generational approach will be adopted in the same way as in Activity 1.1.1.
116. Location: The entire coastal area of the country.
117. Beneficiary population: The country's coastal population and ecosystems.
118. Institutions responsible/actors involved: Ministry of Environment, expert groups, departmental governments. MVOT, DINOT.

[68] Hydrobiological guardianship is a land use planning figure applied to a territorial space associated with a natural element or to the management of an environmentally sensitive process, from the perspective of water and biodiversity. Taken from the Local Land Management and Sustainable Development Plan of Juan Lacaze and its Microregion, including Colonia Cosmopolita and Paraje Minuano *(Plan Local de Ordenamiento Territorial y Desarrollo Sostenible de Juan Lacaze y su Microrregión, incluyendo Colonia Cosmopolita y Paraje Minuano*) (art. 11).

Output 1.2 Improved systems for recording and monitoring climate change impacts

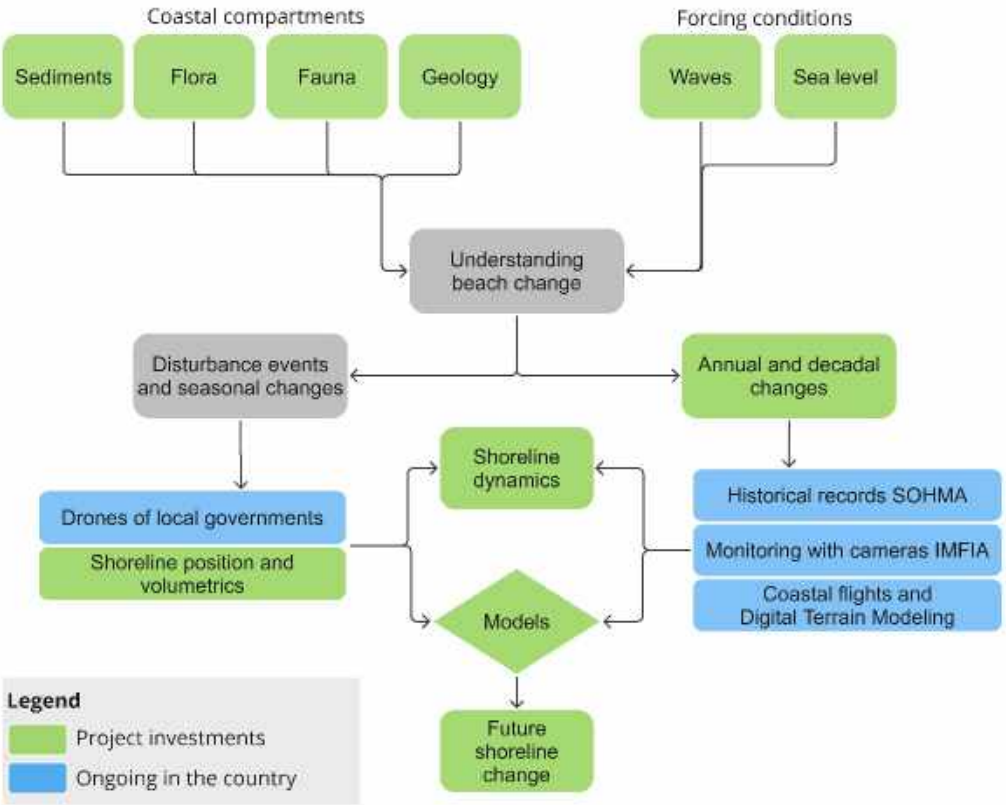
Activity 1.2.1 Strengthening systems for recording and monitoring climate change impacts

119. This activity proposes the development and implementation of a system to monitor changes in the coast and the effectiveness of adaptation measures, accompanied by capacity building activities to carry it forward and ensure its sustainability over time.

120. It will be built on efforts being developed by the Ministry of Environment in coordination with coastal subnational governments through the formulation and implementation of the National Coastal Zone Adaptation Plan. To date, monitoring of the coastline has been promoted by subnational governments, which includes the periodic survey of beach profiles, the capture of the digital terrain model from the dune to the breaker zone through drone flights, as well as the monitoring of beach arcs through the analysis of series of satellite images, cameras and photography by means of remote and citizen monitoring systems. Today, subnational governments have already incorporated these tools into their planning.

121. This activity proposes to undertake a series of activities to take advantage of these advances and arrive at a high quality integrated coastal monitoring system, taking as inspiration the one developed by the state of Victoria, in Australia[69]. The following figure shows the components of this integrated system and what would be the contribution of this project.

Figure 10. Project contributions to the establishment of an integrated system for coastal monitoring



Source: developed for this proposal based on a graph in the Victorian Coastal Monitoring Program.

122. The following is a more detailed description of the project's contribution in terms of investments and developments to achieve this system:

- **Conceptualization, development, and implementation of the system:** Hiring of highly specialized consultants to carry out this development. Organization of the system for its development and implementation, calculation of decadal and annual changes, analysis of the dynamics of the coastline and

[69] Victorian Coastal Monitoring Program website: Victorian Coastal Monitoring Program (arcgis.com)

modeling with all the information received, development of forecasts of future changes incorporating climate change variables.

- **Acquisition and installation of 4 smart buoys** to add to the 2 buoys already installed and managed by SOHMA. The smart buoys, which have already been successfully tested, provide real-time meteorological data. They collect wave, wind, sea surface temperature and barometric pressure data, and provide information through a Spotter control panel and an API. They will be managed by the Coastal and Marine Division (*División Costera y Marina*) of the Ministry of Environment and the Navy Oceanographic Service (*Servicio Oceanográfico de la Armada*, SOHMA).
- **Incorporation of the sea level forecast work carried out within the framework of the EWS for Juan Lacaze:** The Faculty of Engineering of the UdelaR will develop the sea level forecast for the coast of Juan Lacaze to be incorporated into the EWS (Activity 1.3.1). This development will be included in the system so that in the future, together with NAP Costas, the forecasts of the other prioritized sites and other vulnerable coastal areas of the country can be incorporated.
- **Strengthening of the sea level monitoring network** managed by SOHMA. This would include developing databases that work in the cloud and can be accessed by national and local governments for decision making.
- **Remote monitoring with cell phones:** The monitoring with cameras that is carried out in other areas of the Uruguayan coast requires buildings 30 m high to place them. This condition does not exist in the prioritized sites of the project, so the remote monitoring system with cell phones already developed by the country would be expanded. The local population can voluntarily get involved in feeding this monitoring system. Stakeholders will have access to a dashboard or platform to facilitate collaboration on coastal adaptation and will be able to share information and records of impacts.
- **Development of a monitoring protocol for the coast and the coastal adaptation works** carried out under Component 2:
    - An assessment of fauna, flora, geology, and topography, to know the biological and physicochemical dynamics of the beaches of the 6 prioritized sites. This information will provide guidelines and recommendations to be considered in the protocol (for example, it will indicate what work should or should not be done on the beach during a certain season of the year because of the reproduction of a key species).
    - Articulation with an NGO or national organization for the preparation of the protocol, which in turn articulates with the local groups of the 6 prioritized sites that during and after the implementation of the works will ensure that the intendancies guarantee its application.
    - Preparation of the protocol for monitoring works for both coastal ecosystem restoration (catchment fences, revegetation, etc.) and drainage improvement works (drainage inlets, etc.).
    - Development of a registration form/data matrix to be used by the intendancies to follow up on the progress of the indicators and determine whether the adaptation measure is working.
- **Practical trainings for participatory monitoring:** Practical trainings will be conducted with schools, local groups, neighbors, who voluntarily want to participate in monitoring the progress of adaptation measures.
- **Climate change impacts on vulnerable populations:** As part of the activities foreseen in the GAP, a document will be prepared with guidelines and recommendations for recording and monitoring climate change impacts on children, youth, women, the elderly, and the disabled population, which will then be integrated into the platform or dashboard to improve the system (Act. G.1.2.1.a and b).
- **Training workshops on registration and monitoring of climate change impacts and gender and social inclusion approach** (Act. G.1.2.1.c, d and e of the GAP): Training workshops will be held for the technical teams in charge of the registration and monitoring system for the effective inclusion and follow-up of the specific indicators on gender and age differentiated impacts of climate change, once the document of guidelines and recommendations mentioned above is ready. Training workshops will also be organized for civil society representatives and local government representatives to learn how to feed the registration and monitoring system with information related to sex- and age-differentiated impacts of climate change. Specific training activities may be organized for these population groups, in coordination with the Departmental Gender Directorates. It is expected that after these workshops, the technical teams will have sufficient knowledge to generate annual reports on the differentiated impact of climate change on children, young people, women and the elderly population, as part of the reports generated by the project.

123. Location: The entire coastal area of the country.

124. Beneficiary population: The country's coastal population and ecosystems.

125. Institutions responsible/actors involved: Ministry of Environment, SOHMA, IMFIA, SNRCC, SINAE, local governments, civil society organizations.

Activity 1.2.2 Development of a loss and damage assessment system for the tourism sector on the coast

126. This activity proposes to develop a methodology for recording and estimating losses and damages in the tourism sector due to climate impacts and to improve information on losses and investments made by local governments in the face of climate events. These two aspects, which are interrelated, since one feeds the other, are arranged below in two sub-activities.

Sub-activity 1.2.2.1 Development of Loss and Damage Assessment Methodology

127. The development will be led by the Ministry of Environment, in conjunction with the National Climate Change Response System (SNRCC) and will feed the National Emergency System (SINAE), so that it can incorporate it into its risk analysis in coastal areas.

128. The country has taken some first steps in adapting and applying international methodologies to the reality of its sectors and their main climate hazards and impacts. The study Loss and Damage Assessment in Uruguay (*Evaluación pérdidas y daños en Uruguay*)[70] has analyzed the background, challenges related to the form of registration, event classification, methodology, institutional procedures for accessing information, the use of information integration platforms, necessary institutional arrangements, installed institutional capacities, makes a proposal of how the governance of the loss and damage assessment mechanism could be, and provides recommendations to consolidate governance in the tourism sector. It explains the methodology that was applied only to the cruise ship sector (other tourism activities are missing). It also suggested a methodological fact sheet for the tourism sector.

129. In addition, during the formulation of this proposal, the progress of the Binational Project on the Uruguay River financed by the Adaptation Fund was analyzed, which is designing and implementing methodological guidelines to assess impacts, losses and damages (Output 2 of this project). It was concluded that the planned developments will not be directly exploited within the framework of this project, given that the Binational is focusing on the transportation sector. However, the communication channel will be kept open between both projects to exchange strategies and lessons learned.

130. It is proposed to develop a loss and damage methodology with economic and non-economic considerations that:

- Is suitable for use for the tourism sector on the coast.
- Improve the scale of analysis for the coastal zone since what has been developed so far has been done on a national scale.
- Improve the situation of lack of information and registration. There is a need for more available information and/or institutional arrangements to access it at the appropriate times and an adequate platform to manage information in a systemic way.
- Take advantage of the existing information system Monitor Integral de Riesgos y Afectaciones (MIRA)[71] of SINAE.
- Incorporate the gender and generational perspective, which has not been prioritized so far.
- Consider the road map proposed by the study Loss and Damage Assessment in Uruguay.

131. To achieve these objectives, this activity will carry out the following actions:

- **Baseline Study:**
  - Conduct a comprehensive baseline study to identify existing records and information in the tourism sector and to determine what should be incorporated into the system.
  - Comparison with the effects of the COVID-19 pandemic will be considered as a potential approach, given the significant impact on the tourism sector during that period. Explore the hypothesis of beach loss in the face of extreme weather events using records available during the pandemic.
  - Include a survey of the information needs of various stakeholders, not only governmental, but also tourism operators, among others.
  - Define indicators to be integrated into the system, ensuring a cross-cutting gender and

[70] Study contracted by the Ministry of Environment with funding from EUROCLIMA and developed during the year 2022. The full study is not published, but the summary version (containing the executive summary and the critical report) published by FIIAPP can be consulted at this link.
[71] SINAE's Monitor Integral de Riesgos y Afectaciones: https://www.gub.uy/sistema-nacional-emergencias/mira.

generational perspective that determines what records and information from the tourism sector exist to see what should be recorded in the system.

- **Development of a new module in the MIRA system:**
  - Implement a specific module for the tourism sector in the MIRA system, based on the results of the baseline study.
  - Perform the necessary integrations to allow data entry into MIRA. These entries would cover both information from the baseline and the registration of new adverse events (impact generators), thus allowing their subsequent evaluation.
  - Develop applications that facilitate data collection in the system.
- **Technical training:**
  - Training will be provided to technicians from the Ministry of Tourism, Ministry of Environment, SINAE, and intendancies on the efficient use of the new module.

Sub-activity 1.2.2.2.2 Capacity building for the recording of losses and investments at the local level

132. The objective of this activity is to improve the capacities of the accounting and finance areas of the municipal governments, focusing on the accurate recording of expenditures related to recovery from events. In addition to strengthening the operational areas responsible for recording and evaluating the impacts of adverse events (natural or anthropogenic) that generate recovery expenditures.
133. Today, the lack of discrimination makes it difficult to understand how these expenses and their impact are diversified. To address the lack of systematization in the recording of expenditures, it is proposed that a consulting firm be hired to collaborate with the staff of the Treasury areas. The consultancy would be responsible for establishing a clear and detailed record of investment at the subnational level, particularly in coastal areas, to ensure the effectiveness and sustainability of the measures implemented. The consultancy, led by a specialized team, will work closely with the six intendancies, providing the necessary accompaniment to implement and maintain this improved expenditure recording process.
134. As part of the training and support, training sessions will be held for the technical teams in charge of the recording and monitoring system for the effective inclusion and follow-up of the specific aspects of gender and age-differentiated impacts of climate change.
135. Location: The entire coastal zone of the country.
136. Beneficiary population: Coastal population and ecosystems, tourism sector.
137. Institutions responsible/actors involved: Ministry of Environment, SNRCC, SINAE, MINTUR, local governments, civil society organizations.

Output 1.3 Early Warning System for coastal flooding installed

Activity 1.3.1 Development of people-centered, *end-to-end* coastal flood risk EWS

138. It is proposed to develop an EWS to mitigate or reduce the impacts of coastal flooding for Juan Lacaze as a pilot experience for the country, developing the four components of an EWS according to the standards of the World Meteorological Organization[72,73], and to analyze the experience to scale it up and replicate it in other coastal zones.
139. To determine the gaps and needs to establish an EWS of these characteristics in Juan Lacaze, during the formulation of this proposal, work has been carried out with DINAGUA, INUMET, SINAE, IMFIA, SOHMA and the interest in this development has been confirmed with the departmental and local governments.
140. Based on the analyses carried out, it has been determined that the project will begin with the development of an implementation plan for the activity and will finance equipment, technical assistance, training, digital infrastructure and software necessary to close the gaps in the 4 components of the EWS, as described below.

1) Knowledge of coastal flood risks, including climate change impacts:

- *Study to develop relationships between hydrometric measurements (rules) and impacts associated with flooding:* Determination of flood affectation levels. Definition of action thresholds for early warning (exceedance of levels, impact).

[72] WMO Guide (2018), Multi-Hazard Early Warning Systems: A Checklist.
[73] WMO (2022), Guidelines on Implementation of a Coastal Inundation Forecasting–Early Warning System (WMO-No. 1293).

- I*mpact and risk study with a gender and generation perspective:* To understand the differential impacts of climate change and the specific risks of coastal flooding. This vulnerability study will take into consideration the differential impacts on young and adult women, children and the elderly in Juan Lacaze (Act.G.1.3.1.1.a of the GAP).
- *Economic valuation of impacts:* A consultancy will be hired to evaluate the direct and indirect costs of the flood, such as property damage and recovery costs. It also considers social and environmental impacts, including population displacement (in case, for example, of evacuations) and damage to ecosystems.

2) Impact-based detection, monitoring and forecasting:

- *Development of impact-based forecasting:* All warning actors consulted at the national level agree that impact-based forecasting does not yet exist in the country. Therefore, it is of great interest to develop a first pilot experience in Juan Lacaze. Based on the models already generated in the country, together with the study to relate hydrometric measurements with the impacts associated with floods, work will be done to advance towards impact-based forecasts, key for communicating risks to the population, including the roles, protocols and necessary articulation among the actors involved.
- *Strengthening of measurement equipment:* In order to have optimal measurements for the establishment of the EWS in Juan Lacaze, the project will provide measurement equipment for the stream (DINAGUA), a tide gauge for recording levels at the stream level with real-time data transmission (SOHMA) – the combination of both types of measurements would contribute to correlate data -, and a weather station (INUMET).
- *Develop an automated model to integrate the different hydro-meteorological and sea level rise forecast variables and define thresholds to inform impact-based warnings* on the coast of Juan Lacaze as a specific product of the PronUy RPFM[74] forecast system to be incorporated into the EWS. This model will be developed by the Faculty of Engineering of UdelaR, through IMFIA in 6 phases, in close coordination with the other key governmental stakeholders. The phases include 1) Exchange with users: key issues will be discussed with institutional decision makers, such as historical flood data and forecast requirements; 2) Database: collection and curation of historical data and the creation of a database structure; 3) Forecast generation: study of dynamics, development of numerical models and the definition of the evaluation system. 4) Forecast dissemination: generation of dissemination and evaluation systems with users; 5) Training for the transfer of the generated system: workshops for institutions and training of technicians; 6) Evaluation and improvement of the system: during implementation, adjusting and improving as necessary. The application programming interfaces (APIs) necessary for communication and exchange between the different national systems involved in this EWS will also be developed.
- *Integration with MIRA:* The integration of different instrumentation, maps and other elements will be developed through the necessary programming, calibration and other efforts.
- *Development of EWS protocol:* For monitoring, issuing impact-based warnings and establishing the competencies (including the preparedness and response phases) of the different warning actors, as well as the guidelines for the collection of information related to the impacts of adverse events.
- *Strengthening the personnel of national and local institutions:* Highly specialized training will be provided to personnel from SINAE, DINAGUA, INUMET, SOHMA, IMFIA, CDE and CECOED to understand and manage the end-to-end and people-centered EWS, since all parties recognize that today's personnel are not prepared for an EWS of these characteristics. In total, about 40 people (at least 40% women) would be reached by this training.

3) Dissemination and communication:

- *Development of an EWS communication strategy:* With gender and social inclusion criteria and the implementation of the most appropriate media to communicate the risks to the population. As detailed in Act. G. 1.3.1.1.d of the GAP, communication channels will be identified that specifically reach young and adult women, the young population in general and the older adult population, based on available information on the composition of households and economic activities, especially those headed by women, in Juan Lacaze. The information generated from the vulnerability and risk study with a gender and generational perspective will feed the necessary information for the EWS and the definition of roles and protocols that guarantee the concrete visibility of the entire population (Act. G.1.3.1.1.b of the GAP).

[74] PronUy_RPFM developed by IMFIA. Real-time operational forecast of different meteo-oceanic conditions in the territorial waters of the Río de la Plata and its Sea Front: https://www.fing.edu.uy/imfia/pronostico-marea/.

- Elaboration of a database of the population: This database would be aligned with the SINAE information system that records emergency events occurring in Uruguay in detail since 2019. There they also record the impacts on people, families, assets of significance and environment. The objective of this activity is to generate administrative records of exposed and affected people in Juan Lacaze.
- *Support to strengthen local media:* Support will be provided to local newspapers and radio stations, as well as other effective media in Juan Lacaze, so that they are incorporated into the EWS communication strategy.

4) Preparedness and response:

- *Preparation of contingency plans:* Process led by SINAE and worked with the different EWS stakeholders. The project will promote the holding of the necessary meetings for decision making.
- *Design and execution of simulation exercises*, fine-tuning and adjustments based on the socialization of the plans with the population.
- *Training and transfer of tools:* Workshops will be organized with the local population in Juan Lacaze and with local authorities on the importance of the operation of early warning systems with a focus on social inclusion, and as part of these workshops, didactic and dissemination material will be prepared for the local population (Act. G. 1.3.1.f of the GAP). Similarly, specific training will be provided on the gender approach in early warning systems, aimed at the technical teams in charge of EWS, with the purpose of incorporating the necessary knowledge to design and implement contingency plans and simulation exercises with a gender perspective, with a special focus on the differentiated needs of women, children, youth and the elderly (Act.G.1.1.3.1.c and d).

141. Location: Juan Lacaze.

142. Beneficiary population: Tentatively, it is estimated that it could benefit the population exposed to flooding in the municipality (3,167 people, according to DINAGUA's risk map). As mentioned above, the representation of women in this location is 51.7%.

143. Institutions responsible/actors involved: DINAGUA, INUMET, SINAE (CECOED, CDE), CDE, IMFIA, SOHMA, department of Colonia, municipality of Juan Lacaze, local population, neighborhood organizations.

Component 2 – Reinforced green and hybrid infrastructure to increase coastal resilience

144. Each of the prioritized sites ("pilot sites") will have one or more measures related to ecosystem conservation and restoration (Output 2.1) and storm drainage improvement (Output 2.2) and with the promotion of sustainable ecotourism (Output 2.4). Then, for all departments, the revolving fund mechanism for investments in housing and building protection in medium flood risk areas will be applied (Output 2.3):
    - *Colonia, Juan Lacaze:* It will include a floodable park on the banks of the Blanco stream, elevated pedestrian walkways for beach access and strengthening of the municipal nursery.
    - *San José, Playa Penino and Barrio Autódromo:* will include the development of an ecotourism project. On the coast, measures are planned for regeneration and strengthening of vegetation and income management, along with improvements to the drainage system, such as widening of ditches and canals and adaptation of the discharge in the JAC canal.
    - *Montevideo, Playa del Cerro:* it is proposed to eliminate exotic vegetation, accompanied by revegetation with native species, restoration of the dunes, and management of pedestrian and vehicular access. As for drainage improvements, the large drainage system that crosses the beach will be redirected, relocating its discharge and guaranteeing an attenuation space on the existing road island.
    - *Canelones, Mouth of Arroyo Solís Chico: La Floresta – Costa del Plata:* Contemplates action fronts on both sides of the mouth of Arroyo Solís Chico. It involves improvements to the storm drainage system in La Floresta by redirecting discharges and buffering, restoring and stabilizing the dune cordon with native vegetation on the La Floresta margin (near the mouth) and in Parque del Plata, and managing income and uses of the beach. The recovery of coastal wetlands is also contemplated.
    - *Maldonado, beach arch from Arroyo Tarariras to Cañada Zanja Honda:* Recovery of the dunes, recovery of vegetation and management of income and use of the beach, as well as recovery of wetlands. It also contemplates the adequacy of rainwater discharges. These interventions are complemented by the incorporation of hydrobiological guardianship described in Component 1 – Activity 1.1.1.
    - *Rocha, La Paloma, south and east beach arches:* This sector includes the adequacy of rainwater discharges on the beach, bioretention, conservation and restoration of coastal wetlands and margins of watercourses, lamination lagoons. It also includes the recovery of dunes and revegetation with native species, as well as the management of beach access.

145. The table below schematically presents the interventions to be carried out at each site.
It is important to note that the project proposes the integration of multifaceted measures, strategically grouped for implementation at each site.

Table 2. Component 2 interventions planned at each site.

Site	Conserved and restored coastal ecosystems				Improved and sustainable drainage and stormwater systems				Flood-proof homes and buildings	Enhanced hybrid infrastructure for ecotourism
	Recovery of dune ridge structure	Conservation and regeneration of beach vegetation	Beach access management	Recovery of coastal wetlands	Redirection and/or adequacy of storm water discharges on the beach	Bioretention	Accumulation ditches, adequacy of natural channels and buffer ponds	Floodable parks	Flood-proofing of residences and buildings	Design and development of a sustainable ecotourism project
Colonia			✓					✓	✓	
San José			✓	✓	✓		✓		✓	✓
Montevideo	✓	✓	✓		✓		✓		✓	
Canelones	✓	✓	✓	✓	✓		✓		✓	
Maldonado	✓	✓	✓	✓	✓				✓	
Rocha	✓	✓		✓	✓	✓	✓		✓	

Output 2.1. Strengthened coastal ecosystems to respond to erosion and flooding impacts.

Activity 2.1.1 Recovery of dune ridge structure

146. This activity consists of the installation of “barrier” devices between 50 cm and 100 cm wide and high, capable of reducing wind speed and allowing the sand that is transported to be deposited, collaborating in the reconstruction of the coastal dune ridge as a continuous structure. These devices are called sand fences.

147. For their construction, plant materials will be used, preferably fresh prunings with abundant volume and foliage, of exotic tree species from the coastal zone itself. Priority is given to the use of plant material since, when decomposing, it serves as a substrate and nutrient to facilitate the subsequent growth of herbaceous psammophilous vegetation that gives stability to the dune ridge and is part of the next phase of the coastal dune ridge regeneration process (Activity 2.1.3). In turn, the use of plant material (pruning) from exotic species to give structure to the fences contributes to the reduction of the density of these species. Preference will be given to the pruning of Acacia longifolia, an invasive species widely distributed along the Uruguayan coast that meets the leafiness requirements necessary for the construction of these devices. Special care will be taken when pruning outside of the seed production season to avoid the spread of these species, although to date these species are not known to thrive from their use in catch fences. The use of this species for fencing contributes to its reduction and further limits its expansion.

148. Where pedestrian entry points exist in the area where sand fences are installed, they will be interrupted to allow passage. However, this interruption will not continue the pedestrian entrance linearly, but will divert it slightly to avoid the possible generation of a wind tunnel that would generate sand transport out of the system. This will generate an "S" inlet instead of a straight inlet.

149. Pruning could be provided by the departmental or intendancies as appropriate. Both the Ministry of the Environment and most of the intendancies and municipalities have vast experience in the use of these devices.

150. They will be installed outside the summer season, between the months of May and September, to avoid interfering with tourist activity and to avoid the time when the plant species being used has seeds, so as not to favor its propagation.

151. For this measure to be effective, that is, for the structure and functioning of the coastal dune ridge to be recomposed and to fulfill its function of buffering extreme events, it is essential to give it continuity through the revegetation of the forming dune, a measure foreseen in activity 2.1.2.

152. Actions sensitive to gender and vulnerable groups: The works will be gender-sensitive, so that the intervention on the selected beaches does not affect the daily lives of women, young people and the elderly. Specific criteria will be included in the bidding documents for the contracting of public works companies: use of inclusive

language in the work signage, both in the signage used during the construction stages and the signage that remains installed including signage adapted for blind people, and signage with non-sexist images and icons, as well as signage promoting that the work is free of gender violence (Act. G. 2.1.1.1.a of the GAP)**.** The design of the "S" entrance will take into account people with disabilities and reduced mobility, providing the necessary facilities and adaptations. It shall be safe for children and pregnant women. The installation of vegetation associated with this activity will need to assess how it may affect the safe movement of women in these spaces. This will be consulted with the local population, in coordination with the Social Safeguards and Gender Specialist and the Departmental Gender Directorates (where applicable and according to the participation and consultation criteria included in the ESMP) (Act. G. 2.1.1.f and h of the GAP). The companies assigned to execute the works will have to include 40-50% women in their technical staff, as well as work plans (Environmental and Social Management Plan) that incorporate gender and gender violence awareness activities for all the people working in the works (Act. G. 2.1.1.g of the GAP).

153. Location: Beach area in Playa del Cerro (Montevideo), Parque del Plata and La Floresta (Canelones), Playa Grande, Playa Hermosa and Playa Verde (Maldonado), stretch of beach between Los Botes and La Serena and La Aguada beach (Rocha).

154. Beneficiary population: Permanent inhabitants of each locality, tourists and beach visitors. According to trends illustrated by local population statistics, in each of the localities, the female population is approximately 50%. Directly, 51.3 ha of beach area will be recovered. Indirectly, the area behind the dunes will be protected from flooding and wave effects.

155. Institutions responsible/actors involved: Departmental governments, municipalities and Ministry of Environment, potential contracted company.

Activity 2.1.2 Conservation and regeneration of beach vegetation

156. This activity consists, on the one hand of planting native psamophilous herbaceous species to address three different situations: i) stabilize the existing coastal dune ridge or the one that will be generated by sand fences with Activity 2.1.1. 1 as well as the dune area that will be left uncovered after the removal of exotic vegetation, ii) stabilize the slope in the case of dunes on the margins of streets (this measure applies particularly to Parque del Plata, Canelones), iii) increase the density of vegetation behind the coastal dune ridge. The incorporation of vegetation will in turn favor the conditions for the settlement of fauna.

157. The appropriate species to be planted will be evaluated in each case, taking into account the species present in neighboring areas that are in good condition. Given that *Hydrocotyle bonariensis*, *Senecio crassiflorus* and *Panicum racemosum* are associated with the mobile dunes along the Uruguayan coast -accompanied in each region by a different set of other herbaceous species-, these species will initially be considered. In the case of Playa Penino the species to be used will be hydrophilic species, given the environment to be restored.

158. This measure is essential to ensure the effectiveness of activity 2.1.1, given that if there is no vegetation, the structure of the coastal dune ridge will not be preserved.

159. Likewise, exotic herbaceous vegetation that has advanced spontaneously or implanted on the mobile dune areas, affecting their natural dynamics, and replacing native vegetation, will be removed. The strategies for the removal of this vegetation will take special care not to affect the native vegetation present in the area and avoid the regrowth of the exotic species. Consideration will be given to the need to carry out the removal of exotic vegetation in stages and associated with revegetation with native species to avoid the loss of sand in cases where the coverage of the dune by the exotic vegetation is very high.

160. Actions sensitive to gender and vulnerable groups: The installation of vegetation associated with this activity should evaluate how it may affect the safe movement of women in these spaces. This will be done in consultation with the local population, in coordination with the Social Safeguards and Gender Specialist and the Departmental Gender Directorates (where applicable and according to the participation and consultation criteria included in the ESMP) (Act. G. 2.1.1.1. f and h of the GAP. Specific criteria will be included in the bidding documents for the contracting of public works companies: use of inclusive language in the work's signage, both in the signage used during the construction stages and the signage that remains installed, including signage adapted for blind people, and signage with non-sexist images and icons, as well as signage that promotes that the work is free of gender violence (Act. G. 2.1.1.1.a of the GAP). The companies assigned to execute the works will have to include 40%-50% women in their technical staff, as well as work plans (Environmental and Social Management Plan) that incorporate gender and gender violence awareness activities for all the people working in the works (Act. G. 2.1.1.1.g of the GAP).

161. Location: Playa del Cerro (Montevideo), Parque del Plata and La Floresta (Canelones), Playa Grande, Playa Hermosa and Playa Verde (Maldonado), stretch of beach between Los Botes and La Serena and La Aguada

(Rocha).

162. Beneficiary population: Permanent inhabitants of each locality, tourists, and beach visitors. According to trends illustrated by local population statistics, in each of the localities, the female population is approximately 50%. Some 30 hectares will be directly reclaimed. Indirectly, the land behind the revegetated area will be favored and protected from flooding and the effects of waves.

163. Institutions responsible/actors involved: Departmental governments, municipalities and the Ministry of the Environment, the contracted company.

Activity 2.1.3 Management of access to and use of the beach

164. A series of actions are proposed here to organize pedestrian and vehicular circulation and thus reduce the impact of traffic on fragile areas, particularly the coastal dune ridge. On the one hand, elevated pedestrian accesses will be installed on the dune ridge to concentrate pedestrian traffic in specific areas, avoiding the impact of trampling on the vegetation of the ridge and facilitating access to the beach area for people with mobility difficulties. They will be designed with environmentally appropriate criteria, using lightweight materials that are not chemically treated – or the most ecological option possible after evaluation based on the study of alternatives included in Component 1 of the project – and maintaining a height that does not affect the circulation of sediments. The design will also follow universal accessibility criteria, including specific conditions for the blind and people with reduced mobility. In Canelones and San José, the design of the walkways will include a structure for strolling and contemplation of the surroundings.

165. Although in some cases the location of the accesses has been tentatively sketched based on the consultations carried out, the exact points of installation of the pedestrian entrances will be defined jointly with the neighborhood commissions of each site, to incorporate as a criterion the current use of the beaches (the points with the highest concentration of entrances).

166. In addition, to prevent vehicles from entering the beaches or parking on the dune, as well as to improve safety conditions for pedestrians, at some of the sites vehicular parking spaces will be created or spaces will be delimited that are currently used, but inadequately, associated with the entry points that have pedestrian walkways. Parking spaces will be properly delimited, and materials will be used that are both resistant and allow infiltration into the ground. In the case of Canelones, a box will be provided so that the person ensuring the safety of the vehicles has adequate working conditions. They will be created on public land outside the beach area and the intendancies or municipalities, as appropriate, will manage the designation of personnel responsible for security in cases where necessary. In the case of existing parking lots, but in inadequate conditions (as is the case in the stretch of beach between Los Botes and La Serena in La Paloma, Rocha), they will be redesigned following the criteria established here. Likewise, vehicular access to the beach will be delimited by the installation of fencing arranged in such a way as to prevent the passage of vehicles (including ATVs) but allow the passage of wheelchairs and strollers in the appropriate places.

167. These measures will be accompanied by signage that includes information on coastal space preservation measures (no vehicular traffic in prohibited areas and pedestrian passage through designated areas) as well as information on the values present in the area (including the environments present). The design of the signage will be agreed upon with the neighborhood commissions of each site, ensuring that the message conveyed is adapted to each locality.

168. Actions sensitive to gender and vulnerable groups: The walkways and parking spaces will have appropriate signage to inform and raise awareness of primary care services in the area (medical emergencies, attention to cases of gender violence, etc.) (Act. G. 2.1.1.b of the GAP). Specific parking spaces will be created for People with Disabilities and reduced mobility, including specific parking spaces for pregnant women and for people in charge of transferring children (Act. G. 2.1.1.d of the GAP). If new lighting is installed, criteria will be taken into account to contribute to the safety of women using these spaces, without losing sight of environmental considerations. To this end, the company in charge of the work will have to carry out the necessary consultations with the local population, in coordination with the Social Safeguards and Gender Specialist and the Departmental Gender Directorates (where applicable and according to the participation and consultation criteria included in the ESMP) (Act. G. 2.1.1.g and h of the GAP). Specific criteria will be included in the bidding documents for the contracting of public works companies: use of inclusive language in the work's signage, both in the signage used during the construction stages and the signage that remains installed, including signage adapted for the blind, and signage with non-sexist images and icons, as well as signage that promotes that the work is free of gender violence (Act. G. 2.1.1.1.a of the GAP). The companies assigned to execute the works will have to include 40%-50% women in their technical staff, as well as work plans (Environmental and Social Management Plan) that incorporate gender and gender violence awareness activities for all the people working in the works (Act. G. 2.1.1.1.g of the GAP).

169. The consultation and participation spaces to be considered for the involvement of neighborhood commissions will consider gender and generation criteria, in accordance with what is detailed in this regard in the GAP and the ESMP.

170. Location: pedestrian accesses will be installed in the coastal area of Juan Lacaze (Colonia), Playa Penino and Autódromo neighborhood (San José), Playa del Cerro (Montevideo), Parque del Plata (west bank of the Arroyo Solís Chico, Canelones), and in Playa Verde, Playa Hermosa and Playa Grande (Maldonado). Parking lots will be installed at Playa Penino and the Autódromo neighborhood (San José), Parque del Plata (Canelones), the stretch of beach between Los Botes and La Serena (La Paloma, Rocha) will be reconditioned, and vehicle fencing will be installed at Playa del Cerro (Montevideo), Parque del Plata (Canelones), and Playa Verde, Playa Hermosa, and Playa Grande (Maldonado). According to trends illustrated by local population statistics, in each of the locations, the female population is approximately 50%. Signage will be installed at all sites.

171. Beneficiary population: Permanent inhabitants of each locality, tourists and beach visitors, street vendors.

172. Institutions responsible/actors involved: Departmental governments, municipalities and the Ministry of the Environment, neighborhood commissions, potential contractors.

Activity 2.1.4 Conservation and restoration of vegetation on watercourse margins and coastal wetlands

173. The activity consists of the recovery of the structure of coastal wetlands, restoring their ecological functioning and their role as part of a Sustainable Drainage System, as well as the implementation of measures for the conservation and enhancement of these areas. These measures will be aligned with the planning instruments to be worked on in Component 1 sub-activity 1.1.1.1.2.

174. 174. The recovery of the structure includes revegetation with native herbaceous, shrub and tree species and the removal of exotic plant species.

175. 175. To this end, first, vegetation characterization studies will be carried out on the banks of watercourses and wetland areas of the sites to identify the appropriate vegetation for each case. In the case of Canelones and San José, the municipal nurseries will also be supported with additional equipment.

176. The conservation and enhancement actions involve the installation of signage and infrastructure that will allow people to connect with these spaces through adequate access for contemplation and enjoyment.

177. Actions sensitive to gender and vulnerable groups: specific criteria will be included in the bidding documents for the contracting of public works companies: use of inclusive language in the work signage, both in the signage used during the work stages and the signage that remains installed, including signage adapted for the blind, and signage with non-sexist images and icons, as well as signage promoting that the work is free of gender violence (Act. G. 2.1.1.a of the GAP). The companies assigned to carry out the works will have to include 40%-50% women in their technical staff, as well as work plans (Environmental and Social Management Plan, or equivalent) that incorporate gender and gender violence awareness activities for all the people working on the works (Act. G. 2.1.1.g of the GAP).

178. Criteria will be considered to encourage the participation of women and vulnerable groups in restoration actions and the design of conservation and enhancement measures (Act. G. 2.2.1.g. of the GAP).

179. Location: pilot sites in San José, Canelones, Maldonado, and Rocha.

180. Beneficiary population: permanent inhabitants of each locality. According to the trends illustrated by the local population statistics, in each of the localities, the female population is approximately 50%. In surface area, some 42 ha will be directly benefited. Indirectly, the entire coastline will benefit from the buffering of rainwater discharges from the wetlands, as well as the visiting population and tourists who use the beaches.

181. Institutions responsible/actors involved: Departmental governments, municipalities, neighborhood organizations, and the Ministry of the Environment.

Output 2.2. Improved and sustainable drainage and stormwater systems

Activity 2.2.1 Redirection and/or adequacy of stormwater discharges on the beach

182. The objective of this activity is to mitigate erosion caused by stormwater discharges on the coast.

183. When the discharge of a stormwater drainage system is contributing to coastal erosion, it can be addressed by relocating the drainage point (redirection) or by installing an energy dissipating structure at the discharge point, which acts by subtracting energy from the flow before it runs off the beach, in order to minimize erosion in the area.

184. The type of discharge depends on the flow conducted and the discharge environment. Generally, by guaranteeing conditions of more rapid evacuation of the flow in the upstream basin, the flow and velocities of the discharges on the coast increase, making it even more necessary to adapt them to mitigate erosion processes.

185. In each of the localities it is foreseen:

i. In Playa Penino and Barrio Autódromo, San José, the adaptation of the discharge of the JAC channel is foreseen. The executive project is included in the activity.

ii. In the case of Playa del Cerro in Montevideo, the relocation of the existing storm drainage in the middle of the beach is considered, relocating it to the west side of the beach, preferably directing its discharge to an existing natural course or, if not feasible, redirecting it to the natural rocky point. The executive project is included in the activity.

iii. In the pluvial discharges located in the slope of La Floresta (area with danger of landslides, left margin of the Arroyo Solís Chico) Canelones, the planned modifications are due to remove pressures from the slope of the ravine and are oriented to the redirection of 3 of the 4 existing pluvial discharges and readjusting the one located in Las Violetas street. There is a 2008 preliminary project and the Intendencia de Canelones will update the project and the executive project.

iv. In the beach arch between Cañada Zanja Honda and Arroyo Tarariras in Maldonado, there are 4 discharges of smaller streams in which the installation of energy dissipation is planned, requiring an engineering project (it does not include the large streams of the beach arch Cañada Zanja Honda and Arroyo Tarariras).

v. As part of the activity in La Paloma (Rocha), the adaptation of the 2 drainage discharges coming from Barrio Parque (in La Aguada beach arch the existing discharge at Yamandú street and in the South arch the discharge located in 13th street) is contemplated.

186. Actions sensitive to gender and vulnerable groups: Specific criteria will be included in the bidding documents for the contracting of public works companies: use of inclusive language in the work signage, both in the signage used during the work stages and the signage that remains installed, including signage adapted for blind people, and signage with non-sexist images and icons, as well as signage promoting that the work is free of gender violence (Act. G. 2.1.1.a of the GAP). The companies assigned to carry out the works will have to include 40%-50% women in their technical staff, as well as work plans (Environmental and Social Management Plan, or equivalent) that incorporate gender and gender violence awareness activities for all the people working on the works (Act. G. 2.1.1.g of the GAP). Participation and consultation with the local community will be taken into account to learn about their interests and needs, with special involvement of women's and youth groups (in accordance with the ESMP and Act. G. 2.2.1.d of the GAP).

187. Location: San José, Montevideo, Canelones, Maldonado, and Rocha.

188. Beneficiary population: Local population of each municipality, tourists, and beach visitors. According to trends illustrated by local population statistics, in each of the localities, the female population is approximately 50%.

189. Institutions responsible/actors involved: Local governments, municipalities, and the Ministry of the Environment.

Activity 2.2.2 Bioretention

190. The objective of this activity is to minimize the impact of stormwater on the coast. This means preventing increases in peak flows (and therefore velocities) and the total volume of runoff reaching the beach.

191. 191. Improvements in the drainage system must take an integral approach to the system where the stages of catchment of runoff can be differentiated in the areas of input, buffering – conveyance and discharge. Therefore, upstream measures also contribute to strengthening coastal areas in the event of heavy rainfall events and in the day-to-day operation of the drainage system[75].

192. Bioretention has been chosen as a source control measure. In consultation with the Land Use Planning Department of the intendancy, it was determined that there is public space available. Given that the area has vegetation, it will be necessary to design the partial location of bioretention areas within the property. Bioretention consists of depressions in the soil containing vegetation in a soil mixture designed over a gravel storage layer. They allow infiltration, storage and evaporation of both direct rainfall and runoff from upstream. It contains (from top to bottom): vegetation layer, stagnation area, organic layer and planting soil mixture, sand layer, geotextile and storage layer. The expected result of the implementation is the reduction of the peak water

[75] Source: Manual de diseño de sistemas de aguas pluviales urbana. Version 1.0, MVOTMA/DINASA, October 2009.

flow that ends up in the water discharges on the beach, reducing erosion by pluvial action on the beach.

193. Actions sensitive to gender and vulnerable groups: Specific criteria will be included in the bidding documents for the contracting of public works companies: use of inclusive language in the work signage, both in the signage used during the work stages and the signage that remains installed, including signage adapted for the blind, and signage with non-sexist images and icons, as well as signage promoting that the work is free of gender violence (Act. G. 2.1.1.a of the GAP). The companies assigned to carry out the works will have to include 40%-50% women in their technical staff, as well as work plans (Environmental and Social Management Plan, or equivalent) that incorporate gender and gender violence awareness activities for all the people working in the works (Act. G. 2.1.1.g of the GAP). Participation and consultation with the local community will be taken into account to learn about their interests and needs, with special involvement of women's and youth groups (in accordance with the ESMP and Act. G. 2.2.1.d of the GAP).
194. Location: Rocha.
195. Beneficiary population: All people using the beach (residents and tourists), fishermen and residents, 5,000 inhabitants of La Paloma (50.7% of inhabitants are women in La Paloma). Floating population: 50,000 tourists per year in the department.
196. Institutions responsible/actors involved: Intendancy of Rocha, Municipality of La Paloma and Ministry of Environment.

Activity 2.2.3 Accumulation ditches, adequacy of channels and buffer ponds.

197. This activity will promote the design and installation of sustainable drainage devices, with the objective of reducing the risk of flooding and mitigating the environmental impact caused by the modification of the natural conditions of the watershed and the change in the flow balance.
198. Control structures within the drainage system are generally used for total or partial retention of storm flow[76].
199. In flow buffering and conveyance, retention structures such as buffer ponds can be implemented, the conditions of natural channels can be adapted, and infiltration and retention can also be favored by means of grassy ditches with accumulators.
200. Design aspects of Buffer Ponds: Their purpose is to reduce instantaneous flows over the networks. They are useful in properties with a large surface area, with a large proportion of green spaces. They can contribute to irrigation, allow maintaining a volume of water below the volume required for buffering for a specific use or activity. Care must be taken to ensure the safety of children and to avoid mosquito breeding. Depending on the design, the incorporation of native hydrophilic vegetation, adequate to avoid eutrophication of the water body, will be considered.
201. Design aspects of the accumulation ditches: The ditches consist of open channels located parallel to the street axis between the shoulder and the sidewalk, into which the blocks and streets drain in a distributed manner. Although their purpose is conduction, significant increases in their section and control elements allow them to have an accumulation function.
202. They can be designed with permeable walls or slopes in order to reduce transported flows or recharge groundwater tables, and their section must be adequate to guarantee the necessary discharge in the event of large return periods, taking into account their influence on flood areas and incorporating considerations for climate change scenarios.
203. Flow buffering can prevent flooding in periods of minor returns and attenuate peak flows in events of greater intensity. In all cases they require an evaluation of the drainage system and available space for their installation.
204. In each of the locations it is foreseen:
    i. In Barrio Autódromo and Penino, San José, the adequacy of the JAC stream located parallel to Luis Puig Street is contemplated in accordance with the general projects of the basin (intervention to be articulated with DINAGUA), the detailed project is included within the activity.
    ii. In the Cerro, Montevideo, it is planned to implement buffering in the available space between the channels of the Rambla José Gurvich, this will have to have an executive project.
    iii. In La Floresta, Canelones, it is foreseen to update the existing 2008 preliminary project and carry out the executive project (action to be carried out by the Intendancy of Canelones and which also applies to activity 2.2.1) implementing a buffer lagoon in the public property located on Carabela Street, between Gaboto Street and Diagonal Juan Días de Solís.

[76] Source: Manual de diseño de sistemas de aguas pluviales urbana. Version 1.0, MVOTMA/DINASA, October 2009.

iv. In La Paloma, Rocha, it is planned to intervene in the lower area of the Barrio Parque drainage project, adapting the existing project with a focus on sustainable drainage and incorporating aspects of climate change, specifically final conduits and buffer ponds to be determined in the executive project in the two drainage axes of Barrio Parque, in the sector that drains towards Los Botes beach (approximately 700 m of drainage in Av. Central, projected buffer lagoon in green space, 400 m of ditches between the lagoon and the discharge) and in the sector that drains towards La Aguada beach (approximately 1400 m of adaptation of existing course.

205. Actions sensitive to gender and vulnerable groups: The drainage ditches to be built should include the necessary protection for the care of children, people with reduced mobility and the elderly, as well as the installation of the necessary signage indicating the location of the ditches. The necessary maintenance to prevent the proliferation of mosquitoes and other insects must also be included (Act. G.2.2.1.c of the GAP). Specific criteria will be included in the bidding documents for the contracting of public works companies: use of inclusive language in the work signage, both in the signage used during the work stages and the signage that remains installed, including signage adapted for blind people, and signage with non-sexist images and icons, as well as signage that promotes that the work is free of gender violence (Act. G. 2.1.1.1.a of the GAP). The companies assigned to carry out the works will have to include 40%-50% women in their technical staff, as well as work plans (Environmental and Social Management Plan) that incorporate gender and gender violence awareness activities for all the people working in the works (Act. G. 2.1.1.1.g of the GAP). Participation and consultation with the local community will be taken into account to learn about their interests and needs, with special involvement of women's and youth groups (in accordance with the ESMP and Act. G. 2.2.1.d of the GAP).
206. Location: Prioritized sites in San José, Montevideo, Canelones, Rocha. According to engineering project definition.
207. Beneficiary population: Inhabitants of the project areas, where the female population is approximately 50%, according to trends illustrated by local population statistics.
208. Institutions responsible/actors involved: Intendancies of Colonia, San José, Montevideo, Canelones and Rocha, and municipalities of each locality, as well as the Ministry of the Environment.

Activity 2.2.4 Floodable parks

209. The objective of this measure is to reduce the flow and speed of water runoff, mitigating the effects of flooding, while at the same time fulfilling a recreational function and promoting the public use of flood-prone areas, avoiding the possibility of housing being built in areas at high risk of flooding.
210. Flood-prone parks are green spaces with herbaceous, shrub and/or tree vegetation; adjacent to bodies of water or in areas at risk of flooding, with infrastructure adapted to periods of flooding and where the preservation of habitat for fauna in turn allows the facilitation of natural succession processes of plant species. These green areas allow for the reduction of runoff flows by increasing infiltration into the soil and reducing runoff velocity through friction with vegetation and by reducing flows. It will generate a recreational area, carbon sink, landscape value, temperature regulation, biological corridors, stress reduction and contribution to the psychological wellbeing of the population, improvement of air quality.
211. The design should be developed at the beginning of the implementation of the measure. In Juan Lacaze, some adjustments are already being made to the land for its use as a flood park near the mouth of the Blanco stream. The plan is to complement these actions and design a flood park covering approximately 24 hectares.
212. In Juan Lacaze, the measure includes the survey of flora and fauna present and potential for the park area; the design and installation of signage to promote the biodiversity of the area; the strengthening of the municipal nursery; the planting of native vegetation identified in the study as appropriate for the area, both on the banks of the stream and in the rest of the park area; the design of infrastructure and zoning of the park's uses. The latter includes a study for the design of paths for sustainable mobility, including all forms of travel that do not depend on motorized vehicles such as walking: bicycles, scooters, among others (including the possibility of a path over the embankment in the section between the two bridges). The design will aim to reduce impacts, guarantee accessibility, and zone uses according to soil conditions.
213. Actions sensitive to gender and vulnerable groups: the design of the flood-prone parks should include inclusive recreational spaces that allow the use of public space by both women and men. The design of the work should consider the safe circulation of women and young people, as well as the adequacy of spaces for the circulation of the elderly, people with disabilities and people with reduced mobility. In the event that this detail cannot be included in the bidding documents, the REACC Costas project will support the preparation of a specific preliminary project with specialists in this area that can then be incorporated into the construction project (Act

G. 2.2.2.1.c of the GAP). Specific criteria will be included in the bidding documents for the contracting of public works companies: use of inclusive language in the work signage, both in the signage used during the work stages and the signage that remains installed, including signage adapted for blind people, and signage with non-sexist images and icons, as well as signage that promotes that the work is free of gender violence (Act. G. 2.1.1.1.a of the GAP). The companies assigned to carry out the works will have to include 40%-50% women in their technical staff, as well as work plans (Environmental and Social Management Plan) that include activities to raise awareness of gender and gender violence among all the people working on the works (Act. G. 2.1.1.1.g of the GAP). Participation and consultation with the local community will be taken into account to learn about their interests and needs, with special involvement of women's and youth groups (in accordance with the ESMP and Act. G. 2.2.1.d of the GAP).

214. Location: Flood Park on the banks of the white stream between the Río de la Plata and Camino Aguas Corrientes, Juan Lacaze, Colonia.

215. Beneficiary population: Direct: Inhabitants of the municipality of Juan Lacaze and the Autódromo and Penino neighborhoods, where women represent 51.7% and 50.8% of the population, respectively. Indirect: visitors to the parks, with special attention to women, children, young people, the elderly, the disabled and people with reduced mobility.

216. Institutions responsible/actors involved: Intendancies of Colonia and San José, Municipalities of Juan Lacaze and Ciudad del Plata, and the Ministry of the Environment.

Output 2.3. Flood-protected housing and buildings

Activity 2.3.1 Implementation of a financial mechanism to promote retrofitting in housing and other buildings in flood risk areas

217. This activity proposes the creation of a revolving fund mechanism for the population vulnerable to climate change in areas at medium and high flood risk and whose dwellings are consolidated and not susceptible to future relocation, to reinforce their homes and commercial premises.

218. The National Housing Directorate (DINAVI) of the Ministry of Housing and Land Management would technically manage this revolving fund, which will be associated with the existing Urban Rehabilitation Program. DINAVI would sign agreements with the intendencies or update the existing ones. The financial administration would be in the hands of CND, the Executing Entity.

219. Some of the elements that could be eligible are listed below. This list is intended to be left open to cover any solutions not identified at this time that could be of great relevance to the beneficiaries. In addition, the conclusions of the NAP Cities technical studies on these solutions will be taken into account. The desire not to close the list of investments is the reason why this activity is classified as USP.

• locks or flood gates • waterproofing of walls • storm valves • check valves	• adaptation of electrical installations • accessibility measures for people with disabilities or reduced mobility • mechanisms for lifting furniture and other valuables to upper floors

220. The project takes the experience and lessons learned from the implementation of the revolving fund for adaptation of housing and commercial buildings in the Intendancy of Paysandú, which is currently being implemented within the framework of the binational project financed by the Adaptation Fund "*Adaptación al cambio climático en ciudades y ecosistemas costeros vulnerables del Río Uruguay (Adaptation to climate change in cities and vulnerable coastal ecosystems of the Uruguay River)*". During the consultation process, discussions were held with the CND and the Intendancy of Paysandú; some of the main lessons learned from the conception of this project are related to the need to start by raising awareness among the exposed and potential target population and to have a technical team composed of at least one architect and one social worker to mobilize the revolving fund, who can work in the territory and review each of the loans requested.

221. The steps to be established for the implementation of this fund are as follows:

a. Survey of exposed and vulnerable areas. b. Survey of specific adaptation measures for two-parent and/or single-parent households headed by women (Act. G.2.3.1.a of the GAP).	d. Environmental and social risk analysis for adaptation measures defined under the ESMP. e. Preparation of the operating regulations (ROP). f. Consultation on the ROP to the population. g. Awareness-raising workshop; door-to-door

c. Diagnosis on access to credit by young and adult women in the specific project intervention areas (Act.G.2.3.1.b of the GAP).	campaign, pre-registration through the web and technical visits. h. Granting of loans. i. Monitoring of the execution of the measures.

222. The Operating Regulations (ROP) of the revolving fund will include eligibility criteria linked to identified environmental and social risks, the prioritization of recipients taking into account the diversity in the composition of the population, considering gender and generational criteria, with special attention to single-parent households headed by women. It may not include criteria or requirements that block the access of women and youth to the financing or investment options offered (Act. G.2.3.2 a, b and c of the GAP).

223. Location: Neighborhoods at medium risk of flooding in the six coastal departments.

224. Beneficiary population: To confirm the number of households to be reached during the project implementation period (4 years). It is expected that after the end of the project the fund will continue to be sustained and rotate to other households during the following years, as part of DINAVI's programs (see more in Section II-J). Specific contributions will be defined to guarantee and promote access to the funds under this mechanism (for example, 30% of the beneficiaries are single-parent households headed by women).

225. Institutions responsible/actors involved: Intendancies, municipalities, DINAVI.

226. Classified as Unidentified Sub-Project (USP): Although the typology of beneficiaries, the typology of measures and the broad areas where this funding window will be implemented (medium-high risk areas according to flood risk maps) are known, it is not desired to close the list of measures in an exhaustive manner. Therefore, the ESMP states that the USPs should go through the same risk identification process and safeguard steps as the fully formulated activities included in the proposal, including consultation. These considerations will be taken into account throughout the different steps of the fund implementation listed above, and in particular by the survey of adaptation measures and the consultation on the operational rules of the revolving fund. See more details in Annex 6.

Output 2.4. Enhanced hybrid infrastructure for sustainable ecotourism development

227. Playa Penino is a unique site for environmental interpretation and ecotourism, and especially for "bird watching" tourism. The area has a high species richness, with a particular combination of marine, estuarine and freshwater birds. This richness attracts birdwatchers from all over the world, but local participation in these activities is practically nonexistent. The productive activities carried out by the local population in the area are mainly extractive (plant material, sand, fishing). The role of the ecosystems in the area and the importance of biodiversity, as well as their intrinsic value, have not been addressed at the local level. Therefore, the community's engagement with these environments remains extractive rather than focused on preservation. The proximity to the port of Montevideo, the main arrival point for international cruise ships, makes the reserve one of the key sites for attracting tourism.

228. The activities included in the proposal will contribute to the development of the area and improve the livelihoods of the local population, while it is expected to generate economic co-benefits, including new jobs. The revaluation of the area has the added benefit of acting as a deterrent to occupation of the area.

Activity 2.4.1 Design and development of sustainable ecotourism project.

229. An initial study will be carried out to design the Playa Penino ecotourism project in a sustainable manner, considering, among other issues, the area's carrying capacity to determine when and how it can be exploited for tourism without compromising the natural conditions of the site and particularly without generating a negative impact on bird communities. The project will have an integral focus on sustainability, enhancement and conservation of the wetland ecosystem, its great diversity of flora and fauna and especially migratory birds, and also the generation of economic income for the local population, improving their livelihoods, environmental education, and ecotourism with national and international projection.

230. This project will also finance related investments and the design of marketing, promotion and dissemination plans with the objective of including Playa Penino on the national tourist map.

231. Two types of actions are envisaged, depending on whether the land is public or private.

232. In the public area, it is planned to act on the beachfront properties of approximately 3 km. Elevated walkways

will be included with spaces for the sale of reed handicrafts, among others, that will make it possible to walk through the area without affecting the vegetation. Some investments to be considered could include bird watching facilities such as binoculars, wildlife identification guides, and signage. The project will place special emphasis on generating job opportunities for women as environmental promoters or nature guides. This initiative is directly related to Activity 3.4.1 Articulation with training spaces to incorporate local tourism issues and Activity 3.4.2 Program to strengthen women's employment in coastal areas.

233. In addition, this activity should be carried out in close coordination with other Component 3 activities that promote the awareness of the local population, their involvement in climate action and their appropriation, appreciation and respectful enjoyment of the natural space.

234. For private properties, the project will generate guidelines for the promotion of sustainable practices (vegetation management in landscaping, rainwater management, training).

235. This activity will be carried out in coordination with the National System of Protected Areas (*Sistema Nacional de Áreas Protegidas,* SNAP), the Ministry of Tourism, the Intendancy of San José, the Municipality of Parque del Plata, local organizations and companies.

236. Gender and vulnerable group sensitive actions: the ecotourism project design will include a section detailing the socio-economic activities of women in Playa Penino, especially those related to tourism, and then identify concrete investments to support their needs and economic ventures (GAP Act G. 2.4.1.a). Marketing and promotion/dissemination plans will include those enterprises run by women in the area, to be promoted as part of the overall strategy (Act. G. 2.4.1.b of the GAP, and Activities 3.4.1 and 3.4.2 of Component 3). The work design to be financed will include adequate spaces for people with reduced mobility and blind people, as well as the necessary adaptation for the safe circulation of children. This includes the creation of specific parking spaces for people with disabilities and reduced mobility when applicable, as well as specific parking spaces for pregnant women and people in charge of transporting children (Act. G. 2.4.1.c of the GAP). The adequacy of infrastructure to be financed will include signage with non-sexist language, as well as signage adapted for blind people (Act. G. 2.4.1.d of the GAP). Participation and consultation with the local community will be taken into account to learn about their interests and needs, with special involvement of women's and youth groups (Act. G. 2.4.1.f of the GAP).

Component 3 – Stakeholders build capacity, understand climate risks, and engage in climate action

237. The proposal is to increase the technical capacities and awareness of the local population, government institutions and the productive sectors, ensuring an increase in awareness and an exchange of knowledge on the impacts of climate change on the coast and adaptation measures, and to promote mechanisms for advocacy and collective action to promote the implementation of adaptation measures and their sustainability and replication.

Output 3.1 Decision-makers, technicians and operators sensitized and involved in coastal adaptation.

Activity 3.1.1 Communication strategy

238. As a first step, the support of specialized professionals will be sought to develop a Communication Strategy with a gender and generational perspective that will conclude with an action plan identifying the different audiences and different communication actions for them. Some will be general and others specific for young people, general population, politicians, technicians and SMEs. This plan will define the most appropriate communication materials to be used, as well as the priority actions by intervention site and target audience.

239. The Communication Strategy will include a specific chapter or section to address how to communicate with a gender and generational perspective, specifically detailing that women, young and adult women, as well as youth and adolescents, and economic enterprises linked to tourism activity in the coastal zone will be part of the target audience. The communication materials that integrate the Strategy will be adapted accordingly, using inclusive language, including images and illustrations without gender bias. The Gender Strategy Action Plan (or similar) will also include specific indicators disaggregated by sex and age, in order to measure the scope of the Strategy in a differentiated manner by population groups (Act.G. 3.1.1.a, b, c and d of the GAP).

Sub-Activity 3.1.1.1 "Harassment-Free Coast" Awareness Campaign (GAP Act G.A.1.1)

240. According to the main concerns of women, youth and adults, as well as the population in general, which were

compiled in the Gender Analysis Annex document (based on the consultations carried out both for the design of this complete proposal and as part of the NAP Costas) about insecurity and situations of street harassment and gender-based violence that occur in different places along the coast, the Action Plan includes a cross-cutting activity to the actions of Component 3 to design an awareness-raising campaign on harassment in public spaces, linked to the use of the coastal space by women, youth, children, girls and boys, and the general population, the Action Plan includes a cross-cutting activity to the actions of Component 3 to design an awareness campaign on harassment in public space, linked to the use of coastal space by women, young people, children and the elderly – "Costa Libre de Acoso" (Harassment Free Coast). In order to raise awareness among the general population and technical teams, workshops are proposed to present the campaign in the activities detailed below as part of Component 3.

Activity 3.1.2 Awareness-raising for high-level policy-makers

241. This activity will seek to raise awareness among high-level policy makers, from mayors to ministers and Parliament, on the threats and impacts of climate change, the necessary adaptation measures and the tools to implement them, with specific consideration of how to also involve the gender and generational perspective.

242. Some of the instances in which we will seek to participate will be:

- Meetings at ministerial level: short informative meetings will be proposed with representatives of different ministries and agencies (Ministries of Housing, Transportation, Economy, National Directorate of Hydrography, SINAE, etc.). The key is to provide them with access to the information that is available, and that there are technical personnel available and working effectively on concrete climate change adaptation measures on the coast. In addition, it will be critical to make them understand how the measures being implemented contribute to compliance with the 2nd NDC. Specific briefings will also be organized to discuss how the adaptation measures being implemented impact the daily lives of women and youth living and working on the coast (Act. G. 3.1.2.b of the GAP). Annual Departmental meetings may also be organized to present the progress of the implementation of the ESMP and the Gender Action Plan (GAP Act. G.3.1.2.c).
- Congress of Intendancies: interventions will be proposed at these meetings of mayors that take place periodically. In these interventions, it will be proposed to analyze the barriers to the implementation of adaptation measures, what technical and financial tools the country has, how resources are being used to provide solutions, and what are the most suitable and effective adaptation actions. As proposed by the GAP, the information prepared for these meetings will be complemented with information disaggregated by sex and age, with the objective of sensitizing participants to the differentiated impacts of climate change on the entire population (Act. G. 3.1.2.a of the GAP).

Activity 3.1.3 Awareness-raising and training for local technicians

Sub-Activity 3.1.3.1 Training of technicians and operators

243. As explained in the context section, there are important differences in criteria on how to implement certain measures or how to carry out certain maintenance tasks that promote adaptation. For example, while some technicians in the municipalities know that the presence of vegetation in certain sites helps to buffer floods, the people who carry out the maintenance of these sites (e.g., machinists who maintain streams and those directly responsible for them) assume that the presence of vegetation is associated with dirt and end up removing it. Another example of a difference in criteria is related to the use of exotic vegetation, when native vegetation can be much more resilient and needs less irrigation (and, therefore, there would be less water running offshore contributing to erosion).

244. Through the project, awareness and training activities will be carried out with technicians from the intendancies (works, environment, development, LUP, among others) to provide practical tools that will allow them to incorporate good practices and updated criteria regarding coastal adaptation in the daily management of the territory. These trainings will include, among others, the following topics: management of the effects of flooding on infrastructure (houses, bridges, schools, health centers, etc.), management of ecosystems affected by erosion and flooding (dunes, wetlands, forest), management of livelihoods affected (fishing, beach services, ecotourism, etc.), mainstreaming the gender perspective in these issues, management of environmental and social safeguards, monitoring the impacts of coastal erosion and flooding, complaints and claims mechanism, communication and consultation with the population, knowledge of what changes are expected in the coasts due to climate impacts, knowledge of possible coastal adaptation measures, capacity to identify good practices and replicate or scale up measures that work, capacity to manage coastal flooding prevention and impact on people, gender equality and social inclusion (according to Act. G.3.1.3.c of the GAP)

245. In addition, we will work with municipal personnel (technicians, work crews, construction companies

subcontracted by the intendancies) on Ecosystem-based Adaptation measures, environmental and social impact assessments in coastal areas, strategic evaluations, among others, to reach agreements on maintenance criteria and best practices for the implementation of ecosystem restoration measures, rainwater and drainage. Material will be produced to systematize this information on best practices, such as guides and operational sheets on best practices for cleaning ditches and avoiding runoff, among others.

Sub-Activity 3.1.3.2 Manual on Best Practices for Gender and Generational Mainstreaming in Public Works (GAP Act. G.3.1.3.a)

246. In order to have reference materials to make effective the specific measures requested to the public works companies that will be contracted for the activities of Component 2 (and also in line with the Environmental and Social Management Plan), a Manual of good practices on gender and generational approach will be prepared, so that both the selected companies and the technical teams and operators are aware of and implement these recommendations. The Manual may be attached to the contracts as an annex and may be based on similar materials already produced in Uruguay and Argentina[77].

Sub-activity 3.1.3.3. Reflection and training workshops on urban planning and gender perspective

247. As part of the sensitization and training activities, it is proposed to work with the technical teams of the Ministry of Environment linked to the implementation of the REACC Costas on urban planning and gender perspective and social inclusion to generate capacities related to these issues, given the importance that the local population, especially women, have given to this topic during the consultations carried out within the framework of the NAP Costas and for the design of the REACC Costas (see the Gender Analysis in Annex 4). These workshops could also be planned at the local level, to work with the Departmental Gender Directorates and with other local stakeholders linked to the REACC Costas (Act. G. 3.1.3.b).

Sub-activity 3.1.3.4. Presentation workshop of the Harassment-Free Coast Campaign

248. This workshop will be aimed mainly at technical teams and decision makers linked to the REACC Costas project to present the campaign proposed in the Gender Action Plan and to raise awareness of this problem in the coastal zone of Uruguay (see Act. G. A. 2 of the GAP).

Output 3.2 Local population sensitized and involved in coastal adaptation

Activity 3.2.1 Develop and socialize a Dissemination Plan and Participatory Strategy by intervention site

There are various mechanisms in each Department to involve the local population in coastal projects. In some departments there are follow-up commissions, in others there are participatory development roundtables and periodic information meetings. The degree of formalization and frequency of meetings also varies in each case. Within the framework of the project, it is proposed to advance in identifying the participation mechanisms in place in each site and to socialize the participation mechanism for the socialization of project activities.

The project will begin with surveys and identification of local participation spaces and mapping of actors/stakeholders to then define the participation mechanism for each intervention site socialized with the local population, including definition of the frequency of meetings/socialization sessions and the form of feedback on the project. The surveys of local participation spaces and stakeholder mapping will include an analysis of the involvement of young and adult women, how they participate, and what their main barriers to participation are, as well as the identification of specific spaces organized and led by women, and their degree of formalization (Act. G. 3.2.1.a and b of the GAP).

The Dissemination and Participatory Strategy Plans for each pilot site will explicitly include how to ensure the representation and participation of women and youth. This implies prior knowledge of their specific needs and requirements for effective participation (e.g., time availability, care spaces, appropriate communication channels, etc.), in accordance with Act. G.3.2.1.c of the GAP.

Activity 3.2.2 Raising awareness and strengthening participation instances to involve young people in adaptation measures

249. Through this activity, the project will seek to work with local youth to raise their awareness of climate change, its expected impacts on the coast, the importance of adaptation measures and their monitoring, as well as to survey the pre-existing knowledge among them that can contribute to the project, while incorporating the

[77] The Intendancy de Montevideo published "Urbanismo feminista en Montevideo", "Montevideo libre de acoso sexual en los espacios públicos". Another reference can be the publication of the Ministry of Public Works of Argentina "La perspectiva de género en ciclo de la Obra Pública".

perspective of gender, generations and other social and environmental issues.

250. The project will build on DINACC's experience with the "Youth Climate Action (*Acción Climática Joven*)" initiative, which already works specifically on empowering youth in climate action. Continuous learning, action-oriented and experiential educational approaches, including immersive field-based and non-formal educational experiences, will be considered to connect youth to coastal environments and adaptation measures. In addition, meetings of young people involved with climate action on the coast will be encouraged by inviting them through idea competitions to propose innovative initiatives for communicating the importance of coastal adaptation, which could be funded by the project or by existing initiatives with which the project could link, such as the Colonia Region Fund[78]. The innovative proposal competitions will be designed to promote the presentation of ideas with a gender perspective through scores and selection criteria, according to the Act. G.3.2.2.2.d of the GAP.

251. Training and awareness-raising activities aimed at young people shall include the participation of at least 50% of young women. To this end, it is important to ensure that disseminations and calls for proposals reach and engage them, and that appropriate communication channels are used (Act. G. 3.2.2.2.c of the GAP).

252. We will work with young people and youth associations to deploy different communication actions that will actively incorporate the gender perspective.

Activity 3.2.3 Awareness raising and training for communicators

253. The project will facilitate training and exchange sessions with local communication professionals. Media outlets such as local radio and television stations will be actively involved, and the potential of social networks will be used to disseminate the message. Activities with communicators will include breakfasts and workshops where information about the project will be shared, with specific sessions to address and learn about good practices for effective communication of climate change with a gender perspective, in order to create a first direct link to later have a continuity of work during project implementation and to be considered in their coverage (see Act. G.3.2.2.2.a of the GAP).

Activity 3.2.4 Awareness and involvement of the local community

254. This activity will seek to provide information, practical knowledge and tools to increase interest and promote active involvement in climate action to protect the beach ecosystem from erosion and coastal cities from flooding among the population. Through the adoption of a behavioral change approach, the project will translate the most relevant climate change information, adaptation measures, lessons learned and learning resources into understandable, gender- and generational-sensitive language. Specific activities with the population may include:

- Strengthen the network of environmental promoters trained by the Ministry of Environment[79], including specific workshops and involvement of environmental promoters from each prioritized site in project activities.
- Implementation and monitoring activities of the adaptation measures developed by the project. In accordance with Act. G. 3.2.4.e of the GAP, 50% of the daily wages assigned to each department/prioritized site for the monitoring of adaptation measures will have to be paid to women, in order to strengthen their role and involvement in such monitoring and follow-up.
- Annual meetings with women from civil society directly affected by project activities, for participatory monitoring of the implementation of adaptation measures and the Gender Action Plan (Act. G. 3.2.4.a of the GAP).
- Neighborhood educational outings to recognize the coastal territory, native vegetation, its uses and importance in contributing to the reduction of coastal erosion and flooding. Didactic outings adapted for boys and girls will be organized (as included in Annex 4 – Gender Action Plan – Act. G.3.2.4.b).
- Development of communication products such as audiovisual material, promotional spots, podcasts, and infographics to be disseminated through local media outlets or dissemination events, designed with inclusive language and with images and illustrations that do not reproduce gender stereotypes (Act. G.3.2.4.c of the GAP).
- Practical exchange workshops with civil society, including associations such as development roundtables, neighborhood commissions, coastal groups, and with specific modules or work sessions on gender and social inclusion (Act. G. 3.2.4.d).

[78] Fondo Región Colonia is a non-profit social organization made up of community leaders from different localities in the department of Colonia in Uruguay. Among other initiatives, they finance sustainable development micro-projects (between US $1,000 and 2,000) of local social organizations. More information: https://www.fondoregioncolonia.org/2017/01/30/financiamiento-de-proyectos/.

[79] Ministry of Environment – Red de Promotores Ambientales: https://www.gub.uy/ministerio-ambiente/redpromotoresambientales

Artistic-cultural activities such as the organization of photographic, artistic-plastic, and communicational exhibitions, as well as other knowledge products that, as well as and in coordination with the Activities under Output 3.3, can be disseminated in different media.

Sub-activity 3.2.4.1. Local workshops for the presentation of the Harassment-Free Coast Campaign

255. Workshops will be organized to present the Campaign to the local population in each of the intendancies linked to REACC Costas in order to raise awareness of this problem in the coastal zone of Uruguay (see Act. G. A. 3 of the GAP).

Activity 3.2.5 Awareness-raising for MSMEs / productive sectors

256. It is important that SMEs in the tourism sector, the real estate sector and other productive sectors are aware of the threats of climate change on the coast and how its impacts and future climate change scenarios can affect the economic activities carried out there.

257. For the real estate sector, the project will organize targeted information sessions where it will identify developers and seek to involve them in the project's activities, disseminate present and future climate risks, and seek alliances to involve them in the protection of coastal and beach ecosystems.

258. In addition, the project will work with these types of stakeholders and those involved in the tourism sector or tourism-related activities on awareness-raising activities, access to information, and transmitting information on new regulations that are expected to come into force, such as the National Coastal Space Directive (DNEC) regulation. We will seek to work especially with those who are particularly dependent on beach tourism or who are located in areas that are expected to suffer greater impacts in the future related to erosion and flooding exacerbated by climate change.

259. All information sessions will include information disaggregated by sex and age in the materials prepared for these activities so that this sector has specific knowledge on how the threats and risks associated with climate change have a differential impact on men and women, youth and adults, and how this affects the different sectors in their economic activity in particular (Act. G.3.2.2.2.a of the GAP).

Output 3.3 Improved knowledge management

Activity 3.3.1 Identification of good practices and lessons learned

260. The project will promote the identification and dissemination of learning that will be identified through a previously defined methodology. Some of the activities to be included are:

- Case studies on adaptation measures successfully implemented by the project. Special emphasis will be placed on cases of Ecosystem-based Adaptation and new methodologies that consider ecosystems in adaptation measures. These may start to be built and disseminated in the second half of the project.
- Identification of challenges during implementation and the lessons learned from them to promote a process of reflection among the parties involved in the project.
- Conduct annual reflection workshops with a variety of stakeholders, including national, departmental and local government staff, academia and civil society organizations, to jointly assess project progress and opportunities for improvement. These workshops will include specific working sessions on gender and social inclusion (Act. G.3.3.1.c of the GAP), which may be organized in conjunction with the Departmental Gender Directorates involved (Act. G.3.3.1.d of the GAP).
- Preparation of communication products such as videos and fact sheets with key lessons learned to be disseminated to the entire governance arc of the Uruguayan coast. These communication products will include information disaggregated by sex and age and will specifically highlight the experiences of women who were reached by the adaptation measures. According to the GAP, at least 1 video will be on women's experiences during the project (Act. G.3.3.1.1.e of the GAP).
- The Gender Action Plan includes the identification of at least 3 case studies on gender and generations, as well as the inclusion of gender and generational criteria in the analysis and selection of all case studies identified (Act. G.3.3.1.a and b of the GAP).

Activity 3.3.2 Knowledge management exchanges between intendancies

261. According to the consultations and interviews conducted with representatives of the intendancies, there are not many moments that favor exchange and learning both internally and between intendancies. The arrival of a project such as this one will seek to create these spaces to generate cohesion among the teams of the intendancies around strategies and best practices for adaptation to climate change on the coast, through workshops and meetings.

262. Within the framework of this activity, the GAP proposes to organize work and follow-up meetings on the actions implemented by REACC-Costas between the Departmental Gender Directorates and their teams. These meetings may include visits to the sites prioritized by the project, with the objective of generating a space for joint learning and cohesion among the teams of the intendancies (Act. G.3.3.2.2.a of the GAP).

Activity 3.3.3 Coastal Space Management Congress

263. This activity will seek to promote the dissemination, articulation and exchange of ideas during a congress actively involving the community. This activity seeks to empower society and bring together diverse actors interested in coastal management to address climate change.

264. It will articulate and promote complementarity with existing initiatives, such as the National Meeting on Coastal Management organized by the University of the Republic, whose first edition was held in 2022 and was aimed at students and graduates of the Program in Integrated Coastal Management[80].

265. This congress may include elements such as a) Panel discussions where coastal management experts, scientists and government representatives will present their approaches and challenges; b) Community Forums where the local community will share their concerns, ideas and experiences related to coastal management and climate change; c) Collaborative Workshops for participants to propose specific solutions to address the problems identified; d) Exhibition of examples of coastal climate change adaptation technologies and strategies; e) Specific panels to present and discuss how the gender and generational approach is part of the management of the REACC Costas project, as well as the main challenges and progress in this regard (Act. G. 3.3.3.3.a of the GAP).

266. Specific financial resources will be secured for women and young people from civil society to participate in the Congress (Act. G. 3.3.b of the GAP).

Output 3.4. Capacities of the population strengthened for economic autonomy by revaluing the coastal space.

Activity 3.4.1 Coordination with educational spaces to incorporate local tourism topics

267. The objective of this activity is to facilitate community participation in quality ecotourism training programs. The project will articulate with training spaces to promote it among project beneficiaries, with an initial focus on the localities of Playa Penino, Juan Lacaze and the populations of the mouth of the Solis Chico, but also considering its expansion to other sites prioritized by the project. This activity aims to promote ecotourism training and the appropriation of sustainable practices. The project's Gender Action Plan has established that at least 40% of the people trained in ecotourism should be women (Act. G.3.4.1.a of the GAP). The project foresees 10 scholarships for women to be trained in ecotourism.

268. The project will collaborate with local educational institutions, such as the Universidad del Trabajo del Uruguay (UTU), to facilitate access to ecotourism training programs. It will explore the possibility of integrating specific topics related to ecosystem-based adaptation, sustainable practices, cultural identity and natural heritage into the training curriculum.

Activity 3.4.2 Program to strengthen women's employment in coastal zones

269. The Gender Action Plan includes the design of a program to strengthen access to formal employment and improve the current working conditions of women engaged in economic and productive activities in the coastal zone. The program may include education and training on topics such as the development of business plans, digital marketing strategies, use of social networks, etc. As part of this program, a systematization of existing resources in Uruguay and in the intendancies aimed at strengthening business development and access to specific sources of credit or financing will be carried out, to be disseminated among the women participating in the program.

B. Describe how the project/programme provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project/programme will avoid or mitigate negative impacts, in compliance with the

[80] The I National Meeting of Integrated Coastal Management was held in August 2022 in Maldonado, Uruguay, and was aimed at students and graduates of the Programa en Manejo Costero Integrado. Organizers: Interdisciplinary Center for Integrated Coastal Management of the Southern Cone and UNESCO Chair in Integrated Coastal Management of the Southern Cone UdelaR: https://udelar.edu.uy/portal/2022/04/i-encuentro-nacional-de-manejo-costero-integrado/

Economic benefits of the project

270. The project will provide tangible economic benefits for the vulnerable population of the pilot sites in the Uruguayan coastal zone. These benefits include more stable incomes, preservation of employment, asset protection and savings for both the population and the local government in terms of reduced exposure to flooding and associated costs.

271. Comp. 1, through institutional and policy improvements (Output 1.1), the climate information monitoring system (Output 1.2), and the flood early warning system (Output 1.3), will enable better prevention, mitigation, planning and more effective management of climate risks, resulting in reduced exposure and economic costs for both the public and private sectors associated with climate impacts.

272. Comp. 2 with the increased resilience of coastal areas (Outcome 2.1) will stabilize and even increase the income of the population by avoiding losses in tourism and navigation activities due to the loss of beach due to coastal erosion and sea level rise. The improvement of storm drainage systems that discharge onto the beach and upstream retention infrastructure (Outcome 2.1) will also contribute to the proper preservation of the beach and increase tourist activity and reduce the impact of storm flooding in adjacent neighborhoods. In turn, the improvement of housing and commercial buildings against flooding (Outcome 2.3) will protect the vulnerable population, reducing their exposure and the economic costs associated with the loss of goods and property. Furthermore, all these measures will also benefit the most vulnerable neighborhoods prone to pluvial and sea level rise flooding by generating indirect economic benefits by avoiding emergency response costs in extreme events, while also reducing the likelihood of their need for government social assistance. Finally, the design of the Ecotourism program at Playa Penino (Activity 2.4.1) will develop more sustainable tourism activity at the site, generating livelihood diversification for the population, new employment opportunities and increased income for residents.

273. Comp. 3 will build capacity among stakeholders (Output 3.1) and develop communication and outreach strategies (Output 3.2) that will reduce economic impacts by educating on how to prevent flooding and act during emergencies and how to properly care for and preserve beaches, reducing the cost of climate change hazards on livelihoods, infrastructure and the general population.

Environmental benefits of the project

274. Comp. 1 will provide environmental benefits at the national level because it will help identify and protect vulnerable ecosystems and components, both in land-use planning instruments and in projects carried out in the coastal defense strip, facilitating their corresponding environmental assessments and providing the necessary resources for the implementation of guidelines, directives and plans by the national government and intendancies. This result is important for future actions to foresee and/or avoid specific negative environmental impacts.

275. Likewise, the system for recording and monitoring climate change impacts (1.2) and the early warning system for coastal flooding (1.3) will be key results for more effective management of climate risks to the local ecosystem.

276. Comp. 2 will promote investments in green and hybrid infrastructure to restore and conserve coastal ecosystems, improve drainage, and protect homes and buildings. Each of the prioritized sites will feature one or more measures related to ecosystem conservation and restoration and storm drainage improvement, which will provide direct and indirect environmental benefits related to increased ecosystem integrity, structure, and biodiversity.

277. Ecosystems: several of the sites prioritized in the project have some degree of protection or are located near areas of conservation value, for example: Bañados del Este Biosphere Reserve[81] in Rocha or the departmental-level Playa Penino Nature Reserve in San José[82]. In all cases, they will indirectly benefit from the reduction of pressure on natural resources and ecosystem services under the corresponding regulations and in line with the Local Land Use and Sustainable Development Plans, together with environmental organizations and species conservation plans that work at the local level.

278. Comp. 2 activities, focused on improving the drainage system and promoting the implementation of sustainable urban drainage systems, will have a positive impact on the environmental sanitation of the beach. By improving stormwater quality, a healthier environment for beach users will be achieved. In addition, reducing the constant discharge of water will help keep the sand dry, thus preventing the invasion of grasses and the

[81] Programa de Conservación de la Biodiversidad y Desarrollo Sustentable en los Humedales del Este (Program for Biodiversity Conservation and Sustainable Development in the Eastern Wetlands): https://www.probides.org.uy/reserva-biosfera.php
[82] Resolution 774/996 of the Intendancy of San José.

presence of rodents and flies.

279. Comp. 3 will raise awareness and build the capacities of the different coastal stakeholders to ensure that they are aware of the risks and adaptation measures and become actively involved in climate action, for example by participating in the installation and monitoring of sand fences, dune revegetation campaigns, awareness-raising events and the exchange of experiences between beaches with similar problems, collaboration in the preparation of educational material for dissemination, installation of posters and signage. In all these instances, environmental considerations will be included.

280. The implementation and monitoring of the Environmental and Social Management Plan in Annex 6 will ensure that the project complies with the Fund's Environmental and Social Policy.

Social benefits of the project

281. The project's actions have important social benefits for the population since, on the one hand, they aim to recover and conserve the beaches as democratic and public use spaces, to increase their resilience in the face of floods and current and future extreme events, accompanying the actions with awareness raising and strengthening of the local population for climate action. The beaches are accessible to everyone, regardless of social class, age, or gender, all year round. There are close links between the inhabitants of the departments and their visitors; they are spaces for leisure, sports, recreation, meeting and care, often used by women with children.

282. On the other hand, the prioritization of the pilot sites has taken into account socioeconomic and ecosystemic vulnerability criteria. The selected beaches are not exclusive enclaves, but spaces that offer inclusive access and are used daily by people with low- and middle-income levels.

283. The social benefits of the project reach both the inhabitants of the areas closest to the coast – the direct beneficiaries – and those who travel to the beaches for economic, recreational or cultural activities throughout the year, with a greater influx of tourists (domestic and foreign tourism) during the summer. As mentioned above, the project will increase the resilience of the beaches, which will help sustain economic activities in the long term and even generate new activities that will allow women to earn income.

284. The results of Comp. 1 (outputs 1.2 and 1.3) will have benefits for the population of the entire coastal zone of the country and flooding sites, climate information recording and monitoring system and the early warning system for Juan Lacaze (EWS), with a people-based approach, for better anticipation of extreme events and floods, and more effective management of climate risks, resulting in a reduction of the population's exposure to climate impacts.

285. Activity 2.2.4 of Comp. 2 contemplates the redevelopment of flood zones with recreational parks, adding value to new spaces of environmental and cultural interest and at the same time preventing the highly vulnerable population from settling in flood-prone areas in the future.

286. Activity 2.3.1 will promote investments with clear benefits in terms of improving the quality of life and increasing the resilience of the population by protecting homes and buildings from flooding through revolving funds that will enable the affected population of high and medium vulnerability to have the economic resources to improve their homes to withstand flooding. In this unique activity to be carried out on private property, primary importance will be given to ensuring that preferential access is given to vulnerable groups, as indicated in the activity description, thus ensuring equitable distribution of the benefits provided by this mechanism.

287. Comp. 3 proposes to increase the technical capacities and awareness of decision makers, technicians, local population and the productive sectors, ensuring an increase in awareness and an exchange of knowledge on the impacts of climate change on the coast and the adaptation measures applicable in the project, and to promote advocacy and collective action mechanisms to promote the implementation of adaptation measures and their sustainability and replication by the local population in awareness-raising activities.

288. During the field visits and meetings held for the preparation of this proposal, it was possible to learn directly that the population, together with the educational institutions, is generally organized and attentive to the needs of improving their beaches in dialogue with local governments. In order to achieve the results of Component 3 throughout the project, we will work together with all interested parties, taking advantage of local knowledge and the road already traveled in search of improved knowledge management (Outcome 3.2).

The project will be open to the participation of all interested parties. At the beginning of the project and prior to any intervention, working meetings will be held with stakeholders in each of the six sites to design and validate the Dissemination Plans and Participatory Strategies that will be used throughout the project. ***Gender Analysis***

Gender Baseline **(for more information, please see Annex 3 – Gender Analysis)**

289. Education: According to data from the ECH 2019, in the departments where the project will intervene, women have on average more years of schooling than men, including tertiary education. Similarly, illiteracy rates are

also lower for women.

290. Female participation in the labor market: For the total of Uruguay in 2021[83] the activity rate was 61.8%, among the female population it was equal to 55%, while for males it was 69.1%; this gender gap is even more marked in the departments of Colonia, Rocha and San José where the lowest female activity rates are found (52.9%, 50.6% and 48.9% respectively). The rest of the departments present a female activity rate that is above the country's average, with Maldonado having the highest rate at 59.1%. In turn, the gender gap for this indicator is more significant among people without tertiary level for all departments equally. Regarding the employment rate, in 2021 in Uruguay it was 56%, while males were more employed than females (63.7% vs. 49.0%), a trend that is reflected in all coastal departments, with the exception of Colonia and San José where the gaps are larger, with a difference of more than 19 points. On the other hand, the female employment rate is higher than the male rate in the branches of Education, Social services and those related to human health and Domestic service in private households, employment sectors that are typically feminized. The same situation arises when looking at unemployment data by sex, which in Uruguay disadvantages women, who by 2021 represented 11.0% of unemployed people, against 7.9% of unemployed men, the total for the entire population was 9.3%. In the coastal departments these differences are replicated, with special attention to the case of San José and Colonia where the difference reaches between 6 and 7 points, to the detriment of women (11.0% and 13.5% female unemployment, respectively).
291. Female participation in the tourism activity: According to data from the ECH 2019[84], female employment in the tourism sector represents 44% of the total, especially in activities related to Lodging, Restaurants, Travel Agencies and Cultural Services, sectors whose female workforce exceeds 50%. On the other hand, the tourism sectors related to Transportation, Leisure Services and Miscellaneous Tourism Services employ mostly men (83% and 64%, respectively). In the case of the departments of Rocha, Canelones and Maldonado, more than 50% of the tourism jobs mentioned as the first activity are occupied by women. And in the case of Montevideo, 21,625 women were registered as working in tourism, making it the department with the most female jobs in Uruguay. When analyzing the data by age range, women up to 29 years of age have their first occupation in tourism in a higher percentage than in the economy (30% in tourism and 22% in the total economy), being employed mainly in restaurants (38%) and Travel Agencies (32%). In the case of men up to 30 years of age, their first occupation in tourism is 27% (and in the total economy, 24%).
292. Access to information technologies: Access to and use of ICTs is higher for women than for men in the departments where the project will intervene. This information, added to the education data, positions women better to design climate information management interventions (early warning systems).
293. Women's political participation: According to data collected by the Observatorio Territorio Uruguay, in 2020 only 2 of the 19 departments were governed by women: Montevideo and San José. Although the proportion is slightly higher when analyzing gender parity in municipal bodies, the data show that the local political scene is still dominated by men, at least in positions of higher authority. In the 125 municipalities of Uruguay, only 19 were led by women as of 2020. In the coastal departments, the case of Rocha stands out, where there are no women mayors, and conversely the case of Canelones, which is the coastal department that has more women mayors in relation to the rest. When looking in detail at the data on municipal authorities, the gender gap remains in favor of men, since no department exceeds the figure of 38% of female municipal authorities, highlighting once again the case of Rocha, and also that of Colonia, with the lowest participation of women in municipal positions (25.8% in both cases).
294. The NAP Ciudades and the NAP Costas integrate the gender perspective in the identification of key indicators and carry out a process of institutional strengthening in gender for management and decision-making. The participation of communities in risk identification is a priority in the Coastal NAP, from which Local Perception Workshops on Climate Change Risks were developed.
295. As expressed in the guidelines of Uruguay's Gender and Climate Change Strategy[85], which have been reflected in the NAP Costas, and in the country's 2nd NDC, climate change has **different impacts on people and on the territories where they live and carry out their activities**, with women being in a situation of greater vulnerability when their socioeconomic, cultural and political characteristics are analyzed. In addition to the general impact on housing, the alteration of coastal space is also relevant because it serves for recreational

[83] Data based on ECH 2021 from INE, Anuario Estadístico Nacional 2022.
[84] Data systematized in Itmark, S. & Larruina, K. (2021). Empleo turístico y empleo total en Uruguay a 2019, con incorporación de perspectiva de género (Serie Documentos de Trabajo; No. 06/21). Montevideo: Universidad de la República. Facultad de Ciencias Económicas y de Administración, Instituto de Estadística. https://www.colibri.udelar.edu.uy/jspui/handle/20.500.12008/1051

[85] "Estrategia de Género y Cambio Climático. Hacia un Plan de Acción 2020-2025." (SNRCC, Uruguay, 2019)

purposes and as a transit zone to essential services, including health, education and access to employment. At the same time, they possess specific knowledge that places them in a differential position when it comes to designing climate change adaptation measures, but which, due to the structures of decision-making spaces, are not incorporated and are not taken into account.

Gender benefits of the project (for more information, please see Annex 4 – Gender Action Plan)

296. This project, through its Gender Action Plan (attached to the Full Proposal), will not only seek to ensure that coastal adaptation measures respond to the specific needs of women in their territories, but also includes specific activities and actions to generate and strengthen capacities in both local institutions and the population, in order to have more and better tools to recognize and quantify those gender inequalities that need to be addressed as part of a comprehensive coastal adaptation policy. As part of the knowledge management activities, the Gender Action Plan includes that at least 3 case studies on lessons learned and good practices are on gender and generations, and that the 6 case studies (1 per prioritized site) prepared include a gender and social inclusion perspective. The Gender Action Plan also details that at least 1 video will be produced on the experiences of women targeted by the project's actions. Similarly, annual workshops will include special sessions to discuss and exchange information on gender and social inclusion during project implementation (Comp. 3).
297. The Action Plan also details how the operation of the project's governance scheme contemplates the participation of the person in charge of the supervision and implementation of the Plan, as well as the participation of the Departmental Gender Directorates in the Technical Committee.
298. As part of the project, a “Harassment Free Coast” Awareness Campaign is included through the GAP, based on the main concerns and interests of young and adult women in each of the coastal sites, as recorded and worked with the local population during the consultations carried out within the framework of the Costas NAP, as well as for the design of this Full Proposal.
299. As part of the activities of Comp. 1, the Gender Action Plan includes resources for coastal planning instruments to be updated to include specific chapters and sections with content on gender and generational perspective. At the local level, the expected result is that not only the departmental gender directorates will have better information to design their policies, but also that local and national institutions will have more elements to mainstream the gender and generational approach in their interventions on the coast. People-based early warning systems will have a specific consideration on the means of dissemination and communication channels that reach especially women and youth, based on the information available on single-parent households in the intervention areas, especially those headed by women. To this end, the Gender Action Plan proposes the preparation of a risk and vulnerability study with a special focus on gender and generational perspective in Juan Lacaze, the results of which may feed into the EWS. It also includes specific training for the technical teams in charge of the EWS on gender perspective, as well as the identification of specific communication channels to reach women and young people, as well as the elderly. Access to information, knowledge and technology is a key dimension in the capacity to respond to climate change[86].
300. The activities planned for Comp. 2 will not only result in improved infrastructure that is resilient to the effects of climate change but will also have specific benefits on the lives of women who circulate and work on the beaches, as well as on people with reduced mobility, and on how children make use of the public space. The consultation processes with the population[87] carried out within the framework of the NAP Costas compile the importance of the beach not only as a place for recreation but also for building community and social bonds. In particular, it is crucial for women that beaches are also a safe space, both for circulation and for the development of economic activities linked to beach tourism (street vending, seasonal tourist services, etc.). In this sense, the project proposes to strengthen the economic activity of women who work and live on the coast by promoting their participation in quality ecotourism training and capacity building provided by local and/or national institutions, guaranteeing specific resources to promote their participation. In turn, as part of Component 3 and through the Gender Action Plan, the project will finance the design of a program to strengthen women's employment in coastal areas (see Act.3.4.2).
301. Coastal infrastructure will take into account the importance of appropriate lighting that contributes to the safety of women where required – always observing the minimum environmental impact on the beach ecosystem and the protection of the nocturnal landscape -, the installation of signage with information on access to public

[86] In this regard, the document “Perspectiva de género en la adaptación costera al Cambio Climático. Plan Nacional de Adaptación Costera de Uruguay” (Marrero, L., n/d) cites that among the different vulnerabilities faced by single-parent households, the greater workload has repercussions on time poverty, which is more accentuated in those households headed by women. This has consequences not only on the economic but also on the physical autonomy of women, conditioning their capacity to respond to extreme events.

[87] “Recomendaciones de género en la adaptación costera. Talleres en sitios pilotos: La Paloma, Piriápolis, Atlántida, Playa del Cerro y Kiyú. Plan Nacional de Adaptación al cambio Climático en la Zona Costera” (Guchin, M., August 2022).

services (including local and national offices for the prevention of gender violence), and the installation of ramps and appropriate access for people with reduced mobility, children and pregnant women. This will be guaranteed through specific work requirements both in the bidding documents and in the contracts and will be jointly supervised by both the Social Safeguards and Gender Focus Specialist and the Departmental Gender Directorates, as appropriate at each site. In addition, the proposed financial mechanisms for housing and commercial buildings to cope with floods will be jointly supervised by both the Social Safeguards and Gender Specialist and the Departmental Gender Directorates, as appropriate at each site. (Activity 2.3) will be designed with specific considerations for women to access and implement these funds, contributing to both their resilience and their economic and financial autonomy (housing and businesses run by women). In this regard, the Gender Action Plan includes resources to carry out two survey and diagnostic studies related to specific adaptation measures that can be included as eligible for financing in the financial mechanism and to the barriers to women's access to credit, so that the financial mechanism will include them in its access criteria.

C. Describe or provide an analysis of the cost-effectiveness of the proposed project/programme.

302. A comprehensive strategy: This project stands out as a pioneering initiative in the country, marking the beginning of adaptation activities based on detailed studies, comprehensive modeling of future climate scenarios, and exhaustive analysis of socioeconomic and ecosystem vulnerabilities. What distinguishes this effort from previous experiences is its integration of multifaceted measures, strategically grouped for implementation in unique sites.

303. Through the project's support to establish evidence-based monitoring, evaluation and learning mechanisms, a wealth of knowledge will be generated. These valuable learnings will serve as a basis for future funds, facilitating the scaling up and replication of these experiences (see also Section II-J).

304. The project has included activities in its three components that reinforce each other in a positive way to ensure their sustainability and successful joint implementation. A number of selection criteria have been followed to ensure efficiency in terms of cost and effectiveness. Initially, the NAP Coasts team prioritized all activities by analyzing their ability to meet the established objectives of reducing coastal erosion and flooding risks, as well as the Paris Agreement's Global Adaptation Goal. Then, the required measures were analyzed in terms of their short- and long-term results, environmental impact, social impact, other associated benefits, and initial and maintenance budget, and compared with possible adaptation alternatives. The main document used for the evaluation of cost-effective alternatives was "Technologies for Adaptation to Climate Change. Coastal Erosion and Flooding (Linham, Nicholls, 2010)". Finally, the analysis of alternatives was also based on analyzing national and international experiences to select the most cost-effective ones.

305. Activities under Components 1 and 3 which include strengthening governance with planning tools and various technical studies, improving a climate information system, implementing a flood early warning system, capacity building and awareness campaigns for all stakeholders, entail low investment with demonstrated long-term effectiveness and sustainability of actions, as well as benefits that would be justified under all future scenarios (typically no-regrets options). These address key issues related to the effects of global changes already being experienced in the coastal zone. They also help to address bad practices and encourage changes in social and cultural behaviors that tend to neglect vulnerable groups such as women and different generations, and to understand the importance of emergency responses arising from climate impacts in the coastal zone that can prevent the loss of lives, homes, and workplaces. Without the implementation of these activities, the effectiveness and sustainability of Component 2 (investments) activities cannot be guaranteed.

306. The measures proposed in Component 2 were selected according to the needs of the ecosystems and the population of each site derived from the vulnerability analysis. These protection and accommodation measures (IPCC CZMS, 1990), which also have a proactive and preventive approach, are necessary to maintain the protection and recreation service provided by the dune system, beaches and other coastal ecosystems against erosion and coastal flooding. Without these measures, the valuable protection service provided by coastal ecosystems would be lost, and measures would have to be taken to relocate threatened populations or withdraw development in exposed areas, which has a high social cost and is undesirable. In addition, they avoid increased losses and economic costs compared to current reactive measures, such as evacuation, subsidies to people affected by flooding, and annual maintenance of coastal infrastructure. In addition, they are supported by successful studies and experiences carried out in different stretches of beach along the Uruguayan coast, as mentioned above.

307. On the other hand, if the benefit is calculated as not losing the value of the beaches provided by their protection

and recreation services, a study conducted by IH Cantabria (2019)[88] yields a total sum of US$53,863,946 for the beach stretches of the 6 pilot sites, 5 times more than the sum of the total investment of the project.

308. Finally, it is worth mentioning that the project seeks to leverage the human and technical resources of the public sector to carry out the activities, using and reinforcing existing structures, while ensuring the integration of climate change and adaptation solutions and strengthening their capacities to manage climate impacts in the coastal zone. This contributes to sustainability and ensures that climate change aspects are considered in future interventions and in the day-to-day actions of the local public administration.

309. In addition, complementarity is ensured with other projects and programs run by public institutions that promote community participation, training and communication strategies based on local practices, culture and social norms. This makes it possible to effectively promote behavioral change and ensure greater acceptance and commitment from the local community in the implementation of the proposed measures.

[88] Determines the loss of economic value of beaches due to coastal erosion according to the TR100 scenario horizon 2100 RCP8.5. It considers two services provided by beaches: flood protection value and recreational value. The flood protection value provided by beaches is determined by the amount of assets (residential, industrial, service, governmental) in the area immediately adjacent to the beach (up to 300 meters).

Specific expected outcomes	Project strategy	Details	Alternative for the same outcome	Details
2.1 measures related to the conservation and restoration of ecosystems	2.1.1 Recovery of the structure of the dune ridge with the installation of fences with plant material	Advantages: They are a "soft" technology that does not generate negative effects derived from their installation (e.g., Vega et al., 2007). They are easy to implement and low cost. Their effectiveness has been proven in different parts of Uruguay's coastal zone and it is a technology promoted both institutionally and by social organizations. As the plant material used in the construction of the fences degrades, it provides nutrients for the growth of the dune vegetation itself. They have the complementary function of limiting access to the beach, preventing passage through the areas to be preserved. Sand dunes also provide valuable coastal habitat for many highly specialized plants and animals. As such, sand dunes can be considered both ecologically and recreationally important. Rehabilitation and maintenance of natural and artificially created dunes can be accomplished at the community level. Cost: USD 11.5 per linear meter of plant material catchment fence installed (includes pruning, freight and execution with staffing). Positive national experience: Within Kiyú (San José) a series of low-cost measures were implemented that focused on EbA. The measures included sand capture fencing to increase beach height and volume (Carro et al., 2018). As a result of the fencing, beach profiles between 2013 and 2018 showed an increase in average height (≥1 m) and volume (≥46 %) of sand, a well-developed high water level berm, and more massive vegetation. Consequently, none of the six storm surges, including 2012-like surges that have occurred since implementation, have put coastal infrastructure at risk (Ocean and Coastal Management, Challenges to climate change adaptation in coastal small towns: Examples from Ghana, Uruguay, Finland, Denmark, and Alaska, 2021). Audiovisual record of other national institutional experiences: example of installation of sand fences in Jaureguiberry (https://www.youtube.com/watch?v=6EvjAgNk1v0&t=73s), example of ecosystem recovery in Punta del Diablo (https://www.youtube.com/watch?v=QemxLYFhCso).	Breakwater, free-standing docks	Disadvantages: Tough works with a large budget (due to initial investment and maintenance). Due to sea level rise and increased wave energy, maintenance costs increase. They also entail construction impact and are not easily removable. The use of hard works that imply important erosive effects in other points of the coast is ruled out: due to distortion of sediment input by coastal drift (Panario and Gutiérrez, 2006) or as in the case of free-standing seawalls where there is the possibility of the formation of tombolos and inlets that are too pronounced and can have a negative effect on the beach (Dean, 1997). Cost: A study by Linham et al. (2010) indicates that the unit cost of constructing 1 km of vertical seawall ranges from $0.4 to $27.5 million. Levee raising costs between USD 0.9 and 29.2 million per meter in height and kilometer in length (in 2009 US dollars) (Hillen et al., 2010). The breakwater costs USD 5,000 per linear meter. Negative national experience: Non-functional breakwaters in La Floresta where increased sand leakage is perceived. Non-functional breakwaters in Colonia del Sacramento Bay (Piedra-Cueva and Texeira, 2001). Impacts of breakwaters in Cufré Creek (Panario and Gutiérrez, 2006; Gutiérrez and Panario, 2019). Negative international experience: after large-scale monitoring on the east coast of Florida (USA), the seawall was removed due to excessive erosion problems (Dean, 1997).
			Coastal defense with geotextile geotubes	Disadvantages: More expensive technology. It does not contribute to ecosystem restoration but is exclusively a technology that seeks to protect the dune ridge behind and minimize the transport of sand from the dune ridge to the submerged beach (Steffenino, 2019). It requires entry of machinery to the beach area and significant movement of the substrate, affecting the coastal ecosystem. There is a risk of undermining the base of the geotubes due to the effect of waves (Soledispa, 2004). If the geotubes are exposed, the landscape is affected (Soledispa, 2004). Cost: USD 1000 per meter installed according to Szephegyi et al. (2019). Negative national experience: Arroyo Maldonado https://www.sudestada.com.uy/articleId__8656bae4-0389-4f39-9caa-d04f70e3aac4/10893/Detalle-de-Noticia
	2.1.2 Conservation and	Advantages: The presence of psammophilous vegetation is indispensable for the stabilization of the coastal dune cordon and its natural recomposition after wave events (Vega et al., 2007). Planting is done to ensure the presence of	Natural dispersion of vegetation	Disadvantage: Vegetation may take too long to cover the surface of the littoral dune ridge and the proto-dune formed may be lost. There may be no vegetation in surrounding

Specific expected outcomes	Project strategy	Details	Alternative for the same outcome	Details
	regeneration of vegetation with chemical-free removal of exotics and planting of native vegetation	vegetation in areas where it cannot disperse naturally from nearby areas or at a faster rate than would occur naturally. The vegetation provides food and shelter for native fauna. The activity also removes exotic species, thus eliminating a source of beach degradation that accelerates erosion, using non-chemical or mechanical methods that are more environmentally friendly. Cost: USD 3080 (includes the purchase of 1000 specimens of herbaceous vegetation and planting with hired personnel). Positive national experience: Audiovisual record of national institutional experience: Punta del Diablo, Rocha: https://www.youtube.com/watch?v=QemxLYFhCso. The experience involved the planting of 2,000 herbaceous vegetation specimens on 2 stretches of the beach resort's coast: https://www.gub.uy/ministerio-ambiente/sites/ministerio-ambiente/files/documentos/noticias/MVOTMA_Punta_del_Diablo_taller_Nap_Costas_final.pdf	without intervention	areas that can disperse to the area of interest. If there is exotic vegetation with invasive behavior in zones close to the area of interest, it will disperse faster than native vegetation. No monetary cost in investment
			Exotic vegetation planting	Disadvantage: Unlike exotic vegetation with invasive behavior, native psammophilous vegetation achieves a cover that allows maintaining the natural dynamics of the sand, preserving the mobility of the dunes (Panario and Gutiérrez, 2005).
			Control of exotics with herbicides	Disadvantage: Not considered environmentally acceptable. Banned in the department of Montevideo (Resolution of the Intendancy of Montevideo 2823/20 of 10.08.2020 regulating Decree 37.073 of the Departmental Board of Montevideo of May 2019). Negative evidence: the study "Evolution of glyphosate in soil and plants in the devesa of L'Albufera de Valencia after its application for the control of Carpobrotus edulis" (Hueso, 2002) does not recommend the use of the herbicide glyphosate for the control of the species Carpobrotus edulis in dunes due to the discovery of several negative results in practice.
	2.1.3 Management of pedestrian and vehicular access to the beach with the installation of elevated wooden walkways and parking areas and/or fencing, including signage.	Advantages: pedestrian access with elevated walkways guarantees accessibility to the beach for the entire population while protecting the coastal dunes. They will concentrate the passage of users in specific areas, avoiding the coastal dune cord being affected by trampling, which helps to guarantee the effectiveness of the ecosystem recovery actions implemented. They will be designed with environmentally appropriate criteria and maintaining a height that does not affect the circulation of sediments. The design will also follow universal accessibility criteria. The fencing restricts the descent of vehicles to the beach and prevents damage to the beach. Complementing the measure with the presence of parking areas where there is available land, in addition to reducing the risks to the population derived from disorderly traffic, it organizes beach access. Although it involves a relatively small investment, this initiative has a significant impact by valuing both the built structures and the coastal ecosystem. This strategy is essential to ensure the long-term sustainability of the actions taken, promoting public awareness, and encouraging responsible practices to preserve our natural environment. Cost USD 13,000 for 20-meter-long elevated wooden walkway access + USD 2,900 parking area + USD 10 per fence post + USD 2,000 signage package. Positive national experience: Canelones: https://www.imcanelones.gub.uy/es/noticias/canelones-inauguro-bajada-accesible-en-marindia	Demarcation of the access area without construction of elevated platforms	Disadvantages: Although it concentrates the impact in a single point, it does not resolve the impact of trampling on the dunes (loss of vegetation and compaction of the substrate), generating sand leakage routes from the beach to the land. Lower initial and maintenance costs.
			Only restrict access with fencing	Disadvantages: Restricting beach access without presenting alternatives is a less socially and environmentally friendly measure than the proposed measure of discouraging irregular access by installing catch fences, elevated walkways and parking areas. Cost of fencing only

Specific expected outcomes	Project strategy	Details	Alternative for the same outcome	Details
	2.1.4 Coastal wetland restoration/ conservation	Advantages: Measure without remorse. Wetlands are highly productive ecosystems, harboring a high biodiversity while providing an important flood buffering function. They are therefore relevant for biodiversity conservation. Cost: USD 1500/ha – adapted from Rojas (2017) (involves planting of native vegetation specimens and removal of exotic vegetation). Positive national experience: project supported by the Small Grants Program (GEF), which proposed the recovery, management and monitoring of the water quality of a coastal wetland that receives and purifies polluted surface and phreatic waters from a significant portion of the area where it intervened. Solymar (Canelones): https://www.youtube.com/watch?v=sEnEEC4BHH8	Not intervening in coastal wetlands.	Disadvantage: All ecosystem benefits provided by these sites would be lost. No monetary cost in investment
Output 2.2. Improved and sustainable drainage and stormwater systems	2.2.1 Executive project and rerouting/redirection of stormwater discharges on the beach with SUDS	Advantages: Each site presents unique characteristics and needs in terms of Sustainable Drainage Systems management, which implies the need for an executive project for each site. This will guarantee an exhaustive study of alternatives and environmental impacts. In some sites it is a matter of updating existing pre-projects in the area. The sustainable adaptation of stormwater discharges onto the beach employs green engineering techniques that allow the creation of an energy dissipating discharge structure that integrates harmoniously with the natural environment, either through vegetation or rockfill. This micro-drainage work has a significant environmental impact by reducing erosion pressure on the beach, which in turn advances the recovery of the coastal ecosystem and contributes to its long-term preservation. Costs: vary according to the size of the work, ranging from USD2,000 to USD30,000 for the adequacy of minor discharges and USD150,000 for redirection. Positive national experience: Playa Mansa Punta del Este, Maldonado.	Conventional macrodrainage works	Disadvantages: These works can result in more polluting discharges due to the lack of a natural filtering system, which compromises water quality and the health of marine and coastal ecosystems. In addition, they do not reduce flow rates or runoff velocity along the drainage, which means that the total volume of water must be managed at the final discharge point, with no possibility of groundwater replenishment. Cost: They are generally more expensive both in their initial construction and in their long-term maintenance as they do not integrate natural principles.
	2.2.2 Bioretention 2.2.3 Accumulation ditches, channel adaptations and stilling ponds	Advantages: Improvements in the drainage system should have an integral approach to the system where the stages of runoff capture in the areas of contribution, buffering-conduction and discharge can be differentiated. Therefore, upstream measures not only contribute to the prevention of flooding in the neighborhood, but also help to strengthen coastal areas by reducing the discharge flow on the beach. The installation of sustainable drainage devices has the purpose of reducing the instantaneous flows over the networks. Some of these can contribute to irrigation, allow maintaining a volume of water below the volume required for buffering for a specific use or activity. Cost: USD130,000 lamination lagoon, USD335,000 bioretention. Positive national experience: Buffer ponds in Montevideo https://montevideo.gub.uy/noticias/medio-ambiente-y-sostenibilidad/asi-funcionan-los-tanques-de-amortiguacion-de-lluvias-en-montevideo	Not carrying out works	Disadvantage: Failure to improve the drainage and stormwater system means that the source of degradation of the beach system will not be eliminated or controlled, thus undermining the guarantee of success of the measures aimed at restoring the coastal ecosystem. No monetary cost in investment

Specific expected outcomes	Project strategy	Details	Alternative for the same outcome	Details
	2.2.3 Flood-prone parks	Advantages: Preventive measure that reduces the flow and speed of water runoff, attenuating the effects of flooding, while at the same time fulfilling a recreational function and promoting public use of flood-prone areas, avoiding the possibility of housing being built in areas at high risk of flooding. It not only improves the quality of life of the inhabitants, but also contributes to economic development by generating opportunities for tourism growth and strengthening the community, making these parks a significant investment in the sustainable future of the region. Cost: USD250,000 (300x20 meter park) Positive national experience: in Fray Bentos https://www.caf.com/es/actualidad/noticias/2023/08/caf-inauguro-el-parque-la-esmeralda-en-fray-bentos-uruguay-para-mitigar-el-efecto-de-las-inundaciones/	Housing relocation	Disadvantage: Reactive measure that is too costly, both in budgetary and social terms, and very difficult to implement because it is a consolidated urbanization.
Output 2.3. Homes and buildings protected against floods	2.3.1 Implementation of a financial mechanism to promote retrofitting in housing and other buildings in flood risk areas	Advantages: The project takes the implementation mechanisms, experience and lessons learned from the implementation of the revolving fund for adaptation of housing and commercial buildings in the Intendancy of Paysandú that is currently being implemented under the Binational Project financed by the Adaptation Fund. It is a proactive measure that involves small investments in adaptation to flooding of homes and businesses that avoid large monetary losses and discomfort in the quality of life of the population. At this stage of formulation, the list of interventions is not closed, and the activity is classified as USP. Although this generates certain uncertainties, the procedure for analyzing housing conditions and flood impact and the best suggested measures will be informed and accompanied by specialists who must comply with the requirements of the Manual, which includes the analysis of alternatives to ensure that the most cost-effective one is selected. This will ensure that each dwelling/building gets the best adaptation measures needed and prioritized locally.	Flood insurance system	Disadvantage: The most vulnerable population, who are usually low-income, are not eligible as clients of insurance companies. In addition, this approach is considered a reactive measure, since the losses and damages have already occurred, resulting in significant costs both on a budgetary and psychological level for the affected people.
2.4 Playa Penino sustainable ecotourism project	2.4.1 Design and development of a sustainable tourism program in the Penino neighborhood	Advantages: By having a comprehensive approach to sustainability, enhancement of the area and conservation of the wetland ecosystem, the diversity of flora and fauna is preserved, while at the same time, the development of the area generates economic income for the local population, improving their livelihoods, environmental education and ecotourism with national and international projection. It is of great benefit to resident families because it allows them to make productive use of the reserve, diversifying their livelihoods and at the same time promoting conservation and increasing local knowledge, strengthening local identity and a sense of belonging as the communities become actively involved in the preservation of their environment. Positive national experiences: http://www.viajeauruguay.com/ecoturismo/actividades-de-ecoturismo-en-uruguay-1.php	Conventional tourism	Disadvantages: By focusing on economic growth and short-term income generation, it does not prioritize ecosystem conservation or raise awareness of the importance of environmental conservation among both tourists and local communities. Nor does it integrate the local community by encouraging the hiring of local services, purchase of regional products and participation in cultural activities, or with active participation in tourism planning and management.

D. Describe how the project/programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national adaptation plan (NAP), national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

310. This project contributes to the implementation of the country's climate change policies and strategies. The **National Climate Change Policy (*Política Nacional de Cambio Climático*, PNCC)**, created in 2016, is a strategic document with measures up to the 2050 horizon that was conceived as the country's short-, medium- and long-term action guidelines for adaptation and mitigation of the challenges posed by climate change. The strategies and lines of action of the PNCC, the National Policy for Integrated Risk Management (PNGIR) and the preparation of the **National Adaptation Plan for Coastal Areas (*Plan Nacional de Adaptación de las Zonas Costeras*, NAP-COSTAS) –** which provides the framework for the preparation of this proposal – are examples of the political and inter-institutional priority given to the progress of climate action and the Implementation in Uruguay of Sustainable Development Goal number 13 of the United Nations.

311. The NCCP was the framework for the preparation of the **First Nationally Determined Contribution (NDC) in the** context of the Paris Agreement. In December 2022, the government of Uruguay submitted its **Second Nationally Determined Contribution (NDC2)** to the United Nations Framework Convention on Climate Change (UNFCCC). In the First NDC, Uruguay had set the following objectives, which were reflected in the COSTAS NAP: 1) Incorporate an adaptation perspective in the development and implementation of the coastal zone policy framework; 2) Strengthen capacities at the national, departmental and municipal levels related to climate risk management and adaptation in coastal ecosystems through the training of human resources and the financing of specific actions, as appropriate in terms of budgetary competencies at the respective levels of government; 3) Promote the preservation of coastal natural spaces and processes threatened by climate change and variability.

312. This project contributes to the implementation of the following **adaptation measures recommended by the NAP COSTAS:**

Removal of hard and/or soft coastal structures to restore the system and move towards natural functioning (Comp. 2).	Develop recommendations for highly vulnerable areas to avoid future hard infrastructure interventions without prior studies incorporating climate change scenarios (Comp. 1).
Introduce into the design of new coastal infrastructure the effect of climate change on the lifetime of the project (Comp. 2).	Restoration and conservation of coastal psammophilous forests associated with dune and wetland systems in the coastal zone (Comp. 2).
Incorporation of nature-based solutions (Comp. 2).	Incorporation of Sustainable Urban Drainage Systems (SuDS) (Comp. 2).
Capacity building and awareness raising (Comp. 3).	Identification, assessment, and monitoring of impacts caused by extreme hydroclimatic events (Comp. 1).
Improving climate change impact monitoring systems (Comp. 1).	Early warning and response systems (Comp. 1).
	Improvement of regional and local plans (Comp. 1).

313. The project will contribute to several of the **adaptation measures proposed by the NDC2.** Indirectly, it contributes to measures No.1, 2, 3, 7, 10, 11 and 32, and directly, it contributes to the following:

- No. 14. Improvement of processes for recording and evaluating the impacts of adverse weather-related events in order to quantify and estimate losses and damages in the tourism sector, improving databases and sources of information.
- No. 21 to 26. To deepen the adequate incorporation of adaptation to climate change and variability in land use planning instruments, urban planning and management, urban landscape, building regulations under a climate risk framework and incorporating the ecosystem-based adaptation approach.
- No. 27. By 2030, a public-private financing instrument will be implemented to improve climate resilience in new and/or existing buildings and urban infrastructure, including an ecosystem-based adaptation approach.
- No. 35. By 2030, Law 19.772 referring to the National Guideline for Territorial Planning and Sustainable Development of the Coastal Space of the Atlantic Ocean and River Plate (*Directriz Nacional de Ordenamiento Territorial y Desarrollo Sostenible del Espacio Costero del Océano Atlántico y del Río de la Plata*) will have been regulated.
- No. 38. Promote the conservation and reduction of the vulnerability of the coastal zone threatened by climate change and variability through ecosystem-based adaptation measures.
- No. 40. Implement a system for monitoring the coastal dynamics of the River Plate and the Atlantic Ocean.

E. Describe how the project/programme meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund.

314. The accredited entity and the executing entities will ensure compliance with all laws, policies and regulations of the Government of Uruguay. The project will comply with all applicable national regulations regarding environmental management, labor relations, health and safety, public health, and protection of the coast and bodies of water. It will comply with all relevant government policies and adhere to all building and construction standards. It will also comply with CAF safeguards and the Adaptation Fund's environmental and social and gender policies. The Environmental and Social Management Plan and the Gender Action Plan are presented in the Annex.

315. To ensure compliance with regulations and technical standards for dune restoration activities and other ecosystem interventions, the project will be supervised by the Department of Coastal and Marine Management (DGCM) of DINABISE. The Environmental Directorates (or designation as appropriate) of the departmental governments will also monitor compliance in the areas in which they are involved. For drainage issues, supervision will be provided by DINAGUA and the Directorates of Works of the municipalities. In any case, the project, through the Management Unit (PMU) and the Project Technical Committee (more details in section III.A of Implementation Arrangements), will ensure that all project activities comply with regulations and follow the appropriate steps for authorization of works or any necessary permits.

316. Project design has been carried out in collaboration with environmental authorities, as well as with local governments and academia, and will continue at all stages of the project to ensure that all subprojects and unidentified subproject measures (USPs) comply with relevant laws and technical standards. During project formulation, virtual and face-to-face consultations have been conducted with specialized technical staff and available technical studies have been analyzed to ensure high quality project design.

National laws that must be complied with in all types of project activities:

<table>
<tr>
<td rowspan="3">Environmental and climate change laws:
- General Environmental Protection Law (No. 17,283, December 28, 2000): Establishes the principles of environmental policy and environmental management instruments (EIA, SNAP, among others). Its Regulatory Decree (No. 222/019) approves the National Environmental Plan for Sustainable Development.
- National Climate Change Policy for 2050 (November 3, 2017).
- Environmental Impact Assessment Law No. 16466.
- Law for the Creation and Management of the National System of Natural Protected Areas (No. 17,234 of February 22, 2000), and its Regulatory Decree (No. 52 of 2005).
- National Water Policy Law (No. 18.610, October 2, 2009).
- Land Management and Sustainable Development Law (No. 18,308 of June 18, 2008) and its Regulatory Decrees (No. 523/009, No. 221/2009).
- National Guidelines for the Territorial Planning and Sustainable Development of the Coastal Space of the Atlantic Ocean and the Río de la Plata (Law No. 19,772 of July 17, 2019).
- Water Code (Decree-Law 14.859 of December 15, 1978).</td>
<td>Laws and strategies with an impact on women's rights:
- Law 19.555 on the equal participation of both sexes in the integration of national, departmental and leadership elective bodies of political parties (2017).
- Law 19.353 “National Integrated Care System” (2015).
- Law 18.651 on the comprehensive protection of persons with disabilities (2010).
- Law 19.580 Violence against women based on gender (2018).
- National Strategy for Gender Equality 2030 (2018).
- National Strategy on Gender and Climate Change (2019)
- Gender and Climate Change Action Plan 2020-2025 (2021)
-</td>
</tr>
<tr>
<td>Law approving the Regional Agreement on Access to Information, Public Participation and Access to Justice in Environmental Matters in Latin America and the Caribbean (Escazú Agreement) (Law No. 19,773 of July 17, 2019).</td>
</tr>
<tr>
<td>State Contracting and Procurement Law (Law No. 18.446)</td>
</tr>
<tr>
<td>Labor rights laws:
- In Uruguay there are twenty laws regulating labor law, the main ones being: Sickness Insurance, Labor Credit Guarantee Fund, Labor Promotion for Persons with Disabilities, Unemployment Insurance, Supplementary Annual Wage or Bonus, Leave Regime, Aliquots or incidences in dismissal, Wages, Occupational Accidents and Occupational Diseases, Maternity, Overtime, Weekly Rest, Vacation Wage, among others.
- Employment Promotion Law No. 19,973, Decree No. 308/021.</td>
<td>Worker health and safety laws:
- Law No. 5.032 of 07/21/914 establishes the obligation of employers to take safety measures to prevent accidents at work and determines their civil liability in case of accidents.
- Approval of the International Conventions on Safety, Hygiene and Health at Work, N° 148, N° 155 and 161 of the ILO, Law Nº 15.965 of June 28, 1988.
- Ratification of the International Labor Organization (ILO) Convention No. 155 of 1981 on prevention of and protection against risks arising from occupational activities (Decree No. 291/007 of 08/13/007).</td>
</tr>
</table>

Laws or regulations related to children:

- Childhood and Adolescence Code, approved by Law No. 17.823
- Child labor (under the age of fifteen) is prohibited in Uruguay; the Instituto de Niño y Adolescente (INAU) grants exceptional work permits for adolescents (over the age of fifteen).
- Committee for the Eradication of Child Labor (CETI).
- Latin America and the Caribbean Regional Initiative against Child Labor.

National regulations and technical standards by intervention type

Comp.	Intervention type	Applicable regulations
1	Strengthening, development of regulations, participatory processes	National Guidelines for Spatial Planning and Sustainable Development of the Coastal Space of the Atlantic Ocean and the Río de la Plata (Law No. 19,772 of July 17, 2019) -- Water Code (Decree-Law 14,859 of December 15, 1978) -- Law on Spatial Planning and Sustainable Development (Law No. 18,308). Guidelines for the approval process of the Strategic Environmental Assessment of Land Management and Sustainable Development Instruments.
	Installation and operation of monitoring and EWS systems	Water Code (Decree-Law 14,859 of December 15, 1978) -- Occupational Safety and Health Law (Law No. 19,196) -- National Policy for Integrated Risk Management of Emergencies and Disasters in Uruguay (2020).
2	Restoration and conservation of coastal ecosystems	Environmental Impact Assessment Law (No. 16,466 of January 19, 1994) and its Regulatory Decree (No. 349/005) -- Water Code (Decree-Law 14,859 of December 15, 1978) -- Article 452 of Law No. 16.736 of January 5, 1996 (in the wording given by Article 171 of Law No. 19,535 of 2017) regulates the entry of vehicles to the coastal defense strip -- Building Code (Decree No. 619/988) -- Occupational Safety and Health Law (Law No. 19,196). UNIT 200:2021 Accessibility for people to the physical environment – General criteria and requirements for an accessible built environment – Fact Sheet No. 6. Recovery and conservation of the coastal dune ecosystem – Guidelines for strengthening biodiversity conservation criteria in the Environmental Impact Assessment (EIA) process – Guidance on the interpretation of environmental information for the development of Ecosystem-based Adaptation measures in urban environments – Aggregate extraction in the coastal strip: Law No. 15.903 of November 10, 1987: Article 193; Environment Law: Law No. 16,466 of January 19, 1994; Investment Promotion Law: Law No. 16,906 of January 7, 1998; Land Management Law: Law No. 18,308 of June 18, 2008; Large Scale Mining Law: Law No. 19,126 of September 11, 2013. Mining Police and Safety Regulations: Decree No. 1230/946 of September 30, 1946 -- Underwater aggregate extraction permits: Decree No. 502/987 of September 2, 1987; General rules on plans and sketches: Service Order No. 1/972.
	Improvement of drainage systems	Building Code (Decree No. 619/988) -- Environmental Impact Assessment Law (No. 16,466 of January 19, 1994) and its Regulatory Decree (No. 349/005) -- Water Code (Decree-Law 14,859 of December 15, 1978) -- Occupational Safety and Health Law (Law No. 19,196). Urban Stormwater Systems Design Manual, Ministry of Housing, Spatial Planning and the Environment.
	Protection of homes and buildings at risk of flooding	Building Code (Decree No. 619/988) -- Social Interest Housing Law (Law No. 18.795) -- Occupational Safety and Health Law (Law No. 19.196)
3	Training, education, sensitization	Law approving the Regional Agreement on Access to Information, Public Participation and Access to Justice in Environmental Matters in Latin America and the Caribbean (Escazú Agreement) (Law No. 19,773 of July 17, 2019) -- National Gender and Climate Change Strategy (2019).

F. Describe if there is duplication of project/programme with other funding sources, if any.

317. The Uruguayan coastal zone is a high priority for the country, and several studies are being developed and the government is planning various investments. Therefore, the development of this proposal has taken care to carefully identify existing or planned initiatives, always coordinating with the Ministry of Environment and CAF, and addressing the issue throughout bilateral meetings with the various stakeholders (see section H).

318. The information base used for this proposal are the products made in the framework of the **National Coastal Adaptation Plan**, a process led by the ME whose studies included the project supported by AECID-CTCN "Development of technological tools to assess the impacts, vulnerability and adaptation to climate change in the coastal zone of Uruguay". After the resulting assessment of the most exposed and vulnerable sites to climate change, the Ministry of Environment is now **ordering the funding requests** seeking synergies among all the identified projects.

319. This project capitalizes on the experience of formulating and implementing the **binational project "Adaptation to climate change in cities and vulnerable coastal ecosystems of the Uruguay River"** financed by the

Adaptation Fund. The Ministry of Environment teams leading the formulation of this proposal are the same that formulated and currently supervise the implementation of the project. In addition, the same Executing Entity, CND, is proposed for the implementation of this project. CND has been participating in the consultation process and has shared its lessons learned. An example has been the analysis of the progress made to date by the revolving fund in Paysandú, thanks to which the current project incorporates measures such as the door-to-door campaign, the increase in the credit amount, and the extension of coverage to all areas in the departments where there is a risk of coastal flooding, to reduce the risk of non-adoption.

320. The articulation with DINAVI of the **Ministry of Housing and Land Management** is also an example of synergy, since the project will use the existing mechanisms of this Directorate (Urban Rehabilitation Program), which will technically manage the revolving fund for housing protection.

321. The Ministry of the Environment, intendancies, municipalities and social organizations have worked on **dune restoration and revegetation** at the sites, as well as the installation of geotubes and geotextiles as **coastal defense** measures. Some of the most recent precedents are listed below:

- In Playa del Cerro, the Intendancy of Montevideo has developed a series of preliminary assessments for restoration and conservation measures along the coast.
- Recently, the Intendancy of Canelones generated an "Ecological Restoration Plan" for the department, which provides for restoration measures in the coastal zone. The present project accompanies the proposals of the intendancy, providing resources for the work in one of the vulnerable areas of the coast.
- At the mouth of the Arroyo Solís Chico, the Intendancy of Canelones has established an agreement with the Faculty of Engineering of UdelaR – IMFIA. Its objective is the elaboration of an "Integrated Management Plan for the mouth of the Solís Chico and the beaches of La Floresta – Parque del Plata". The project team has had access to the preliminary results of the study[89]. Based on its conclusions, it can be affirmed that, since this study focuses on the sedimentary dynamics of the stream, the measures proposed by this project to improve drainage in the La Floresta sector do not depend on them. These measures will be considered complementary and not contradictory and "*no regrets"*, as confirmed during interviews conducted during the formulation of the project with the intendancy and the IMFIA itself. This study has also allowed to discard other medium-sized works that were initially identified as a possibility in the Parque del Plata banks.
- At Los Botes and Anaconda beaches, in La Paloma, the municipality has implemented actions to reduce flooding. This measure of sand desiccation has been implemented in a palliative way. The present project proposes to address the problem from its forcing and strengthening the system to avoid permanent flooding. Also in La Paloma, a detailed assessment[90] was conducted which included the study of baseline and shoreline dynamics for La Aguada beach. To this end, the baseline was evaluated, the historical evolution of the shoreline was quantified using aerial and satellite photos, the average and extreme regime of maritime agents (waves and sea level) was determined, the dynamics of sediment transport were characterized, and the evolution of the shoreline was modeled at different time scales to understand the historical dynamics of the shoreline of each site and to evaluate the response of the system to the effects of climate change and to the alternatives that would be proposed. Based on previous studies and analyses, a feasibility study was conducted on the intervention alternatives to mitigate the unacceptable threats of coastal erosion and flooding, including the quantification of the expected evolution of the beach for each measure considered.
- In Maldonado, this year the intendancy carried out a removal of structures in Playa Grande. It was an old abandoned and at high risk of collapse, which also modified the coastal structure. The Environmental Directorate must recover the dune area and ensure that all current environmental regulations are complied with, so this project will work on this recovering ecosystem. They also plan to demolish a structure on the sand at Playa Hermosa.
- In Juan Lacaze, the municipality began landscaping and leveling the land around the Blanco stream to promote public use and, together with the Intendancy of Colonia, a pedestrian bridge will be installed over the stream to enable access to other beaches from that area.

322. As for projects dealing with the **improvement of drainage and rainwater systems**, the following are included:

- The Intendancy of Montevideo has implemented sustainable drainage measures including, since 2018, the installation of rain gardens in different neighborhoods of the city. This is a measure that the intendancy has continued to implement, which is indicative of its positive results. This background allows taking lessons

[89] "ASESORAMIENTO TÉCNICO PARA LA GESTIÓN INTEGRADA DE LA DESEMBOCADURA DEL ARROYO SOLÍS CHICO – PRODUCTO 1 (BORRADOR)". Agreement between the Intendancy of Canelones and the Faculty of Engineering, Universidad de la República. Draft report dated 31 December 2023.
[90] "IMPLEMENTACIÓN DE MEDIDAS DE ADAPTACIÓN EN LA ZONA COSTERA DE URUGUAY EN EL MARCO DEL NAP COSTAS CONSORCIO ISTEC INGENIERÍA" | ISTEC Ingeniería and Dica & Asociados" dated July 2023.

learned in the design, criteria for the choice of installation sites, possible conflicting aspects and costs involved in the implementation of these devices.

- In the department of San José, in the town of Ciudad del Plata, close to the pilot sites of this project, there are also drainage design experiences financed by the Office of Planning and Budget (OPP), although they are exclusively gray infrastructure.
- In the department of Rocha, in the town of Punta del Diablo, a diagnosis was made of the behavior of the micro-watersheds associated with the southern end of Playa Grande and El Rivero, a preliminary analysis of the erosive capacity of the discharge to the beach of these micro-watersheds and the development of proposals for corrective measures[91]. The proposals elaborated point to the design of a Sustainable Drainage System. Although the implementation of the proposed measures did not materialize, both the Ministry of the Environment and the Intendancy of Rocha have the capacity generated from this experience to replicate it in other sites.
- Likewise, in La Paloma, the Intendancy has developed the executive project for the implementation of macro drainage works in the main avenue Anaconda and in the Aguada[92]. It is planned to consider this project in order to complement the measures proposed in the lower basin, adapting it to sustainable drainage criteria and incorporating climate change scenarios; the incorporation of an additional lagoon will be evaluated, and the planned discharges will be adapted to guarantee a typology that prevents coastal erosion.
- In Juan Lacaze there is a culvert replacement project (widening the section) on Route No. 54, to be executed by the Intendancy of Colonia, financed by the World Bank, which will improve drainage conditions in the Cañada Blanco and modify the flooding conditions upstream of the existing culvert. Construction is expected to be completed in 2024, so the proposed measures include updating the risk map in the area with the situation after the work is completed.

323. In addition, in Playa del Cerro, Montevideo, the studies commissioned by the Ministry of the Environment in the framework of the NAP Costas have provided the detailed design of adaptation measures to be implemented there[93].

324. All these assessments have informed the decisions of the adaptation measures to be included in the Full Proposal.

325. The project will build on DINACC's experience with the **"Acción Climática Joven"** initiative, which is already working to build local networks for the involvement of the population and youth in particular.

326. For the development of the **pilot EWS for coastal flood risk** for Juan Lacaze, the project will seek to complement and deepen IMFIA's work in the development of a real-time operational forecasting system for different metoceanic conditions in the territorial waters of the Río de la Plata and its Maritime Front called **PronUy_RPFM[94].** Likewise, the conducted work and lessons learned with FEWS-Uy and the EWS for flood risk already in operation in the country will be used as a basis.

327. The project does not overlap with the following GEF-funded projects, either because they address very different issues, such as pollution or maritime transport, or because they do not overlap geographically (e.g., GEF No. 2095 in border areas between Argentina, Bolivia, Brazil, Paraguay, and Uruguay; or GEF No. 10550 on the border with Brazil, outside the project's area of influence): GEF No. 10035 (CAF): Land preparation for the implementation of the La Plata Basin Strategic Action Program; GEF No. 3519 (UNDP): Reduction and prevention of land-based pollution in the La Plata River/Seafront through the implementation of the FrePlata Strategic Action Program. GEF No. 2095 (UNEP): Sustainable management of the water resources of the La Plata Basin with respect to the effects of climate variability and change. GEF No.613 (UNDP): Environmental protection of the La Plata River and its waterfront: prevention and control of pollution and habitat. GEF No. 10550 (FAO): Binational and integrated management of water resources in the Laguna Merín Basin and coastal lagoons. In any case, the project will seek to learn from these projects in terms of ecosystem management, sustainable water resources management and public awareness.

G. If applicable, describe the learning and knowledge management component to

[91] Work carried out by the consulting firm ISTEC within the framework of the project " Fortalecer las capacidades de Uruguay para la adaptación al cambio climático en la zona costera" executed by the Ministry of Housing, Land Management and Environment (now Ministry of Environment) and financed by the Spanish Agency of International Cooperation for Development (AECID) through the EUROCLIMA Program.

[92] EXECUTIVE ENGINEERING PROJECT FOR ROAD AND PLUVIAL INFRASTRUCTURE OF THE "Barrio Parque" NEIGHBORHOOD. LA PALOMA- ROCHA-URUGUAY DEPARTMENT. FONADEP URU/16/002-02, with own resources of the Intendancy and the Nation. The total estimated cost of the project is USD 2,000,000. The Intendancy plans to execute USD 500,000 in 2023.

[93] "CONTRATACIÓN DE EMPRESA CONSULTORA PARA EL DISEÑO DE LAS MEDIDAS DE ADAPTACIÓN DEL PROYECTO PLAYA DEL CERRO – PLAYA KIYÚ" within the framework of the Uruguay-Euroclima+ Country Dialogue, to be carried out between November 2022 and September 2023.

[94] The forecast is freely available and can be consulted at the following link: https://www.fing.edu.uy/imfia/pronostico-marea/index.html.

capture and disseminate lessons learned.

328. As part of the activities of Component 1, the project will seek to support the strengthening of a system for recording and analyzing the effectiveness of adaptation measures, to develop metrics, capture and combine data from various sources of information, process and analyze them, allowing their visualization by different actors to understand the effect of adaptation measures and monitor the coastal ecosystem, the beach line and the variables in coastal dynamics, and record the results achieved in terms of reducing the vulnerability of ecosystems and the population to the impacts of coastal erosion and flooding.

329. The project also has a specific subcomponent aimed at identifying good practices and lessons learned, promoting knowledge dissemination and peer learning. Within this framework, case studies will be carried out based on the implementation experiences of the project's concrete adaptation measures, 3 of which will focus on gender experiences, and will seek to learn about the process, identifying implementation challenges and lessons learned derived from them. In addition, a Congress on coastal space management will be promoted, where it is expected to reach a greater dissemination and reach of actors, which will allow disseminating the coastal adaptation experiences generated by the project in the prioritized sites. Departments and municipalities with different degrees of knowledge and maturity in the design and implementation of measures to reduce the impacts of coastal erosion and flooding will be involved in the execution of the activities. Within this framework, during the previous participatory processes such as the preparation of the NAP Costas and the NAP Costas working group, the importance and value of peer learning and the sharing of implementation experiences among participants was emphasized. Thus, the project's design included exchanges between intendancies, so that technicians and technicians from the 6 sites can visit the works and adaptation measures being carried out in the other sites every year, exchange experiences and learn from each other.

330. The lessons learned from the project will in turn be used to inform the training and awareness-raising activities included in component 3. This component will promote various awareness-raising activities, training, workshops, and outings for neighbors to tour the coastal area and gain a practical understanding of the interventions and the value of the ecosystems and the ecosystem services that provide protection from climate impacts. In addition, artistic and cultural activities will be organized in the six prioritized sites, as well as the involvement of the local population in the implementation and monitoring of the effectiveness of the measures. The aim is to achieve local recognition and appreciation of the importance of protecting ecosystems and maintaining the adaptation measures in place, to disseminate good practices and to raise awareness among a broad target group, including the local community, political decision-makers, local and national government technicians, crews implementing adaptation measures, young people, and grassroots community groups. In addition, consultancies are planned to identify the best strategies for engagement and dissemination of information according to the types of audience/stakeholders to be involved in order to ensure effective outreach to the key stakeholders to be sensitized and involved in coastal climate action.

331. Finally, the project will have a monitoring and evaluation system that will allow monitoring the implementation and results of the measures executed by this project, as well as instances of evaluation of the achievements at mid-term and at the end of the project. This system will integrate data points from different sources and actors, including neighbors, mayors, external consultants and data provided by the monitoring of beach ecosystems that are systematically carried out at the local and national level.

332. It is expected that all the inputs generated in the different activities, monitoring, training, and evaluation instances will be compiled and disseminated through various knowledge products appropriate for each target audience. The project will ensure the use of all that is generated and the joint reflection to guarantee reflection processes and promote a learning culture that allows improving coastal climate action. To this end, through the 3.21. activity, it is planned to identify and prepare different communication products such as videos, fact sheets with key project information, infographics, podcasts, and to identify events where it is relevant to share experiences. It is also planned to hold annual reflection workshops with all stakeholders involved at national, departmental and local levels, including academia and grassroots civil society organizations, to reflect on the evidence and processes implemented, best practices, challenges and share the lessons learned from the project.

H. Describe the consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

333. The formulation of this project has been led by the Ministry of Environment – the National Designated Authority to the Adaptation Fund – and CAF, Development Bank of Latin America.

334. As background, it is important to highlight that, although the formulation of this proposal began in February

2023, Uruguay has been carrying out a highly participatory process on the coast, within the framework of the implementation of the National Adaptation Plan (NAP Costas), during the last 3 years. During this process, the Ministry of Environment has maintained constant communication with departmental governments and other stakeholders in the territory. Both the definitions of the components and contents of the NAP-Coasts and the creation of knowledge have been developed through inter-institutional coordination concentrated in the SNRCC with iterative mechanisms for consultation and adjustment. Particularly noteworthy is the work carried out for the elaboration of gender recommendations to be integrated into coastal adaptation measures in NAP pilot sites. Convened by the Gender Directorates of the intendencies and DINACC, with the support of Inmujeres/Mides territorial referents, the 5 workshops were developed during 2022. With the participation of 61 people (80% women), recommendations were obtained regarding infrastructure, mobility, nature-based solutions and capacity building with a gender perspective. These have been taken into consideration by this project.

335. Table 3 lists all the stakeholders who were interviewed during the proposal formulation process. The activities carried out during the two stages of formulation (Concept Note and Full Proposal) are described below.

Table 3. Stakeholders consulted during the proposal preparation stage.

Ministry of Environment (*Ministerio de Ambiente*)	• DINACC – National Directorate of Climate Change (*Dirección Nacional de Cambio Climático*) • Coastal and Marine Management Department (*Departamento de Gestión Costera y Marina*) • Sustainable Development Promotion Division (*División de Promoción del Desarrollo Sostenible*)	• DINAGUA – National Water Directorate (*Dirección Nacional de Aguas*) • DINABISE – National Directorate for Biodiversity and Coastal Space (*Dirección Nacional de Biodiversidad y Espacio Costero*) • DINACEA – National Directorate for Environmental Quality and Assessment (*Dirección Nacional de Calidad y Evaluación Ambiental*) • INUMET – Uruguayan Institute of Meteorology (*Instituto Uruguayo de Meteorología*)
Ministry of Defense (Ministerio de Defensa)	• SOHMA – Oceanography, Hydrography and Meteorology Service of the Navy (Servicio de Oceanografía, Hidrografía y Meteorología de la Armada)	
Ministry of Housing and Land Management (*Ministerio de Vivienda y Ordenamiento Territorial*)	• DINAVI – National Housing Directorate (*Dirección Nacional de Vivienda*)	
National government (Gobierno nacional)	• SINAE – National Emergency System (*Sistema Nacional de Emergencias*)	
Departmental governments	• Intendancy of Colonia • Intendancy of San José • Intendancy of Montevideo	• Intendancy of Canelones • Intendancy of Maldonado • Intendancy of Rocha
Municipal governments	• Municipality of La Paloma • Municipality of Juan Lacaze • Municipality of Parque del Plata	• Municipality of La Floresta • Municipality of Atlántida • Municipality of Montevideo
Academy	• IMFIA – Institute of Fluid Mechanics and Environmental Engineering (*Instituto de Mecánica de Fluidos e Ingeniería Ambiental*)	
Representatives of the local population	• San José: Tierra de Humedales Foundation • Montevideo: Residents; Centro Cultural Oeste; Organización Vecinxs por la Playa. • Rocha: *Acción Vecina de La Paloma*; *Ecoparque Costa Azul*; *Unión grupos de la costa*.	• Canelones: *Ecoparque Las Piedras*; *Comisión de Vecinos/as de Laguna del Cisne*; *Liga de Fomento La Floresta*; *Asociación de vecinos Las Toscas*. • Maldonado: *Organización Vecinos de Playa Verde* • Residents of the 6 intendancies
Executing entity	CND (Binational Project Executing Entity – Adaptation Fund)	Argentina-Uruguay Binational Project Coordinator

336. **Concept note preparation stage:** During this stage, consultations were carried out in five main instances

between **February and June 2023**: 1) Initial workshops with national and departmental governments; 2) Weekly meetings with government actors; 3) Origination mission with field visits, which included interviews with representatives of the local population and a workshop and validation with departmental governments and academia; 4) Additional virtual bilateral consultations with civil society, departmental and municipal governments; 5) A specific meeting with departmental gender focal points. A total of 95 people (59% women) were consulted during this first stage, including 27 from the national government (78% women), 49 from local governments (53% women) and 19 representatives of associations and local population (47% women).

337. With all these actors, it was possible to validate the threats and impacts of erosion and coastal flooding exacerbated by climate change, as well as the non-climatic issues found in each department. Institutional strengthening needs were identified, concluding that work on risk prevention, gender mainstreaming, management of environmental and social safeguards and monitoring the impacts of adaptation measures are essential. All the possibilities in terms of adaptation measures were also reviewed, always favoring an ecosystem-based adaptation approach. Some of the issues discussed with representatives of the local population provided a better understanding of the impacts of urbanization, dependence on tourism as a livelihood and source of local income, inadequate practices related to waste and sanitation, beach access and the effectiveness of beach restoration and drainage improvement measures carried out in the past. Thanks to these numerous joint analyses between the technical teams and the reality of the territory, the measures included in the concept note were defined.

338. **Full Proposal development stage:** discussions were deepened and extended to other stakeholders. Exchanges were generated with stakeholders from civil society organizations, NGOs, and the tourism sector on potential impacts, including the possible influence of beach access regulations.

339. The consultation period for the formulation of the Full Proposal took place **between September and November 2023**. Between October 9 and 18, a mission was carried out in Uruguay to continue with the consultation process and to visit the 6 prioritized sites. There, meetings and workshops were held with the local intendancies and municipalities and exchanges were generated with the local population. After the mission, numerous thematic meetings were held on various topics of interest with different institutions or governmental and non-governmental groups; for example, discussions were held on the monitoring and control system for maritime levels with the IMFIA, on the needs of the EWS with the SINAE, SOHMA and DINAGUA, and on the activities and projects that the Ministry of Tourism is executing or will execute considering the changes induced by climate change, among others.

340. The consultation process involved 121 people from the municipalities, ministries and civil society, of which 78 were women (64.4%).In turn, 97 people participated in the workshops with civil society, of which 59 were women (61%).In the breakdown by site and gender, participation was as follows: La Paloma, Rocha (18 participants, 71% women), Piriápolis, Maldonado (28 participants, 57% women), Parque del Plata, Canelones (10 participants, 60% women), Ciudad del Plata, San José (9 participants, 56% women), Playa del Cerro, Montevideo (16 participants, 63% women) and Juan Lacaze, Colonia(16 participants, 56% women).

341. The main points emerging from the stakeholder consultation process are: the population's request to guarantee citizen participation from the project conception stage. They wish to actively participate in all stages of the process and express their willingness to get involved and work together with the intendancies to ensure the correct execution and control of the activities. They also expressed the need to generate information on environmental issues and effective dissemination measures to raise public awareness of the importance of protecting natural resources and ecosystems. They also mentioned the importance of a synergic coordination system, where ministries, intendancies and municipalities work together to implement projects in the same area. The NAP Costas working group formed to work on the implementation and follow-up of the National Coastal Adaptation Plan fulfills this role of strengthening coordination between these levels. Finally, representatives of the local population made proposals for concrete activities to be included in the project, such as the development of ecotourism in Playa Penino or support for the economic autonomy of women in the project area. These proposals were incorporated into the proposal.

342. These instances contributed to the development of the Environmental and Social Management Plan that includes Guidelines for Dissemination and Participatory Strategy (reflected in Activity 3.2.1) aligned with the provisions of the Environmental and Social Policy of the Adaptation Fund. Consultations also continued with organizations and agencies with competence in gender issues in order to validate the activities and design the Gender Action Plan that orients the activities to the specific needs identified in this area. In all instances it was announced that the project would have these plans and a Complaints and Grievance Mechanism.

I. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

343. In formulating this proposal, careful consideration has been given to the non-duplication and complementarity of the project with other sources of funding, as described in section F. Special attention has been given to planned investments in the coastal zone, identifying activities that are complementary to the country's efforts and planning. In addition, it has been ensured that project activities can generate adaptation results independently. It is important to note that none of the proposed activities are dependent on additional investments from other sources or stakeholders. These activities are focused on specific groups and areas in order to ensure verification of adaptation results.

344. The following are the scenarios with and without project for each project component.

Component 1. Strengthen evidence-based coastal planning in the context of climate change

345. *Baseline*: Although the planning instruments developed in the country have been incorporating the climate change perspective, most of them have not included guidelines for the effective adoption of concrete adaptation measures. This occurs both in the case of national regulations (Coastal Space Guidelines), as well as at the departmental level (Local Land Management Plans). On the other hand, although the Ministry of Environment has made progress in the installation of cameras and other types of equipment for monitoring variables on the coast, there are still important limitations in the systems for monitoring and recording climate change impacts of the adaptation measures that are implemented (there is no capacity to make assessments and records on various impacts with or without climate change), and the existing systems (e.g. SINAE) are not able to incorporate climate risk in their analyses. Nor is there a robust record of the behavior of hydrometeorological variables covering the national territory. On the other hand, although the country has made some progress in the development of methodologies for the evaluation of losses and damages due to climate change, these have been for some specific sectors and not relevant for this project (e.g., transportation sector), have only been done at the national level and have not incorporated the gender perspective. Finally, there is currently no early warning system for coastal zones.

346. *AF funds*: The project will help accelerate the definition of criteria and standards necessary for the effective implementation of climate change adaptation aspects of planning instruments. It will collaborate in developing impact monitoring systems, methodologies and systems for recording losses and damages for the tourism sector in the coastal zone, and an early warning system for Juan Lacaze, one of the coastal localities most threatened by climate change in the country.

Component 2. Strengthened green and hybrid infrastructure to increase coastal resilience.

347. *Baseline*: There is a marked lack of funding to invest in measures to adapt the population, infrastructure and ecosystems to coastal erosion and flooding. In addition, in places such as Playa Penino, there is a very low appreciation of coastal space by a local population that faces limited development opportunities and sustains unsustainable practices and uses on the beach. Paradoxically, this site harbors exceptional potential for ecotourism.

348. *With AF funds*: The project will help improve drainage infrastructure, coastal ecosystems, and homes and buildings against flooding and coastal erosion and will contribute to the development of a sustainable ecotourism project, fostering new opportunities for vulnerable populations, with special emphasis on women. Regarding the protection of buildings against flooding, the list of eligible investments is not closed, and the measure is a USP, but it can be stated that the project will still meet its objectives (see description of measure 2.4.1).

Component 3. Stakeholders build capacity, understand climate risks and engage in climate action

349. *Baseline*: There is insufficient comprehensive understanding of climate change and its risks and of adaptation measures among most of the actors that have an impact on the coastal territory, from high-level politicians to beach dwellers. In addition, there are few instances of knowledge exchange. Local technicians face differences of criteria in the implementation of adaptation measures. The population does not actively participate in knowledge management, and the capacities for economic autonomy, especially of women and young people, are limited. There is also a lack of tools for active involvement in climate action.

350. *With AF funds*: Barriers will be overcome through awareness raising, training, identification of best practices and knowledge sharing. Actions will target high-level decision makers through specialized meetings. To address differences in the implementation of adaptation measures, intensive sensitization and training will be provided to local technicians, promoting good practices with emphasis on gender and generations. The project seeks the active participation of the population in coastal adaptation, with participatory dissemination activities and the strengthening of participatory bodies, especially for young people. The training of communicators and the active participation of the community are integral to the project. Advocacy and collective action will be encouraged for the sustainable implementation and replication of adaptation measures.

J. Describe how the sustainability of the project/programme outcomes has been taken

into account when designing the project/programme.

351. The project design incorporates several elements to ensure the continuity of the actions and benefits of the intervention once it is completed. Some of the key elements that will contribute to this purpose are:

- **Sensitization and capacity building of** the entire range of coastal stakeholders, from government and technical spheres to the local population and tourism operators. Good ownership will lead to behavioral changes and the possibility of continuing to implement similar actions when the project ends.
- **Working with government institutions:** The fact that the project is led and implemented by public institutions is a guarantee of ownership and sustainability in the long term.
- **Works maintenance commitment:** This has been agreed between the National Government and the municipal governments and will be embodied in signed agreements prior to the disbursement of funds. These agreements will regulate the responsibilities of each party and will guarantee long-term operation. This commitment ensures that the measures implemented will have institutional and financial backing over time, thus promoting the sustainable preservation of coastal ecosystems.
- **Participatory processes:** Highly relevant throughout the NAP Costas process, they have been deepened for the formulation of this proposal and will be maintained during project implementation. The participation of the various stakeholders in the design and implementation of activities deepens the appropriation and relationship of people with the coastal environment and adaptation measures. The Environmental and Social Management Plan prepared for this proposal establishes Guidelines for Dissemination and Participatory Strategy and stipulates that each department should develop and implement its own Participation Plan for this project (see Annex 6).
- **Gender and vulnerable group-sensitive actions:** In all activities, the inclusion of gender and vulnerable group-sensitive actions reflects a comprehensive commitment to social equity and community participation throughout implementation and beyond, consolidating the connection between interventions and local communities over time.
- **Strong evidence base for coastal restoration measures:** The morphology of local beaches is being carefully assessed and used to inform restoration measures and determine where sand reclamation will withstand future sea levels. Studies of beach adaptation alternatives currently being carried out by the University of the Republic, IMFIA, Faculty of Engineering, include the following assessments: characterization of maritime climate and rainfall discharges to beaches; analysis of historical shoreline evolution; estimation of current sediment balance; characterization of current erosion and flooding hazards; projection of shoreline evolution considering sea level rise; characterization of future erosion and flooding hazards; analysis of alternatives.
- **Comprehensiveness of measures:** The sustainability approach also lies in the combination of a comprehensive set of measures: a variety of measures will be carried out that complement each other, such as recovery of the dune structure, restoration with native species, management of beach access and use, readjustment of stormwater discharges on the beach, etc. The convergence of these interventions is key to ensure a solid and lasting investment result.
- **Evidence-based monitoring, evaluation and learning:** Through project support to establish evidence-based monitoring, evaluation and learning mechanisms, a wealth of knowledge will be generated. This valuable learning will serve as a basis for future funds, facilitating the scaling up and replication of these experiences. In addition, the promotion of participatory monitoring promotes long-term ownership.
- **Engagement of key ministries and government staff throughout implementation through a Steering Committee and Technical Committee:** The proposed implementation arrangements envisage the creation of a Steering Committee with officials with strategic decision-making competencies. In addition, the Technical Committee will involve key technical staff for review, technical oversight and to provide recommendations on planned activities and investments in the basin. This process is expected to strengthen ownership and commitment for long-term institutional sustainability.

352. The following table identifies the main considerations for the sustainability of project results.

Results delivered by the project	Sustainability
Output 1.1 Planning	Activity 1.1.1 has a lasting impact by contributing to the regulation of the National Coastal Space Directive (DNEC). This legal framework, linked to national and international commitments, establishes

Results delivered by the project	Sustainability
instruments with mainstreamed climate change	technical criteria for environmental management with a climate change focus, creating a solid basis for long-term planning. The generation of technical guidelines in activity 1.1.2 also provides concrete tools for the effective implementation of adaptation measures, promoting consistency and uniformity in Land Use Plans (PLOT) over time. The inclusion of specific sections on gender and generations in planning instruments ensures continued attention to these crucial aspects in the future.
Output 1.2 Improved systems for recording and monitoring climate change impacts	Activity 1.2.1, “Strengthening systems for recording and monitoring climate change impacts”, builds on the efficient integration of previous advances on the Uruguayan coast, such as the network of cameras and oligographs. By aligning with regional initiatives such as the NAP Costas and using proven technologies such as smart oligographs and remote monitoring with cell phones, the activity is rooted in existing regional planning. Investment in participatory monitoring training ensures the continued involvement of local people, and the inclusion of gender and generational approaches adds layers of sustainability. This activity is integrated into existing infrastructure and practices and will become operational within the regular activities of SINAE, SOHMA, DINAGUA and local governments. In Activity 1.2.2, "Development of a damage and loss assessment system for the tourism sector on the coast," sustainability lies in improving local capacity for accurate loss and investment assessment. By collaborating with the intendencies and strengthening their accounting capacities, a framework for long-term monitoring of climate change impacts on the tourism sector is established. The proposed methodology, adapted to the coastal context and with gender considerations, is integrated with the MIRA system, allowing for continuous monitoring and effective response to future climate events. Thus, this activity creates a solid basis for sustainable management of climate impacts in the tourism sector, beyond the duration of the project.
Output 1.3 Early Warning System for Coastal Floods Installed	Activity 1.3.1 bases its sustainability on the creation of a comprehensive EWS in Juan Lacaze. By addressing risk knowledge, impact-based monitoring and forecasting, dissemination, and communication, as well as preparedness and response, a comprehensive structure is established. Collaboration with key stakeholders, technical training and the development of protocols ensure the system's adaptability to change and its continued relevance. The inclusion of gender and generational approaches, along with the transfer of tools and local training, ensures an effective response to the community. Thus, this activity not only creates an early warning system, but also establishes the basis for its maintenance and improvement over time.
Output 2.1 Coastal ecosystems strengthened to respond to erosion and flooding impacts	Activity 2.1.1, by using sand catchment fences constructed of plant materials, not only promotes the reconstruction of the coastal dunes, but also contributes to the reduction of invasive species. Careful planning, including the interruption of pedestrian access during installation, and a preference for pruning outside of the summer season, demonstrate long-term consideration to minimize interference and maximize the effectiveness of the measure. Activity 2.1.2, by focusing on the planting of native species and the controlled removal of exotic vegetation, lays the foundation for the preservation of the coastal dune structure. The sensitivity to gender and vulnerable groups not only during implementation but also in the design of walkways and parking lots demonstrates careful planning to maintain the sustainability of the actions over time. Activity 2.1.3 seeks to minimize the impact of traffic in fragile areas by organizing circulation and managing access to the beach. The installation of elevated pedestrian accesses and the delimitation of parking lots with sustainability and safety criteria indicate a long-term vision to preserve the coastal environment. Activity 2.1.4, by addressing the recovery of coastal wetlands and revegetation with native species, establishes measures to conserve and restore these ecosystems over time.
Output 2.2. Improved and sustainable drainage and stormwater systems	In Activity 2.2.1, the redirection and adequacy of stormwater discharges not only seeks immediate solutions to erosion, but also establishes a solid framework for long-term sustainability. The commitment of the intendencies to ongoing maintenance reinforces the long-term effectiveness of these interventions, providing operational and financial assurance beyond the project. Activity 2.2.2, focused on bioretention, stands out for its holistic approach. The implementation of bioretention areas not only aims to reduce beach erosion, but also establishes sustainable practices by integrating native vegetation. This measure contributes to environmental sustainability while responding to the long-term needs of the community. Activity 2.2.3, which addresses accumulation ditches, channel adequacy and buffer ponds, is notable for its design and installation of sustainable drainage devices. By focusing on storm flow retention, it

Results delivered by the project	Sustainability
	not only addresses immediate flooding, but also establishes resilient infrastructure that lasts over time. Activity 2.2.4 emerges as a multifaceted strategy. Beyond reducing flood risk, the initiative provides recreational areas, thus promoting a sustainable use of natural resources and improving the quality of life of the local population in the long term.
Output 2.3 Flood-proof homes and buildings	The long-term viability of Activity 2.3.1 is based on its strategic adoption by DINAVI's Urban Rehabilitation Program, a proven mechanism within the Ministry of Housing and Land Management. DINAVI will technically manage the revolving fund to reinforce housing and other buildings. In developing this line, DINAVI will gain experience in promoting investments focused on flood risk adaptation. The assumption is that, if it works successfully, DINAVI will continue with it over time as is, or pass on information to existing lines to adopt this type of criteria and measures. A 12-year track record attests to DINAVI's ability to adapt, making them a reliable driver of sustained progress, regardless of changing political landscapes. This is one of the reasons why it can be asserted that, despite constituting a USP by not closing the list of eligible investments, the project will nonetheless meet its objectives, the project will consistently achieve its objectives. This flexibility not only reinforces the resilience of the project, but also ensures the effective protection of homes and buildings against flooding, thus consolidating its fundamental strength. Moreover, leaving the closure of the list to a later point in time after the completion of needs assessments of the population of the prioritized sites and the consultation of the ROP, provides greater assurance that the mechanism is responsive to the population and will then be maintained in the future.
Output 2.4 Strengthened hybrid infrastructure for sustainable ecotourism development	The ecotourism project at Playa Penino (Activity 2.4.1) seeks long-term sustainability by transforming the area into an outstanding site for ecotourism, especially bird watching. The integrated approach includes consideration of carrying capacity, ecosystem conservation, and income generation for local people. The creation of a sustainable ecotourism project not only seeks to boost the local economy and improve livelihoods, but also discourages unsustainable occupation of the area. It is hoped that these actions will not only generate economic benefits, but also promote environmental awareness, community participation and the inclusion of vulnerable groups, ensuring a long-term positive impact on the region.
3.1 Decision-makers, technicians sensitized and involved in coastal adaptation	This set of activities is geared towards long-term sustainability, focusing on communication, awareness-raising and training strategies. These actions not only respond to immediate challenges but are also designed to entrench positive change, strengthening resilience, and ensuring long-term benefits in coastal management and community well-being. The Communication Strategy seeks an inclusive approach, considering different audiences and optimizing materials. The "Harassment-Free Coast" campaign is integrated to improve public safety. Awareness-raising for high-level political decision-makers aims to raise awareness of the impacts of climate change, emphasizing the gender perspective. Awareness-raising and training for local technicians addresses differences in criteria and promotes sustainable practices.
3.2 Local population sensitized and involved in coastal adaptation	The actions proposed in the project focus on long-term sustainability through participatory and awareness-raising strategies. Activity 3.2.1 seeks to identify and strengthen local participation mechanisms, ensuring the representation and participation of women and youth. This ensures continued community engagement in coastal management. Activity 3.2.2 focuses on engaging local youth in climate action, building on their experience, and promoting innovative initiatives for adaptation. Activity 3.2.3 will train local communicators, ensuring effective dissemination of climate change information. Activity 3.2.4 engages the community through a variety of activities, from educational outings to communication products, encouraging behavioral change towards the protection of the coastal ecosystem. Activity 3.2.5 will sensitize SMEs to climate risks, promoting sustainable practices and economic diversification. These actions, by addressing different aspects and stakeholders, lay the foundation for resilient and sustainable coastal management.
3.3 Improved knowledge management	Facilitating the identification and dissemination of lessons learned, through case studies, reflection workshops and communication products (Activity 3.3.1), not only encourages continuous reflection during the project, but also establishes a solid knowledge base. In addition, Activity 3.3.2 Inter-council exchanges for knowledge management will strengthen cohesion among the counties, ensuring continuity of adaptation strategies and best practices. In addition, the Coastal Space Management Congress (Activity 3.3.3), by bringing together diverse stakeholders and promoting complementarity with existing initiatives, facilitates the dissemination and consolidation of knowledge, contributing to post-project sustainability by empowering society and strengthening collaborative networks.

Results delivered by the project	Sustainability
3.4 Capacities of the population strengthened for economic autonomy by revaluing the coastal area	Activity 3.4.1 Articulation with training spaces to incorporate local tourism issues is a pillar of sustainability by promoting ecotourism training programs that not only enrich the community, but also strengthen the relationship with local educational institutions. This collaboration not only promotes sustainable practices and ecosystem-based adaptation, but also addresses gender equity with specific goals and scholarships aimed at female empowerment. In parallel, Activity 3.4.2 of the Strengthening Women's Employment in Coastal Areas Program strengthens sustainability by improving working conditions and opening formal employment opportunities for women in coastal economic activities.

K. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project/programme.

353. The following is the analysis of the project's impacts and risks according to the AF Environmental and Social Principles in compliance with the AF Environmental and Social Policy. This project has been classified as a Category B project in accordance with the AF Policy, as the potential impacts are few, small scale and not extremely widespread, reversible or easily mitigated (Annex 5 – Evidence-Based Risk Identification (EBRI)). None of the activities or unidentified subproject (USP) are expected to cause negative environmental or social impacts or aggravate existing conditions, provided they are designed and implemented following the procedures and mitigation measures incorporated in the Environmental and Social Management Plan (Annex 6 - ESMP) and the Gender Action Plan (Annex 4 - GAP).

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
1. Compliance with the Law	Additional evaluation required	This is a fundamental principle that applies to all projects. Some interventions included in component 2 require specific environmental authorizations or administrative permits. To avoid negative environmental or social impacts, the corresponding permit must be obtained from the Ministry of the Environment/Intendancy, depending on the scale of the project, prior to any intervention in the project area.
2. Access and Equity	Additional evaluation required	The ESMP includes the "Guidelines for Outreach and Participatory Strategy" that will serve as a guide for each of the six sites to work on and validate their "Outreach and Participatory Strategy Plan" with the community to ensure the participation of marginalized and vulnerable groups, stakeholders and local authorities.
3. Marginalized and Vulnerable Groups	Additional evaluation required	The main vulnerable groups in the project implementation area have been identified (see Context section). For the development of this proposal, project socialization meetings were held with the various stakeholders (see Annex 2). Measures to ensure the inclusion of vulnerable groups and their universal access to project benefits were included in the ESMP.
4. Human Rights	No additional evaluation required	This is a fundamental principle that applies to all projects. Given that there are no proposed projects that negatively affect human rights, this criterion does not need to be evaluated. Uruguay has signed the Declaration of Human Rights. To reinforce the human rights theme, it will be included in awareness and training activities. The ESMP includes a Grievance and Complaint Mechanism through which human rights concerns can be received under the project.
5. Gender Equality and Women's Empowerment	Additional evaluation required	The EBRI (Annex 5) and the ESMP (Annex 6) identify activities that may involve risks to gender equality and general mitigation measures. Annexed to the proposal is the Gender Assessment (Annex 3) that served as the basis for the preparation of the GAP. The Gender Action Plan (GAP, Annex 4) was designed specifically for each of the activities of this project.

6. Core Labor Rights	Additional evaluation required	This is a fundamental principle that applies to all projects. Some Component 2 interventions may require the hiring of contractors that must comply with labor laws and International Labor Organization (ILO) standards. The general requirements for construction contractors are part of ESMP and will be transferred to the bidding documents along with any additional specifications required (particular safety measures for the task or protective elements) and are mandatory for contractors to comply with.
7. Indigenous Peoples	No additional evaluation required	In the area of influence there are no territorialized indigenous communities or living in communities. There are people who perceive themselves as descendants of indigenous people who live together and share all their activities with the rest of the population.
8. Involuntary Resettlement	No additional evaluation required	The project does not include activities that could result in involuntary resettlement. None of the activities presented will have a risk of relocation of people. Nor will they cause displacement of economic activities.
9. Protection of Natural Habitats	Additional evaluation required	Project objectives include reducing the vulnerability of coastal ecosystems, (restoration and conservation) within and near Natural Protected Areas. Project activities within protected areas (Playa Penino, San José) must consider specific requirements and must be evaluated by the competent authorities (SNAP and ME) prior to any intervention in the area. Environmental and social impact assessments should be conducted to ensure that marine ecosystems and natural habitats are not adversely affected by any activity.
10. Conservation of Biological Diversity	Additional evaluation required	Project interventions will consider the coastal ecosystem vulnerability approach for the design of ecosystem-based adaptation strategies.
11. Climate Change	No additional evaluation required	Project activities are not expected to target GHG-generating sectors. Where civil works are required, it is recognized that the movement of vehicles may increase emissions, but this impact is considered to be temporary and not significant.
12. Pollution Prevention and Resource Efficiency	Additional evaluation required	The risk at this point has to do with activities that may generate waste production and the release of contaminants during civil works and during the use of the new spaces. The ESMP details the measures to be considered in activities related to training and raising awareness among the local population.
13. Public Health	Additional evaluation required	Storm drains can occasionally carry waste or polluting effluents that reach the beaches. The projects will require an executive project and, depending on their scale, an E&S Impact Study, which, in the case of drainage, will include, among other aspects, an analysis of the quality of the discharge water. As mentioned in the ESMP, work will be done to raise awareness and prevent pollution from discharges through the Dissemination Plan and Participatory Strategy for stakeholders at each site.
14. Physical and Cultural Heritage	Additional evaluation required	The project will protect cultural sites that are at risk from erosion and flooding. At the same time, special care will be taken in areas of cultural heritage conservation interest according to the EBRI. To prevent any project from being designed and implemented in a way that damages a cultural site, this aspect will be included in the environmental and social impact studies and assessments.
15. Lands and Soil Conservation	Additional evaluation required	The project has been designed to strengthen ecosystems and improve drainage to prevent the progression of erosion and flooding on the coast of Uruguay. Thus, the very nature of the project itself contributes positively to land and soil conservation. The measures have to do with the application of legislation and their own local LUP plans, with approval from DINACC when environmental permits are required and Coastal and Marine Management from the Ministry of Environment when applicable.

PART III: IMPLEMENTATION ARRANGEMENTS

A. Describe the arrangements for project/programme implementation.

354. At the request of the Government of Uruguay, CAF is the Regional Implementation Entity (RIE) for the project. The Executing Entity (EE) is the Corporación Nacional para el Desarrollo (CND).

355. Key stakeholders related to climate impacts on the Uruguayan coast at the national and local level identified and described in the context/background section will also be involved in the implementation of the project under the scheme described below.

356. The project will have two levels of coordination: an operational structure to manage the coordination of the accredited entity, the executing agency and the operational team/Project Management unit (PMU) and a strategic coordination level that will include a Steering Committee and a Technical Committee. These levels are described below and illustrated in Figures 11 and 12.

1) Operational structure

Implementing Entity (IE)

357. CAF will play the role of Project Implementing Entity, based on its experience of successfully carrying out similar activities in the LAC region. CAF will maintain responsibility for the day-to-day supervision of the project and will have direct responsibility for fulfilling the duties and obligations of an AF Implementing Entity. It will be responsible for financial management and accountable for the use of AF resources under the project. He/she will provide technical and administrative support to the Operational Team (see below) to ensure results-oriented management and proper stewardship of funds. IE functions involve the provision of monitoring and evaluation services. CAF will maintain ongoing coordination with project staff and dialogue with project stakeholders.

The Executing Entity (EE) and the Project management Unit (PMU)

358. The National Development Corporation (CND) will be the EE for the project. The operational team within the EE – the Project Management Unit (PMU) – will have a dedicated team to ensure that all components and activities are carried out in accordance with the project design. It will liaise with the monitoring and evaluation activities (covered by CAF as IE) to ensure that all expected results are achieved on time and within budget.

359. This PMU will have a Project Coordinator, an Adaptation and Environmental Safeguards Specialist (AESS), a Social Safeguards and Gender Specialist (SSGS) (or two equivalent profiles that together cover these specialties), and an Administrative Assistant. All of them will have implementation and monitoring, evaluation, and learning (MEL) functions and will work in coordination with the CAF MEL Specialist designated for the project. The profiles of Adaptation and Environmental Safeguards Specialist and the Administrative Assistant will be covered by the permanent CND team. The Social Safeguards and Gender Specialist (SSGS) will be hired under Component 3.

360. The AESS and SSGS will be responsible for ensuring the implementation of the ESMF and the Gender Action Plan in liaison with CAF's Coordination of Environmental and Social Assessment and Monitoring (*Coordinación de Evaluación y Monitoreo Ambiental y Social*, CESAS) and CAF's Gender Coordination.

361. In addition to training and experience in social and gender issues and project implementation, the SSGS should have proven experience in communication and facilitation with local communities, and in outreach to strengthen project visibility at local, regional, and national levels. Ideally, this profile will have experience in the field of climate change and/or climate change adaptation, and knowledge of the Gender Policies of the Adaptation Fund or the Green Climate Fund.

362. The PMU will work closely with CAF's administrative areas.

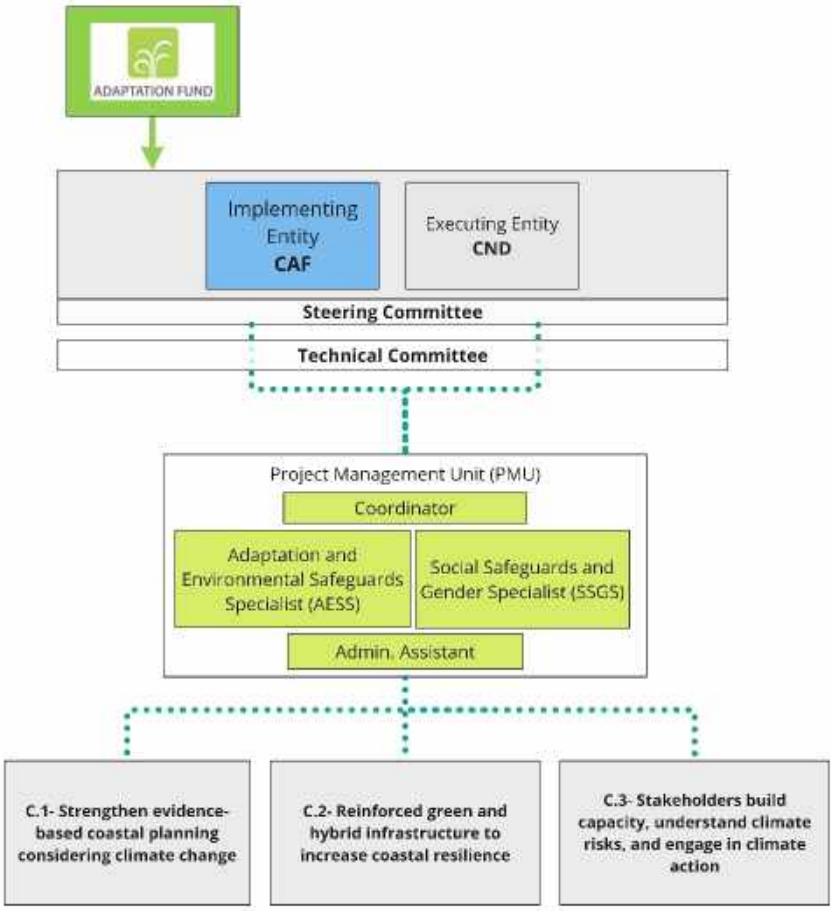
363. The PMU will ensure that project implementation proceeds smoothly through well-drafted work plans, Terms of Reference and carefully designed administrative arrangements that comply with CAF and AF requirements. The responsibilities of the PMU include the following tasks:

- Monitoring of the achievement of the project's results, products, and objectives.
- Manage the day-to-day implementation of the project, coordinating activities according to CAF/AF rules and procedures.
- To provide general administration, acting as an independent and impartial guarantor of cooperation and information exchange.
- Provide technical input as appropriate to the results.
- Facilitate personnel hiring and procurement processes.
- Coordinate with stakeholders and other relevant regional programs, in conjunction with CAF.
- Convene quarterly Project Implementation Meetings (PIMs) with CAF to review progress in the implementation of the work plans.
- Ensure, together with CAF, that specific tasks are subcontracted to suitable suppliers or national and international consultants through competitive bidding processes. The PMU's responsibilities include the development of bidding documents and terms of reference, as well as monitoring the overall progress of

these processes.

- Organize meetings and workshops at the project level, such as kick-off workshops, among others.
- Monitor financial progress reports and the financial balance of the project.
- Prepare general project reports.
- Plan and monitor the technical aspects of the project, including regular field visits and periodic reports.
- Ensure that anticipated funds are used according to agreed work plans and budget.
- Prepare and adjust commitments and expenditures authorized by CAF, ensuring timely disbursements, financial recording and reporting according to budgets and work plans.
- Manage and maintain budgets, including tracking commitments, expenditures and planned expenditures against budget and work plan.
- Maintain productive, regular and professional communication with other project stakeholders to ensure smooth progress of project implementation.

Figure 11. Operational level organization chart



2) Strategic coordination level

Steering Committee

364. The Steering Committee will be led by representatives of CAF, DINACC (Ministry of Environment, which is the Designated National Authority before the Fund) and the Executing Entity (CND) and may include representatives as observers of the different key governmental institutions for the management of issues related to coastal adaptation. At the meetings, which will take place annually, the Project Coordinator and the MEL Specialist will participate in the meetings with the main objective of informing the Committee on the progress and results of the project.

365. The Steering Committee shall be responsible for:

- Review and approve the Annual Operating Plan.
- Evaluate and approve the Annual Procurement Plan.
- Review and approve the PPR – Project Progress Report to the Adaptation Fund.
- Approve changes to the project procurement plans, with possible variations in procurement among the project's Deliverables, for amounts greater than 10% (according to the Fund's rules, it is 10% of both the recipient and the recipient's reduction of the project total). Changes in procurement plans for amounts below this threshold will be approved by CAF and reported to the Committee at each meeting.
- Evaluate project performance.
- Review and approve the mid-term and final evaluations of the project and provide comments and recommendations.
- Arbitrate conflicts that may arise during execution.
- Receive reports from the project coordination on a semi-annual and annual basis during its sessions, as well as be informed of the progress of the annual report to be submitted to the Adaptation Fund.
- Verify compliance with the implementation of the project.
- Provide strategic guidance aligned with national climate change policy and local actions.

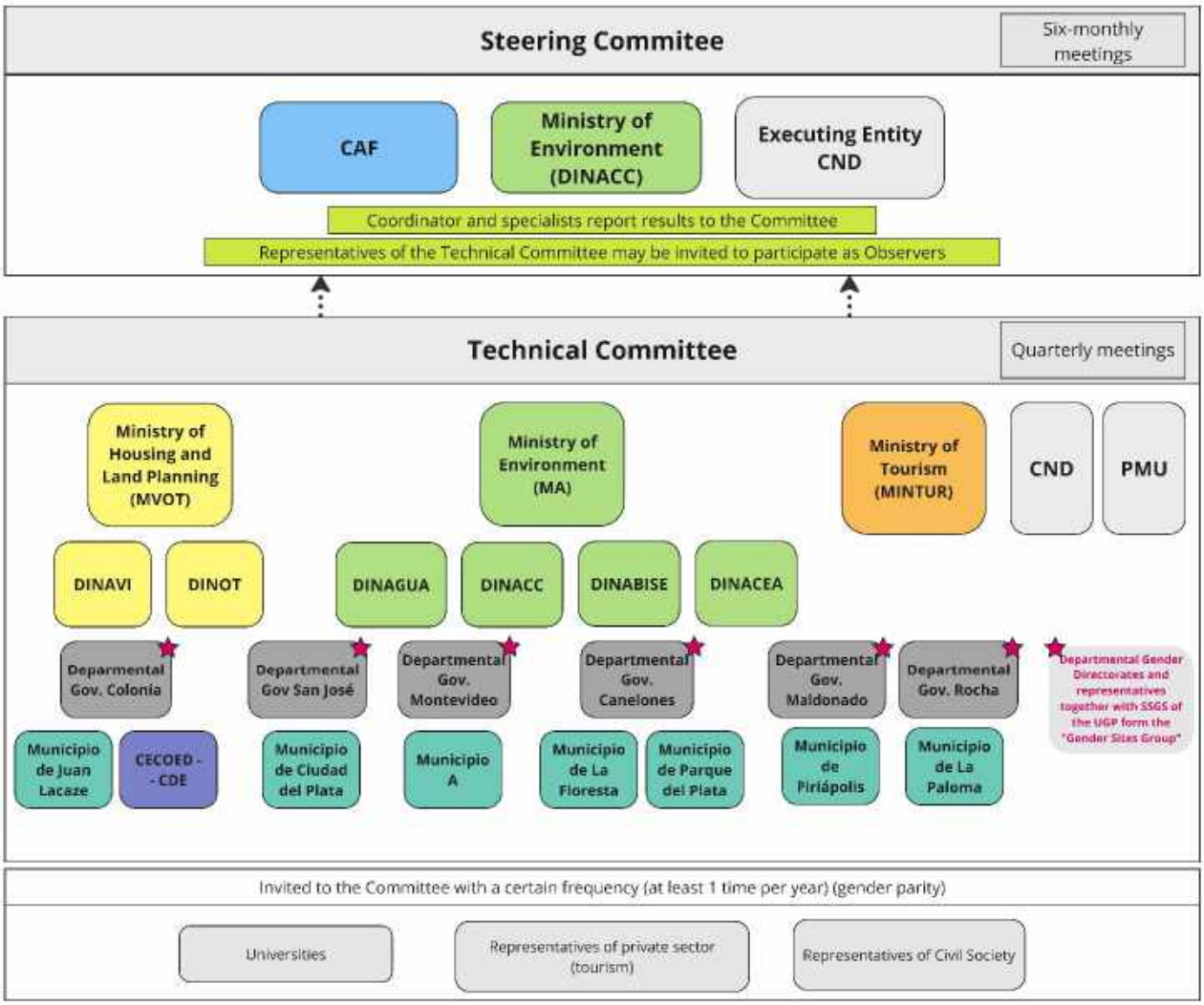
Technical Committee

366. The Technical Committee will advise on technical aspects and report on the progress of execution to the Steering Committee. While the Steering Committee will be made up of high-level representatives of the institutions, the Technical Committee will be made up of technical representatives of the institutions. It will include technicians from MVOT, ME, MINTUR, intendencies and municipalities, as well as CND and the PMU team. This committee will meet every four months. At least once a year, representatives from the private sector (tourism), universities and civil society organizations will be invited to participate as observers (ensuring gender parity).

367. The Technical Committee shall be responsible for:

- Advise and supervise the consolidated Annual Operating Plan.
- Advise and supervise the consolidated Annual Procurement Plan.
- Advise and monitor the PPR – Project Implementation Report and make recommendations.
- Advise and oversee changes to the program's procurement plan with procurement variances between project deliverables in amounts greater than 10%.
- Advise and monitor project performance.
- Advise and supervise the information required for the mid-term and final evaluations of the project.
- Advise and supervise quarterly and annually the progress of the annual report to be submitted to the Adaptation Fund.

Figure 12. Steering and Technical Committees



B. Describe the measures for financial and project/programme risk management.

Risk No.	Identified risks	Type	Probability of occurrence	Impact level	Mitigation measures
1	Difficulties in organizing contracting and procurement for works at the six project sites	Administrative	Low	High	The budget and disbursement schedule have been reviewed with CND, the Executing Entity, which is also the executing entity of the Binational project financed by the Adaptation Fund and which already has lessons learned from its implementation.
2	Identification of suitable consulting firms or consultants to provide the required services.	Human Resources/ Consultant shortage	Medium	Low	Clear terms of reference will be prepared, and procurement will be disseminated through appropriate networks.
3	Long-term maintenance costs of infrastructure works	Financial	Low	Medium	The infrastructure works to be carried out have a low maintenance cost. In addition, ecosystem-based solutions have been favored so that the project avoids them. National and departmental governments will sign agreements to guarantee the allocation of resources for the maintenance of the works. During the formulation of the project, the departmental governments have analyzed the long-term budget needs.
4	Uncertainty about the intensity of climate events that may affect project interventions, including housing and infrastructure.	Environmental	Low	High	The designs of the proposed works incorporate relevant climate scenarios to ensure that the proposed measures can cope with the projected impacts of expected extreme weather events.
5	Elections and change of public authorities	Political	High	Medium	There is a high degree of involvement of the relevant ministries at the technical level. In addition, the implementation arrangements include a technical follow-up committee to mitigate this risk.
6	Low stakeholder interest/participation	Social	Low	High	Socialization with stakeholders has been ensured from the proposal development stage. The project has various strategies to encourage the population's interest in getting involved in coastal adaptation.

C. Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

368. For all 3 project components, the associated risks of all activities and outputs were reviewed, taking into account the implementation arrangements and the roles and responsibilities of the agencies required for the preparation of the ESMP. Both the risk-based risk identification and the ESMP were prepared following extensive stakeholder consultations and clear definitions of project activities. Once the risks were identified for

each activity, the potential impact of the risk, should it materialize, was determined. The overall characterization of each component was determined using the identified risks and associated impacts.

369. The characterization assessed whether the social and environmental impacts were diverse, pervasive, reversible, significant, small-scale, and minor.

370. Based on the results of the component categorization, it is concluded that there are no components that will have widespread, irreversible and significant impacts.

371. Components 1 and 3 were categorized as minimal risk (Category C) due to the nature of their activities related to the creation of tools and guidelines, knowledge management, communication, awareness raising, capacity building, training and articulation and exchanges that are not expected to generate any significant environmental and social impacts. Component 2 was classified as medium risk (Category B) due to its activities related to hybrid or green infrastructure works, such as adaptation of rainwater discharges, canals, bioretention, buffer ponds, floodable parks, hybrid infrastructure for ecotourism.

372. It should be clarified that Activity 2.3.1 "Implementation of a financial mechanism to promote adaptation in housing and other buildings in medium flood risk areas" is a USP type activity. Considering the characteristics and small scale of the Revolving Fund investments, a low-risk classification is foreseen for this activity and, therefore, in no case will the result of the analysis be other than Category C.

373. Most of the components were found to have impacts related to Principles 2, Access and Equity and 3, Vulnerable and Marginalized Groups. Measures to address these include the development of a Dissemination Plan and Participatory Strategy for each of the six sites prior to the start of activities. The Plan should be locally developed and validated with stakeholders and approved by the EE. As mentioned in the Outreach and Participatory Strategy Guidelines section of the ESMP, the plans will address information dissemination, messages, channels, roles of community members, leaders and organizations, appropriate types of communication for different groups, gender groups, gender, age and people with disabilities; frequency of meeting, participation of community members in activities; complaints and gender objectives and also dissemination of the project's complaints and grievance mechanism.

374. Gender equity and women's empowerment was relevant to many of the proposed activities, in which the lack of women's participation could result in not considering their particular concerns and needs and increase the gender gap. The Social and Gender Specialist (SSGS) to be hired for the project must include in each Dissemination Plan and Participatory Strategy the cross-cutting gender perspective and specific actions to ensure its convocation and participation, together with the provisions of the Gender Action Plan designed for the project.

375. Protection of natural habitats, 10. Conservation of Biological Diversity, are mainly applicable to Component 2. To address this issue, it is generally recommended in the ESMP that determinations for final designs of interventions should only be made after completion of baseline studies, and that technical standards should be strictly adhered to. DINACEA of the Ministry of Environment is responsible for the approval of environmental impact assessments and corresponding studies and for requesting conditions to ensure minimal impact. The Adaptation and Environmental Specialist (AESS) and the Social and Gender Specialist (SSGS) of the project will incorporate all relevant measures, including occupational safety aspects, in the bidding documents to be complied with by the contractors and will also follow up on the proposed ESMP in each case.

376. Impacts related to Principle 12. Pollution Prevention and Resource Efficiency are considered applicable to Component 2, these impacts were determined to be temporary (mainly construction phases) and of moderate significance and limited to pollution prevention. For these activities, these impacts were determined to be temporary and of moderate significance and limited to pollution prevention. To address this, the ESMP recommends that interventions be carried out following baseline studies, minimizing disturbed areas during the implementation of interventions, and the application of DINACEA conditions.

377. Component 2 presented impacts related to Principle 13, Public Health. These impacts were assessed as low and were mainly related to potential urban water contamination in drainage and rainwater harvesting systems. The impact will be managed through appropriate training and dissemination of appropriate level messages addressed in the Dissemination Plan. When constructing systems such as lagoon ponds, the AESS will support and supervise these tasks.

378. Specifically, activity 2.4.1 Sustainable Ecotourism of component 2 presents possible impacts related to Principle 14. Physical and cultural heritage, this affectation has to do with tourist overexploitation and degradation of the heritage of Playa Penino. To avoid these impacts, an environmental and social impact study must be carried out and the corresponding environmental permit must be obtained from the Ministry of the Environment, depending on the scale of the project and the sensitivity of the area, before any intervention on the coast is carried out. In addition, a study will be carried out to design the project in a sustainable manner.

Contractors must comply with all the mitigation measures of this ESMP and the specific measures (environmental, social and occupational safety) that the AESS and SSGS social specialist will include in the bidding documents according to the environmental assessment, the ESPs and what is included in the GAP.

379. Principle 15 Land and Soil Conservation states that there are impacts related to activities under Component 2. In case environmental and or Coastal and Marine Management permits are required, these will be requested from the Ministry of Environment where applicable. Final decisions on intervention will be made only after completion of information gathering, baseline studies and recommendations, which will be rigorously followed.

D. Describe the monitoring and evaluation arrangements and provide a budgeted MEL plan, in compliance with the ESP and the Gender Policy of the Adaptation Fund.

380. For the monitoring and evaluation of the project, CAF will hire a Monitoring, Evaluation and Learning (MEL) Specialist based in Uruguay, who will work in close collaboration with the Project Management Unit and the Executing Agency.

381. The MEL specialist will ensure the proper implementation of the monitoring and evaluation plan, including the design of appropriate data collection tools, construction of databases to capture and process information, as well as accompanying local authorities and technicians to strengthen capacities in monitoring, evaluation and follow-up of coastal adaptation measures. Sex-disaggregated data collection and analysis will be ensured throughout the monitoring and evaluation of all activities and results, in alignment with the sex-disaggregated indicators and targets included in the results framework (section E) and the Gender Action Plan (Annex 4). In addition, the specialist will supervise and ensure the quality of the data collected, as well as generate progress analysis and generate inputs for timely decision making in relation to the project. He/she will also oversee collecting the corresponding information from the different areas involved to complete the reports both to the AF and to whoever may require it at the CAF, Ministry or Executing Entity level.

382. The MEL specialist should analyze at the beginning of the activities those indicators that require the collection (or formulation) of a baseline for subsequent reporting and monitoring of results. As part of the project activities, an evaluation of fauna, flora, geology, and topography has been budgeted for, in order to understand the biological and physicochemical dynamics of the beaches of the 6 prioritized sites. This information will provide guidelines and recommendations to be considered in the MEL protocol. He/she will be responsible for supervising the completion of the baseline and ensuring the integration of its results into the MEL of the entire project.

383. The frequency of monitoring progress of activities and collection of monitoring data will be conducted at least quarterly. Field visits will be conducted to have a better understanding of the progress of activities carried out and outputs delivered and to monitor the adequate progress of investments at each prioritized site.

384. The project also includes participatory monitoring of activities, which includes the implementation and follow-up of activities by youth and neighbors in the intervention areas, as well as the integration into the monitoring and evaluation system of the data collected periodically by the intendancies through drones and granulometry studies. The MEL specialist will be responsible for ensuring the compilation and combination of the different data sources in the MEL system.

385. The MEL Specialist will collect all necessary inputs to complete the annual Project Performance Report (PPR) to be submitted to the AF and shall ensure compliance with the definitions of impact and outcome indicators and the AF Evaluation Framework, as well as reporting requirements. The specialist will track progress against the indicators and compare it to the planned targets in the results framework, sharing recommended actions with the PMU and all relevant stakeholders. The environmental and social specialist will be responsible for the follow-up and implementation of mitigation measures identified in the environmental and social management plan in compliance with the Environmental and Social Policy. The gender specialist will be responsible for carrying out and monitoring the activities of the Gender Action Plan aligned with the AF Gender Policy. The Environmental and Social and Gender Specialists will provide information on the implementation status of these plans for the annual PPR assembly, including corrective actions that could have been taken if applicable.

386. The MEL specialist must also ensure timely reporting to detect deviations from planned targets and make recommendations to the project coordinator and PMU team for corrective actions.

387. A mid-term evaluation and a final evaluation will be carried out by an independent external consultant, complying with the evaluation framework and the AF guidelines, such as the Guidelines for Final Project/Program Evaluation. Results data collection for monitoring and reporting purposes will be conducted annually, with appropriate data collection tools and instruments to be developed by the MEL specialist in

accordance with the results framework. Data collection will also involve the participation of the population in the pilot sites and technicians from the intendancies, who will collaborate with the monitoring needs of the project system.

Monitoring and Evaluation Plan

MEL Activity	Responsible party	Budget USD	Frequency
1. Start-up workshop	CAF	20,000	Within two months of the start of the project
2. Start-up report	CAF MEL Specialist	Covered under item 1 - Start up workshop	Two months after the start of the workshop. The initial report will include a brief description of the launching workshop and the activities planned for the following period.
3. Project baseline update	External consultant	40,000	Within the first six months of project start-up Evaluation of fauna, flora, geology and topography, to understand the biological and physicochemical dynamics of the beaches of the 6 prioritized sites already included in the project budget.
4. Monitoring activities of output/outcome indicators	PMU specialists Quartermasters MEL Specialist	95,800	Quarterly data collection for monitoring progress of activities: monitoring of outputs and outcomes Monthly field visits to different activities. Biannual monitoring of progress on results framework indicators
5. Environmental and social monitoring activities	Environmental and Social Specialist Gender Specialist	56,100	Quarterly data collection for monitoring progress of activities – monitoring the results of the gender action plan. Four-monthly monitoring of the progress of the E&S management plan and gender action plan.
6. Annual Project Performance Reports (PPR) to the Adaptation Fund and Project monitoring.	CAF MEL Specialist	134,400	The PPR shall be submitted annually (no later than two months after the end of the reporting year). The first PPR shall be submitted one year after the start of project implementation (date of the inception workshop). The final PPR shall be submitted no later than two months after the end of the reporting year.
7. Follow-up missions to the Project	CAF PMU specialists MEL Specialist	28,000	They are carried out annually. 7,000 per year.
8. Mid-term evaluation (external)	CAF CND	50,000	Mid-term of the implementation of the activities and financing (estimated 2026)
9. Final-evaluation (external)	CAF CND	50,000	2 months before Project ends.
10. Six-monthly Reports	CND PMU specialists,	8,000	Reports submitted to CAF from the project coordination on a semi-annual and annual basis
Total M&E Costs		482,300	

E. Include a results framework for the project proposal, including milestones, targets and indicators, including one or more core

outcome indicators of the Adaptation Fund Results Framework, and in compliance with the Gender Policy of the Adaptation Fund.

Results	Indicators	Baseline	Final goal at the end of the project	Means of verification	Who is responsible and frequency	Risks and assumptions
Objective: Increase the adaptive capacity of the population and the resilience of coastal ecosystems to the risks of flooding and coastal erosion caused by sea-level rise and an increase in the frequency and intensity of extreme events.	Number of beneficiaries (total) Direct beneficiaries, of which Males Women Indirect beneficiaries, of which Males Women	0 (there are no Adaptation Fund projects in this area) 0 0 0 0 0	**521,544** people **1,715** direct beneficiaries 857 (males) 858 (women) **519,829** indirect beneficiaries 244,545 (males) 275,284 (women)	Primary data collection (interviews plus surveys) Project MEL System	Data collection: Technical staff of the PMU, and CAF Report: PMU, and MEL specialist (CAF) Annual frequency	The total number of **direct** beneficiaries was estimated considering the guidelines of the AF core indicators, which are *targeted* (yes) and with a high intensity of support. Therefore, the direct beneficiaries of this intervention include the recipients of training and coaching, the residents of Isla Mala (Juan Lacaze) who will be trained in the EWS contingency plan and the people who will access the revolving fund for access to flood-resistant housing. For **indirect** beneficiaries, the estimate was made considering whether or not they are *targeted* with a medium intensity of support. Indirect 510,816 internal visitors[95] who would benefit from the recovery of the ecosystem service of recreation + 10% population of the sites that participate in massive awareness campaigns + 2,667 people at risk of flooding in Juan Lacaze (due to access to information provided by the EWS).
	Number of Early Warning System	To date, there is no coastal flood early warning system installed in the country. In Juan Lacaze, 24.7% of the population is exposed to flood hazards. Scale: 0	1 EWS consisting of the 4 end-to-end people-centered EWS components installed with high scale in each component. (Scale: 1 low, 2 medium, 3 high and 4 very high)	Project MEL system Interview with key informants	Data collection: end of project External evaluation Report: PMU, and MEL specialist (CAF)	Assumption: The government institutions with competence in EWS maintain their interest and commitment to be part of the project.
	Natural assets protected or rehabilitated.	The selected coastal ecosystems have varying degrees of vulnerability (see Annex: Ecosystem vulnerability analysis).	96.75 hectares of protected or rehabilitated coastal ecosystems	Studies, biophysical analysis, environmental monitoring system Project progress analysis	External evaluation at the end of the project Data to be collected from different sources	Note: The target includes an estimated 94.35 hectares to be rehabilitated and 2.4 hectares to be protected.
Component 1. Strengthen evidence-based coastal planning in the context of climate change						
Outcome 1: Strengthen evidence-based coastal planning in the context of climate change	Number of institutions actively using and making informed decisions based on coastal planning instruments strengthened with climate change considerations. Information on hazards, erosion risks and coastal flooding	The coastal departments of the prioritized sites rely on reactive decision making in the face of climate change issues based on the current available budgets. There is limited consideration of future climate impacts fin coastal decision making. Uruguay has limited experience with coastal adaptation measures and	12 institutions (6 governors' offices and 6 municipalities) state that they make (corrective and prospective) policy and investment decisions in line with the planning instruments supported by the site.	Interviews with key informants Review of secondary documentation such as budgets and activities carried out at pilot sites.	Mid-term and final external evaluation of the project	Note: Evidence of the use and incorporation of information derived from practical guidelines, management and conservation plans, the warning system, the coastal ecosystem monitoring system and adaptation measures into decision-making at the local and national levels. Risk: Not all systems will be operational at the time of the evaluation.

[95] Source: Data provided by the Ministry of Tourism dashboard, Territorio Inteligente, Observatorio Turístico.

Results	Indicators	Baseline	Final goal at the end of the project	Means of verification	Who is responsible and frequency	Risks and assumptions
	generated and disseminated to local and national stakeholders from the systems and products supported by the project.	information systems in place for recording and monitoring changes in beach ecosystems.	12 government institutions have regular and systematic information on beach ecosystems and flood risk.	Interviews with key informants Information generated by the systems supported by the project		
Output 1.1 Planning instruments with mainstreamed climate change	Number of coastal planning instruments that include cross-cutting climate change considerations. Good practice guidelines for coastal adaptation measures.	The National Coastal Space Directive (DNEC) has the status of a law (19772) and its regulation is a commitment assumed by Uruguay in the Second NDC. There is a lack of agreements on technical criteria and definitions for different articles of the law. In addition, the coastal ecosystems of the sites prioritized for intervention are degraded and highly exposed to the impacts of climate change without regulations to manage their use, considering future climate impacts and the protection and conservation needs of these ecosystems. There are some experiences of good practice guides for coastal adaptation measures carried out by some intendencies and by the local population. However, there are many practices that are not yet recognized and implemented in all sites.	3 coastal planning tools with CC considerations 6 good practice guides	Planning tools (plans, regulatory support consultancy, guidelines) Interviews with key informants	Data collection: PMU technicians Report: PMU, and MEL specialist (CAF) Frequency: annual	Assumption: Coastal planning instruments are implemented. Assumption: Planning instruments are included in Land Use Plans (LUPs).
Output 1.2 Improved systems for recording and monitoring climate change impacts	System for monitoring and recording impacts and changes in the dynamics of beach ecosystems and strengthened adaptation measures. Methodology for losses and damages in the coastal tourism sector due to climate impacts developed. Number of technicians from the intendencies trained in the methodology for recording damages and losses	To date, the intendancies have only partially monitored some of the variables that characterize beach dynamics. This monitoring is insufficient to analyze the impacts of coastal erosion. Likewise, there is limited processing of information for evidence-based decision making. According to analyses already carried out in the country (Euroclima, 2022), there are challenges related to the form of registration, event classification, methodology, institutional procedures for accessing information, use of information integration platforms, necessary institutional arrangements, institutional capacities and governance of the damage and loss assessment mechanism for the tourism sector. In this regard, support is needed for the development of this methodology, including at the local level.	Monitoring and recording system for beach ecosystem dynamics and adaptation measures strengthened. Methodology of damages and losses in the coastal tourism sector due to climate impacts developed. 12 Technicians from the intendancies (40% women)	Data collected by the project monitoring system. Deliverables and installed products. Registration of training participants	Data collection: PMU technicians Report: PMU, and MEL specialist (CAF) Frequency: annual	Assumptions: The methodologies and systems developed are formally adopted. The assumption is based on the interest expressed by the parties consulted.
Output 1.3. EWS installed	EWS against coastal flooding threats in Juan Lacaze in operation. Number of recipients covered by the EWS	To date, no coastal flood EWS has been installed in the country. In Juan Lacaze, 24.7% of the population is exposed to flood risk.	1 EWS for coastal flooding threats in Juan Lacaze in operation 3,167 people (51.7% women) residing in	4 EWS components strengthened (risk maps, alert thresholds, protocols, simulations, communication systems)	Data collection: PMU technicians Report: PMU, and MEL specialist (CAF) Frequency: annual	Assumption: The 4 components are strengthened in order for the EWS to function in the face of coastal flooding.

Results	Indicators	Baseline	Final goal at the end of the project	Means of verification	Who is responsible and frequency	Risks and assumptions
			flood-prone areas covered by the EWS	Register of population reached by coastal flood warning service. Key informant interviews		
Component 2: Strengthened green and hybrid infrastructure to increase coastal resilience						
Outcome 2: Reduction of coastal erosion and flooding Preserved recreation and care spaces	Number of sites with strengthened coastal ecosystems to resist flooding and coastal erosion.	The six prioritized coastal sites have diverse degrees of vulnerability and have therefore limited adaptive capacity to withstand climate change impacts such as erosion and flooding. Assets such as drains at the project sites are in many cases covered with vegetation and trash and are not adequate for buffering rainfall discharge in times of heavy rains, contributing to the erosion of the beach ecosystems and their erosion. In the 6 prioritized sites there is also a loss of coastal ecosystem vegetation aggravated by unsustainable practices that include walking and driving vehicles over dune vegetation, among others.	6 project sites with strengthened coastal ecosystems to resist flooding and coastal erosion.	Data collected by the project monitoring system. Satellite imagery and drone information for coastal monitoring Site inspection visits	Data collection: PMU technicians Report: PMU, and MEL specialist (CAF)	Methodological note: The measurement of the strengthening of the ecosystem should consider the change in reinforced assets supported by the project such as reinforced buildings to withstand flooding, improved drainage systems and stormwater projects, improved walkways and entrances to the beach to reduce erosion. The strengthened assets should be measured, both qualitatively and quantitatively (including km, meters or hectares of works completed).
Output 2.1 Strengthened coastal ecosystems to respond to erosion and flooding impacts.	Linear meters of fences installed for the recovery of the structure of the dune cordon. Number of hectares of beach and wetland coastal ecosystems revegetated.	The ecosystems of the prioritized sites show varying degrees of coastal erosion and degradation, aggravated by drainage problems and poor practices associated with the lack of awareness of the need to protect and care for dune and coastal ecosystems, which are key to maintaining the ecosystem systems that these sites fulfill (see attached vulnerability analysis).	10,505 mts of catch fences installed between Rocha, Maldonado, Canelones and Montevideo. 29.74 hectares of beach revegetated in Rocha, Maldonado, Canelones and Montevideo 42.04 hectares of revegetated coastal wetland ecosystems in Rocha, Maldonado, Canelones and San José.	Project monitoring system data Field visits	Data collection: PMU technicians Report: PMU, and MEL specialist (CAF) Frequency: Annual	Assumption: erosion conditions are not aggravated by other extreme factors.
Output 2.2 Improved and sustainable drainage and stormwater systems	Number of coastal sites where drainage and stormwater systems are improved to reduce erosion impacts of discharges on coastal ecosystems, of which: Drainage Pluvial Systems	0	4 coastal sites with drainage and stormwater systems improved to reduce erosion impacts (Rocha, Canelones, San José and Montevideo)	Project monitoring system data Field visits	Data collection: PMU Technicians Report: PMU, and MEL specialist (CAF) Frequency: Annual	Methodological note: Improvements made to drainage and stormwater systems should be described in the monitoring activities as well as the unit of measurement (i.e. in km of sustainable drainage strengthened).

Results	Indicators	Baseline	Final goal at the end of the project	Means of verification	Who is responsible and frequency	Risks and assumptions
Output 2.3 Flood-proof housing and buildings.	Number of people with homes and/or buildings reinforced to withstand flooding.	There is no information on the number of people with reinforced housing for coastal flooding impacts at the project sites. This information will be updated after baseline data collection prior to initiation of activities.	180 people, 51% of whom were women.	Project monitoring system data Key informant interviews Field visits	Data collection: PMU technicians Report: PMU, and MEL specialist (CAF) Frequency: Quarterly	Priority will be given to the most vulnerable households in areas at risk of flooding. Assumes an average of 3 persons per household in the prioritized sites.
Output 2.4 Strengthened hybrid infrastructure for sustainable ecotourism development	Number of ecotourism sites developed.	Playa Penino is part of the Santa Lucía Wetlands in the Department of San José, one of those with a large population in a situation of socioeconomic vulnerability. The beach has a great variety of flora and fauna and a natural reserve of migratory birds, the Playa Penino Natural Reserve, which is not developed for tourism.	1 ecotourism site project developed in Playa Penino.	Project monitoring system data Field visits	Data collection: PMU technicians Report: PMU, and MEL specialist (CAF) Frequency: Quarterly	Assumption: Interest of the population in developing an ecotourism site. This assumption has been validated through the different instances of consultation.
Component 3. Stakeholders build their capacity and knowledge of climate risks						
Outcome 3: Institutional capacities strengthened to reduce flood and coastal erosion induced risk Local population sensitized and capable of responding to flooding and implementing practices to prevent coastal erosion.	Number of trained personnel of government institutions with strengthened capacities (limited to high) for decision making to reduce the risk of climate change impacts from Number of people from prioritized sites involved in coastal climate action through the different activities of the project (disaggregated by sex)	There are different capacities of technicians, technicians and political decision-makers at the local level. At the level of technicians of the intendancies, through the formulation of the project, a survey was carried out on their own knowledge on aspects of management of coastal adaptation measures, knowledge of risks and climate scenarios, monitoring of coastal climate impacts, gender, safeguards, among others, on a scale of 1 to 5: - Cologne: 2.8 - San Jose: 3 - Montevideo: 3.5 - Canelones: 3.8 - Maldonado: 4.4 - Rocha: 2.7 0 people involved with the activities promoted by the project	45 policy makers with high scale, of which 15 women 30 males 180 local technicians and contractors move up to full scale. 40% women 300 people in the prioritized sites, of whom 120 young people (50% female) 180 adults (50% women)	Project monitoring system data Field visits Key informant interviews	Data collection: PMU technicians Report: PMU, and MEL specialist (CAF) Frequency: Annual	Assumption: interest of the population and governments in the project. This assumption has been validated through the different instances of consultation. Risk: There are a large number of participatory activities that can generate a lot of demand from the same population. To mitigate the risk, a schedule of participatory activities should be made during implementation to mitigate this risk and generate synergies between the activities in the territory. Risk: due to personnel turnover, the capacities that are generated may be lost. To mitigate this risk, the project will work in a permanent and coordinated manner with successive training sessions with the teams from the intendancies and will generate support material that will allow for continuity in capacity building. Note: Level of capacity to be measured prior to training, workshops on a 5-point scale (very limited/limited/moderate/high/high/very high capacity) in the different topics to be disseminated.
Output 3.1 Decision-makers, technicians sensitized and involved in coastal adaptation.	Communication strategy with a gender perspective developed. Number of sensitized high-level policy makers Knowledge products	0 0	1 45 sensitized high-level policy makers (15 women)	Project monitoring system data Key informant interviews	Data collection: PMU technicians Report: PMU, and MEL specialist (CAF)	Interest of political decision-makers in participating in the conferences. Risk: that they do not want to participate. This risk will be mitigated through the development of the communication strategy.

Results	Indicators	Baseline	Final goal at the end of the project	Means of verification	Who is responsible and frequency	Risks and assumptions
		0	10	Project deliverables, participant records.	Frequency: Annual	
Output 3.2 Local population sensitized and involved in coastal adaptation	Dissemination Plan and Participatory Strategy in operation Number of neighbors involved in the monitoring and implementation of the project's coastal adaptation measures (disaggregated by sex and generation) Number of competitive proposals to support innovative projects to protect coastal ecosystems submitted by young people. Number of social communicators trained in CC and coastal adaptation measures. Number of residents participating in learning excursions on coastal flora and ecosystems and Number of women participants in gender sensitization workshops Number of SME representatives participating in awareness-raising workshops on coastal adaptation Number of artistic and cultural activities to promote involvement in coastal climate action	0 0 0 0 0 0 0 0	6 84 neighbors involved in the monitoring and implementation of coastal adaptation measures, of which: 12 young women 12 young men 30 adult women 30 adult males 24 competitive proposals awarded to young people to support coastal adaptation measures (50% to women) 60 social communicators (10 per department) 180 residents, of whom 50% are women. 180 women 75 representatives of SMEs and business associations, of which at least 25 led by women. 6 activities (one per site)	Project monitoring system data Key informant interviews Project deliverables Participant registration	Data collection: PMU technicians Report: PMU, and MEL specialist (CAF) Frequency: Quarterly	The development of communication materials should ensure representation of gender balance of voice. One of the case studies should especially assess the differentiated impacts of climate change experienced by women in the SORB and the differentiated benefits generated for women implementing the project technologies. Workshops and work sessions will ensure that they are held at times and on days when women can help and will include babysitting staff to promote women's participation and reduce the risk of women not being able to attend. The design of information campaigns will ensure to provide gender-differentiated benefits addressed by the adaptation technologies promoted by the project and differentiated climate-related impacts for women and men.
Output 3.3 Improved knowledge management	Number of knowledge and dissemination products Number of case studies to disseminate lessons learned, systematize good practices on coastal adaptation and gender.	0 0	10 knowledge products 9 case studies, 3 of which are focused on women.	Project monitoring system data Key informant interviews Project	Data collection: PMU Technicians Report: PMU, and MEL specialist (CAF) Frequency: quarterly	The design of the communication products has inclusive language and represents both men, women and generations involved in the project.

Results	Indicators	Baseline	Final goal at the end of the project	Means of verification	Who is responsible and frequency	Risks and assumptions
	1 Project stakeholder reflection workshop per prioritized site 1 Congress on coastal space management held		300 people, of whom 50% are women (50 people per prioritized site)	deliverables Participant registration		
Output 3.4 Capacities of the population strengthened for economic autonomy by revaluing the coastal area	Number of tourism programs strengthened with content on local tourism and climate change. Employment Strengthening Program aimed at women in coastal areas, designed and implemented. Number of women participating in the Strengthening Employment Program	0 0	1 tourism program reinforced with local coastal tourism and climate change content 1 Employment Strengthening Program for women in coastal areas, designed and implemented. 10 women participating in the Strengthening Employment Program	Project monitoring system data Key informant interviews Project deliverables Participant registration	Data collection: PMU technicians Report: PMU, and MEL specialist (CAF) Frequency: Quarterly	

F. Demonstrate how the project/programme aligns with the Results Framework of the Adaptation Fund

Project Objective(s)[1]	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
Strengthen evidence-based coastal planning in the context of climate change	National and local government institutions use the information generated by the project (technical guidelines, early warning, analysis of the effectiveness of measures) for decision making	**Outcome 1:** Reduced exposure to climate related hazards and threats	1. Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis	USD $1,977,450
Project Result EWS installed. Improved systems for recording and monitoring climate change impacts.	Early Warning Systems for coastal flood hazards installed. Systems for recording and monitoring of CC impacts Damage and loss methodology	**Output 1.1**: Risk and vulnerability assessments conducted and updated	1.2 No. of early warning systems (by scale) and no. of beneficiaries covered and scale)	
Strengthen green and hybrid infrastructure in prioritized coastal sites to increase the resilience of coastal populations and ecosystems to the impacts of flooding and coastal erosion	Number of hectares of coastal beach and wetland ecosystems revegetated.	**Outcome 5:** Increased ecosystem resilience in response to climate change and variability-induced variability.	5. Ecosystem services and natural resource assets maintained or improved under climate change and variability-induced stress	USD $5,340,680
Reduce coastal erosion and flooding	Number of physical and natural assets strengthened to withstand the impacts of climate hazards.	**Output 5:** Output 5: Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability.	5.1. No. of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale)	
Build the capacity and knowledge of coastal stakeholders and promote their participation in climate action.	Number of people from prioritized sites engaged in coastal climate action through the project's various activities	**Outcome 3:** Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses	USD $1,023,870
Local population sensitized and empowered to respond to flooding and adopt practices to prevent coastal erosion.	Number of guides, knowledge products	**Output 3.2:** Strengthened capacity of national and subnational stakeholders and entities to capture and disseminate knowledge and learning.	3.2.2 No. of tools and guidelines developed (thematic, sectoral, institutional) and shared with relevant stakeholders	

G. Include a detailed budget with budget notes, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.

Outputs	Activities	Budget account description	Type of deliverable (interno)	TOTAL AMOUNT (USD)	Total amount per activity (USD)	Notes and assumptions
Output 1.1	Activity 1.1.1 Mainstreaming climate change into planning instruments	Local consultants	Technical study for guideline	**33.600**	**189.400**	Consultant for the development of technical studies for guideline. Assuming average consultant salary per month (availability at 100%) one year contract
		Local consultants	Gender Consultant	**37.800**		3 individual gender consultancies. Assuming average consultant salary per month (availability at 75%) for 6 months for 3 years.
		Professional/ Contractual Services	Studies for Planning Instruments	**118.000**		Hiring of a consulting firm to carry out a plan for the protection, restoration and enhancement of ravines supported by a study for the identification of minor rainfall discharges and vegetation characterization (USD48,000). Hiring of a consulting firm to carry out the Playa del Cerro Beach Management Plan (USD30,000). Hiring of a consulting firm for the development of 5 TO instruments for Maldonado: hydrological protection, including hydrological and hydraulic study (USD25,000) and ecosystem study (USD20,000) and equipment (USD3,000).
	Activity 1.1.2 Development of technical guides to provide guidelines for concrete adaptation measures	Professional/ Contractual Services	Contracting of a consulting firm for the preparation of 6 technical guides.	**60.000**	**61.200**	Hiring of a consulting firm for the production of 6 technical guides. Includes development and printing.
		Travel	Local land travel	**1.200**		Travel expenses for the professionals that will develop the technical guides, to ensure they are properly informed by local experiences.
Output 1.2	Activity 1.2.1 Strengthening systems for recording and monitoring climate change impacts.	Professional/ Contractual Services	Highly specialized consulting team	**314.000**	**909.500**	Highly specialized consulting team composed of: coastal monitoring technician who accompanies the 4 years of the project. Consultant for decadal and annual studies (1 year). Developers of the integrative model that analyzes the dynamic lines of the coast and makes coastal forecasts (6 months).
		Internacional consultant	International monitoring systems consulting	**50.000**		Consulting services for the development of international surveillance systems in the last year
		Equipment	Buoys	**80.000**		4 olygraphs (buoys)
		Professional/ Contractual Services	Strengthening of the sea level monitoring network managed by SOHMA.	**120.000**		Contracting of services for the reinforcement of the sea level monitoring network managed by SOHMA in the first year.
		Professional/ Contractual Services	Studies	**180.000**		An evaluation of fauna, flora, geology and topography, to understand the biological and physicochemical dynamics of the beaches of the 6 prioritized sites.

Outputs	Activities	Budget account description	Type of deliverable (interno)	TOTAL AMOUNT (USD)	Total amount per activity (USD)	Notes and assumptions
		Professional/ Contractual Services	Consulting team to develop the installed works measurement protocol and computer system.	**100.000**		Consulting team to develop the protocol for measuring works installed at the sites, including meetings with locals and workshops with a gender focus. Computer system: data matrix for monitoring data access.
		Training, workshops, and conference	Practical trainings for participatory monitoring (with a gender approach)	**6.000**		1 practical training, for ten persons, for participatory monitoring (with a gender approach) per department
		Professional/ Contractual Services	Communication campaign with dissemination material (including video and TV time)	**59.500**		Company to develop the communication campaign and placement of posters for participatory monitoring. 1 dissemination material per year (infographics, factsheet, short animated video, etc.) with a gender and generational approach. Explanatory video on monitoring of adaptation measures. Broadcast 2 minutes of video on TV 10 times (20 minutes).
	Activity 1.2.2 Development of a loss and damage assessment system for the tourism sector on the coast.	Professional/ Contractual Services	International consulting team for studies	**60.000**	**342.400**	International consulting team for the survey, for the baseline and database of the tourism sector at the subnational level. The methodology should be adjusted, mapping stakeholder needs, incorporating a gender approach and identifying indicators.
		Professional/ Contractual Services	Computer system. New module in MIRA system	**200.000**		Computer system: New tourism module in the MIRA system. Includes training for MinTur and tourism operators for data loading and use.
		Professional/ Contractual Services	Hiring of consulting team	**60.000**		Consulting team to accompany the municipalities to strengthen the capacities of subnational governments in the area of finance for the recording of event recovery expenditures
		Local consultants	Consultant Facilitator	**22.400**		DINACC Governance Facilitator (estimated based on the average consultant salary, 2 months per year for 4 years), Full time.
Output 1.3.	Activity 1.3.1 Development of people-centered, end-to-end coastal flood risk EWS.	Professional/ Contractual Services	3 studies	**50.000**	**474.950**	Consulting team for survey study and analysis of meteorological event level relationships and associated impact in Juan Lacaze. Economic valuation study of impacts. Vulnerability and risk study with a gender and generational perspective.
		Training, workshops, and conference	Training for professionals	**5.000**		Strengthening of the staff of national and local institutions (40 people (at least 40% women) would be reached by this training).
		Equipment	Equipment	**77.000**		1 weather station (USD40,000), 1 acquisition for measuring of the water level in the ravine (USD25,000), 1 hydrometer (USD12,000)

Outputs	Activities	Budget account description	Type of deliverable (interno)	TOTAL AMOUNT (USD)	Total amount per activity (USD)	Notes and assumptions
		Professional/ Contractual Services	Consulting team for the development of the integrative forecasting model	**170.000**		Consulting team (36 months) for the development of the integrated forecasting model. Includes exchange with users, database, generation of the forecast, dissemination of the forecast, training for the transfer of the generated system, and evaluation and improvement of the system.
		Professional/ Contractual Services	IT infrastructure for model	**50.000**		IT infrastructure - development of the web server to integrate all data and make a post
		Professional/ Contractual Services	Consulting team for protocol development	**15.000**		Consulting team for the development of an action protocol for monitoring, issuance of alerts and competencies.
		Professional/ Contractual Services	Communication strategy (with a gender focus)	**15.000**		Service contract to develop a communication strategy (with a gender focus) in the second year of the project
		Professional/ Contractual Services	Computer system. New module in MIRA system	**40.000**		IT system: development of a new MIRA module to generate alerts and update local information
		Equipment	Support to strengthen local media	**15.000**		Support for the strengthening of local means of communication and dissemination of flooding alerts in Juan Lacaze.
		Local consultants	Consultant Facilitator	**33.600**		Consultant facilitator for the meetings between institutions that respond to the alert and elaborate the contingency and response protocol (3 months in year 2 and 3 months in year 3). Estimated based on the average price of consultant in Uruguay. This includes the meetings, workshops and training to local institutions for the contingency plan. Design, training and execution of 2drills, SINAE with consultant supporting (6 months -3 months in year 3 and 3 months in year 4-. Estimated based on the average price of consultant in Uruguay. The protocol must be adjusted based on the first drill and reports must be made.
		Training, workshops, and conference	Community workshop	**4.350**		3 awareness-raising workshops for the local population. 30 persons per workshop
Subtotal Component 1				**1.977.450**	**1.977.450**	
Output 2.1	Activity 2.1.1 Recovery of dune ridge structure	Local consultants	Preliminary project study	**21.000**	**256.615**	Preliminary project studies[96] (10% of the project) for Rocha, Maldonado and Montevideo:.
		Equipment	Inputs for catch fences	**102.890**		Supplies for catch fences for Maldonado and Canelones
		Professional/ Contractual Services	Business service for the installation of catch fences	**128.125**		Business service for the installation of catch fences for Rocha and Montevideo

[96] The specific components of the preliminary project studies are determined on a case-by-case basis. These studies typically cover a comprehensive set of aspects, including but not limited to: legislative frameworks for land management, analysis of land and urban planning backgrounds, detailed site visits, examination of maritime climate conditions, shoreline analysis, baseline assessments, storm drainage studies, hazard diagnosis, and analysis of optimal solutions.

Outputs	Activities	Budget account description	Type of deliverable (interno)	TOTAL AMOUNT (USD)	Total amount per activity (USD)	Notes and assumptions
		Training, workshops, and conference	Training for the installation of catch fences	**4.600**		Training for the installation of catch fences for Maldonado. In Maldonado, the implementation of the catch fences will be carried out by the local population through the programme “Jornales solidarios (solidarity wages)”
	Activity 2.1.2 Conservation and regeneration of beach vegetation	Local consultants	Preliminary project study	**22.500**	**462.680**	Preliminary project studies (10% of the project) for Rocha, Maldonado and Montevideo
		Equipment	Inputs for planting and extraction	**363.350**		Supplies for planting and extraction for Maldonado, Canelones and Montevideo
		Professional/ Contractual Services	Business service for planting and extraction	**66.630**		Business service for the planting and extraction for Rocha and Montevideo
		Training, workshops, and conference	Training for planting and extraction	**10.200**		Training in planting and extraction for Maldonado. In this site, the planting and extraction will be carried out by the local population through the programme “Jornales solidarios (solidarity wages)”
	Activity 2.1.3 Management of access to and use of the beach	Local consultants	Preliminary project study	**62.000**	**699.100**	Preliminary project studies (10% of the project) for Maldonado, Canelones, San José, Colonia and Montevideo
		Technician Worker	Construction Supervisor	**15.600**		Supervisor for each construction site (USD1,200/month)
		Professional/ Contractual Services	Business service for the installation of elevated walkways	**353.500**		Business service for the installation of elevated walkways for Maldonado, Canelones, San José, Colonia and Montevideo
		Professional/ Contractual Services	Business service for the consolidation of parking lots	**175.000**		Business service for the consolidation of parking lots for Maldonado, Canelones and San José
		Professional/ Contractual Services	Business services for fencing	**18.000**		Business services for fencing for Canelones and Montevideo
		Professional/ Contractual Services	Installation of luminaire	**50.000**		Installation of luminaire for Montevideo
		Professional/ Contractual Services	Signage design and installation	**25.000**		Signage design and installation for Canelones, San José, Colonia and Montevideo
	Activity 2.1.4 Conservation and restoration of vegetation on watercourse margins and coastal wetlands	Local consultants	Studies	**75.000**	**527.625**	Studies for Rocha, Maldonado, Canelones and San José
		Professional/ Contractual Services	Business service for planting and extraction	**418.000**		Business service for planting and extraction for Rocha, Maldonado, Canelones and San José
		Equipment	Strengthening of municipal nursery	**9.625**		Strengthening of municipal nursery for Canelones and San José
		Professional/ Contractual Services	Business service for infrastructure	**25.000**		Business service for infrastructure for Rocha
Output 2.2.	Activity 2.2.1 Redirection and/or adequacy of	Local consultants	Preliminary project study	**13.500**	**1.214.900**	Preliminary project studies (10% of the project) for Rocha, Maldonado and San José
		Technician Worker	Construction Supervisor	**50.400**		Supervisor for each construction site (USD1,200/month)

Outputs	Activities	Budget account description	Type of deliverable (interno)	TOTAL AMOUNT (USD)	Total amount per activity (USD)	Notes and assumptions
	stormwater discharges on the beach	Professional/ Contractual Services	Executive project and environmental impact assessment and construction	**1.151.000**		Executive project and environmental impact assessment and construction for Rocha, Maldonado, Canelones, San José and Montevideo
	Activity 2.2.2 Bioretention	Local consultants	Preliminary project study	**15.000**	**233.600**	Preliminary project studies (10% of the project) for Rocha
		Technician Worker	Construction Supervisor	**3.600**		Supervisor for each construction site (USD1,200/month)
		Professional/ Contractual Services	Executive project and environmental impact assessment and construction	**215.000**		Executive project and environmental impact assessment and construction for Rocha
	Activity 2.2.3 Accumulation ditches, adequacy of channels and buffer ponds	Local consultants	Preliminary project study	**2.500**	**643.300**	Preliminary project studies (10% of the project) for San José
		Technician Worker	Construction Supervisor	**16.800**		Supervisor for each construction site (USD1,200/month)
		Professional/ Contractual Services	Executive project and environmental impact assessment and construction	**624.000**		Executive project and environmental impact assessment and construction for Rocha, Canelones, San José and Montevideo
	Activity 2.2.4 Floodable parks	Local consultants	Studies	**40.000**	**309.400**	Environmental impact assessment. Flora and fauna survey technical report. Trail design and zoning technical report. Lump-sum for the product delivered
		Technician Worker	Construction Supervisor	**14.400**		Supervisor for each construction site (USD1,200/month)
		Professional/ Contractual Services	Business service for planting and extraction	**30.000**		Business service for planting and extraction for Colonia
		Professional/ Contractual Services	Business service for infrastructure	**140.000**		Business service for infrastructure for Colonia
		Equipment	Strengthening of municipal nursery	**80.000**		Strengthening of municipal nursery for Colonia
		Training, workshops, and conference	Training	**5.000**		Training to crews in park maintenance, etc. For Colonia, ten persons.
Output 2.3	Activity 2.3.1 Implementation of a financial mechanism to promote retrofitting in housing and other buildings in flood risk areas	Professional/ Contractual Services	Consulting team 2 part-time project staff	**48.000**	**484.000**	Consulting team 2 part-time project staff (1 architect + 1 social worker) to support the DINAVI team. Includes updating of the ROP that will govern the operation of the financial mechanism.
		Grant	Fund	**420.000**		60 credits of USD7,000
		Local consultants	Consultancy for the diagnostic study on access to credit	**10.000**		Consultancy for the diagnostic study on access to credit. Lump-sum for the product delivered
		Travel	Local land travel	**6.000**		Local travel costs to implement the door-to-door campaign to disseminate the revolving fund in the prioritized sites.

Outputs	Activities	Budget account description	Type of deliverable (interno)	TOTAL AMOUNT (USD)	Total amount per activity (USD)	Notes and assumptions
Output 2.4	Activity 2.4.1 Design and development of sustainable ecotourism project	Local consultants	Sustainable Penino Beach project design. Environmental and social impact study	**60.000**	**509.460**	Sustainable Penino Beach project design. Environmental and social impact study. Lump-sum for the product delivered.
		Technician Worker	Construction Supervisor	**3.600**		Supervisor for each construction site (USD1,200/month)
		Training, workshops, and conference	Community workshop	**1.500**		1 community participation workshop to develop the design of the project for 30 persons.
		Professional/ Contractual Services	Business service for infrastructure	**419.360**		Final design and construction of infrastructure: walkway with stops and rests, restrooms, drinking fountains, storage area.
		Professional/ Contractual Services	Implementation of marketing strategy	**25.000**		Contracting of services for the implementation of a marketing strategy
Subtotal Component 2				**5.340.680**	**5.340.680**	
Output 3.1	Activity 3.1.1 Communication strategy	Local consultant	Social Safeguards and Gender Specialist (SSGS)	**80.640**	**105.640**	Estimated based on an average consultant salary/month. 60% availability for 4 years.
		Local consultants	Communication strategy (with a gender and generational perspective)	**15.000**		Consultancy for the development of a communication strategy. Lump-sum per product delivered
		Local consultants	Consultancy for the development of an awareness campaign on harassment in public spaces	**10.000**		Consultancy for the development of an awareness campaign on harassment in public spaces. Lump-sum per product delivered.
	Activity 3.1.2 Awareness-raising for high-level policy-makers	Training, workshops, and conference	Meetings at ministerial level (including specific gender block and urban planning and gender workshops) + Congress of Mayors (including specific gender block and urban planning and gender workshops). Workshop presentation of gender campaign	**2.620**	**3.820**	1 annual meeting at ministerial level and 1 annual congress of mayors. Catering service: 13 ministries (2 persons per ministry (1 woman and 1 man) and congress of mayors 17 men + 2 women). Catering for 50 people for gender workshop.
		Travel	Local land travel	**1.200**		Travel costs for the specialists that will facilitate the meetings with high-level policymakers.
	Activity 3.1.3 Awareness-raising and training for local technicians	Training, workshops, and conference	Awareness-raising and training workshops (training workshop on urban planning and gender) + workshop presentation of gender campaign by the city hall	**16.200**	**46.300**	2 workshops per site per year. Gender theme included in the general ones, except for the gender specific one. Catering service for 30 people in each of the workshops.
		Professional/ Contractual Services	Editing and printing Operational guides and data sheets	**12.000**		2 guides or data sheets per department (total of 12).

Outputs	Activities	Budget account description	Type of deliverable (interno)	TOTAL AMOUNT (USD)	Total amount per activity (USD)	Notes and assumptions
		Local consultants	Consultancy for the development of the manual on good gender practices in public works.	**10.000**		Consultancy for the development of the manual on good gender practices in public works. Lump-sum per product delivered
		Travel	Local land travel	**8.100**		Van rental for travel to sites (USD150 per day) 9 trips over the 4 years for the consultants that will provide the workshops to train local technicians.
facOutput 3.2	Activity 3.2.1 Develop and socialize a Dissemination Plan and Participatory Strategy by intervention site	Training, workshops, and conference	Design and socialization meeting per site. Monthly meetings for 3 and a half years (except for the months of the outing with neighbors activity 3.2.4).	**57.150**	**81.000**	12 workshops - 2 meetings for the 6 sites, one for design and one for socialization. Catering services for a total of 159 meetings, which will be held in the course of 3.5 years (25 people per meeting).
		Travel	Local land travel	**23.850**		Van rental to travel to sites (USD150 per day) for the professionals that will facilitate the workshops and socialization meetings.
	Activity 3.2.2 Raising awareness and strengthening participation instances to involve young people in adaptation measures	Grant	Grant for young people to monitor adaptation measures	**36.000**	**103.500**	4 young local people per department receives a grant to collaborate with the monitoring of the adaptation measures Costs estimated based on 2 months per year support in each of the department during 3 years. For USD250 each.
		Training, workshops, and conference	Local exchange and awareness-raising activities	**10.800**		20 neighbors per annual visit. It is estimated a total of 3 visits for each department, where the project will cover the catering service.
		Training, workshops, and conference	6 competitions for innovative proposals for young people to encourage ownership of the site	**50.700**		Catering on the day of the award ceremony + team trip + 2000 prize for 4.
		Professional/ Contractual Services	Design and printing of contest results sheets	**6.000**		Contracting of services for the design and printing of contest results sheets. 1 per department
	Activity 3.2.3 Awareness raising and training for communicators	Training, workshops, and conference	Exchange and awareness-raising workshops for communicators on the impacts and risks of CC on the Uruguayan coast	**3.600**	**3.600**	2 annual workshops per department during the first and the final year: catering for 10 communicators per meeting.
	Activity 3.2.4 Awareness and involvement of the local community	Training, workshops, and conference	Workshop with women from civil society who are directly affected by the activities of the REACC Costas project.	**34.800**	**318.000**	1 annual training per department. A total of 30 participants is estimated per workshop.
		Training, workshops, and conference	Reconnaissance outings with neighbors	**104.400**		2 annual training reconnaissance outings on local vegetation, functions and best practices per site. 2 annual workshops/outings with neighbors for practical exchange with civil society per site. 30 persons per training.
		Professional/ Contractual Services	Communication products such as audiovisual material, promotional spots, podcasts, and infographics	**30.000**		2 infographics per department, 3 podcasts per site (1 per year)

Outputs	Activities	Budget account description	Type of deliverable (interno)	TOTAL AMOUNT (USD)	Total amount per activity (USD)	Notes and assumptions
		Grant	Grant for local people for monitoring of adaptation activities (50% women)	**90.000**		10 local people per department receive grants to collaborate with the monitoring of the adaptation measures. Cost estimated based on 2 months per year support in each of the department during 3 years. For USD250 each
		Equipment	Monitoring materials (various tools)	**27.000**		USD4500 per department for monitoring tools needed
		Training, workshops, and conference	6 artistic-cultural activities (would pay for materials, prints, bookstore, frames, canvas)	**21.000**		1500 for necessary material and 2000 for the organization of the artistic or cultural activity in each of the 6 departments.
		Travel	Local land travel	**10.800**		Van rental for travel to sites (USD150 per day) for the-specialists that will provide the workshops and trainings in the 6 different sites.
	Activity 3.2.5 Awareness-raising for MSMEs / productive sectors	Training, workshops, and conference	Exchange and awareness workshops for the tourism and real estate sector on the impacts and risks of CC on the Uruguayan coast and access to information and search for innovative solutions for the diversification of their activities.	**14.160**	**24.160**	2 workshops per site for 15 people each (site rental and catering)
		Professional/ Contractual Services	Special dissemination material for the sector	**10.000**		Dissemination material to be confirmed by the communication strategy and prioritized campaign.
Output 3.3	Activity 3.3.1 Identification of good practices and lessons learned	Local consultants	Case studies, annual reports on challenges and learning achieved	**90.000**	**202.400**	Consultancy for the development of the cases studies. At least 6 studies, 1 per department, and 3 on gender.
		Professional/ Contractual Services	Communication products	**62.000**		4 videos (1 video on the experiences of women who have benefited from the project's actions), 6 learning cards, infographics and audiovisual material for the population.
		Training, workshops, and conference	Reflection workshop for all stakeholders	**47.700**		50 people per the 6 sites once a year for 3 years 300 people total, of whom 50% are women
		Travel	Local land travel	**2.700**		Van rental for travel to sites (USD150 per day) for the professionals that will organize and facilitate the reflection workshops in each of the prioritized sites.
	Activity 3.3.2 Knowledge management exchanges between intendancies	Training, workshops, and conference	Annual exchange workshop for the 6 municipalities + gender departments meeting (travel)	**9.450**	**9.450**	3 technicians per department (plus PMU team) per diem and meals paid (US$150 per trip for mobilization). Once per 3 years
	Activity 3.3.3 Coastal Space Management Congress	Training, workshops, and conference	Congress on coastal space management	**10.000**	**16.000**	For the organization of the congress, taking into account rent of a venue, catering, dissemination of the activity, etc.
		Travel	Local land travel	**6.000**		Transport to the congress for 20 people per site (50% women). Total of 120 people with local transport.

Outputs	Activities	Budget account description	Type of deliverable (interno)	TOTAL AMOUNT (USD)	Total amount per activity (USD)	Notes and assumptions
Output 3.4	Activity 3.4.1 Coordination with educational spaces to incorporate local tourism topics	Local consultants	Support for the design of a curriculum Training of trainers: training for teachers specialized in coastal ecosystems, sustainable tourism, etc.	**20.000**	**30.000**	Consultancy for the development the training. Lump-sum per product delivered
		Grant	10 scholarships to first cohort of sustainable tourism (50% women)	**10.000**		10 scholarships of US$1,000 each.
	Activity 3.4.2 Program to strengthen women's employment in coastal zones	Local consultants	Design of the Program for Strengthening Women's Employment in Coastal Areas	**10.000**	**80.000**	Consultancy for the design of the Program for Strengthening Women's Employment in the Coastal Areas. Estimated as a lump sum per product delivered.
		Training, workshops, and conference	Training for women working on the coast	**60.000**		1 training for 10 women working on the coast per prioritized site.
		Local consultants	Systematization of existing resources, technical assistance.	**10.000**		Cost estimated based on the support of a consultant providing technical assistance for 10 months.
Subtotal Component 3				**1.023.870**	**1.023.870**	
Total components				**8.342.000**	**8.342.000**	
Project/Programme Execution cost	Project coordinator	Local consultant	100% availability	**168.000**		
	Specialist 1 - Adaptation and Environmental Safeguards Specialist (AESS)	Local consultant	100% availability	**134.400**		
	Administrative assistant	Local consultant	100% availability	**96.000**		
	Local travel costs of the PMU	Travel	Local land travel	**12.000**		
	Office supplies	Office supplies	3 computers plus office supplies	**6.800**		
	Financial statement audits	Project financial audit	Financial statement annual audits	**12.000**		
	Administrative costs	Administrative fees	Administrative costs, 51% del PMC	**445.800**		
TOTAL PMC				**875.000**		
Total Project/Programme Cost	**Total project (components + PMC)**			**9.217.000**		

IE management fee

Activities	Budget	Year 1	Year 2	Year 3	Year 4
Inception/closure workshop	40.000	20.000			20.000
Financial administration of project funds and accounting services	160.000	40.000	40.000	40.000	40.000
Translations	31.000	4.000	11.500	4.000	11.500
Project oversight. Include visits to project sites to verify quality of deliverables, and overseeing independent evaluations	150.000	30.000	45.000	30.000	45.000
Ensure compliance with audit requirements	60.000	15.000	15.000	15.000	15.000
M&E Specialist, Independent Mid Term Review, Independent Final Project Evaluation, Inception Report, Final Project Report (PPR, AF Environmental, Social and Gender Policy fulfilment overview by CAF)	262.000	62.000	60.000	50.000	90.000
Technical support and backstopping by personnel from CAF	80.000	20.000	20.000	20.000	20.000
Total	**783.000**	**191.000**	**191.500**	**159.000**	**241.500**

H. Include a disbursement schedule with time-bound milestones.

	Upon signature of Agreement	One Year after Project Start a)	Year 2b)	Year 3	Total
Scheduled date	**Sept 2024**	**Sept 2025**	**Sept 202**	**Sept 2027**	
Project Funds	4.420.830	3.385.060	686.320	724.790	9.217.000
Implementing Entity Fees	191.000	191.500	159.000	241.500	783.000
Total	**4.611.830**	**3.576.560**	**845.320**	**966.290**	**10.000.000**

PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. **Record of endorsement on behalf of the government**[2] *Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:*

Natalie Pareja National Director of Climate Change Ministry of Environment	December 08, 2023

B. **Implementing Entity certification** *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (……list here…..) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

[6.] Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entitie

Ministerio
de Ambiente

Montevideo, December 8, 2023

Letter of Endorsement by Government
Government of Uruguay, Ministry of Environment

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: afbsec@adaptation-fund.org
Fax: 202 522 3240/5

Subject: Endorsement for the Project Increasing socio-ecological resilience in the Uruguayan coastal zone and strengthening the adaptive capacity of its infrastructure: REACC COSTAS", Uruguay.

In my capacity as designated authority for the Adaptation Fund in [country], I confirm that the above project proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in (select country).

Accordingly, I am pleased to endorse the above project "Increasing socio-ecological resilience in the Uruguayan coastal zone and strengthening the adaptive capacity of its infrastructure: REACC COSTAS", Uruguay with support from the Adaptation Fund. If approved, the project will be implemented by Corporación Andina de Fomento – CAF – and executed by Corporación Nacional de Desarrollo de Uruguay - CND.

Sincerely,

Ms. Natalie Pareja
National Director of Climate Change
Ministry of Environment

viridia projects

Consultancy for the structuring and formulation of a Concept Note and Full Proposal to be submitted to the Adaptation Fund for the REACC-COSTAS Project, Uruguay.

Stakeholders Engagement Report

CAF BANCO DE DESARROLLO DE AMÉRICA LATINA

FINAL REPORT | December 4th, 2023

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1. INTRODUCTION

CAF, the Development Bank of Latin America, and the Caribbean, in coordination with the Ministry of Environment of the Oriental Republic of Uruguay, selected the consulting company Viridia Projects to carry out the structuring process of a proposal for the National Project "Enhancement of socio-ecological resilience in the Uruguayan coastal zone and strengthening the adaptive capacity of its infrastructure: Implementation of climate change adaptation measures." This proposal has been prepared for submission to the Adaptation Fund for funding.

As background, it is important to highlight that, although the formulation of this proposal began in February 2023, Uruguay has been conducting a highly participatory process on the coast as part of the implementation of the National Adaptation Plan for the Coast (NAP Costas) for the past 3 years. During this process, the Ministry of Environment has maintained constant communication with departmental governments and other territorial actors. Both the definitions of components and contents of the NAP-Coasts and the creation of knowledge have been developed through interinstitutional coordination concentrated in the National System for Responding to Climate Change (SNRCC) with iterative mechanisms of consultation and adjustment. The work done to develop gender recommendations to be integrated into coastal adaptation measures in NAP pilot sites is particularly noteworthy. Five workshops were held in 2022, convened by the Gender Directorates of the Intendancies, with the support of territorial references from Inmujeres/Mides. With the participation of 61 people (80% women), recommendations were obtained regarding infrastructure, mobility, nature-based solutions, and capacity building with a gender perspective. These have been taken into consideration by this project.

Within the framework of formulating this proposal, consultations were conducted at ten main instances between February and November 2023, with five in the formulation of the Concept Note and the remaining five in the Full Proposal process. These are shown in Figure 1. Throughout the entire consultation process, weekly meetings were held with CAF and government actors.

The process was highly participatory and involved different types of key actors. The objective of this report is to describe this consultation process. Sections 2 and 3 provide more detailed descriptions of these stages.

Figure 1. Stages of the Stakeholder Consultation in the formulation of the Concept Note and the Full Proposal.

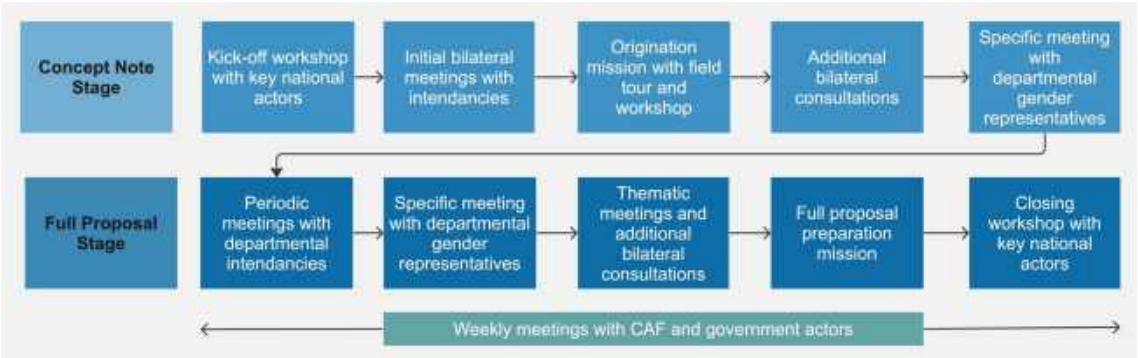


Table 1 lists all the actors consulted throughout the mentioned instances. In total, during the Concept Note stage, 95 individuals were consulted (59% women), including 27 from the national government (78% women), 49 from local governments (53% women), and 19 representatives of associations and the local population (47% women). During the Full Proposal stage, 121 individuals were consulted (64% women), including 24 from the Ministry of Environment and the municipalities (79% women), and 97 representatives of associations and the local population (61% women).

In each stage, the consulting team collaborated with CAF and the Ministry of Environment to identify stakeholders to ensure a broad representation of actors from various sectors involved in the project: government institutions, NGOs, academia, target population, among others. Annex 1 presents the initial mapping of actors that was prepared at the beginning of the formulation process.

Table 1. Stakeholders consulted during the preparation stage of the concept note.

Stakeholder/ type of stakeholder	Detail	
Ministry of Environment	DINACC - National Directorate of Climate Change Coastal and Marine Management Department Sustainable Development Promotion Division DINAGUA - National Water Directorate	DINABISE - National Directorate of Biodiversity and Coastal Space. DINACEA - National Directorate of Environmental Quality and Assessment INUMET - Uruguayan Institute of Meteorology
Ministry of Defence	SOHMA - Navy Oceanography, Hydrography and Meteorology Service	
Ministry of Housing and Territorial Planning	DINAVI – National Housing Directorate	
National Government	SINAE – National Emergency System	
Departmental Governments	Intendancy of Colonia Intendancy of San José Intendancy of Montevideo	Intendancy of Canelones Intendancy of Maldonado Intendancy of Rocha
Municipal Governments	La Paloma municipality Juan Lacaze municipality Parque del Plata municipality	La Floresta municipality Ciudad del Plata municipality Montevideo municipality
Academic Institutions	IMFIA - Institute for Fluid Mechanics and Environmental Engineering	
Representatives of the local population	San José: Fundación Tierra de Humedales/ Vecinos Voluntarios Montevideo: Vecinos y vecinas; Centro Cultural Oeste; Organización Vecinxs por la Playa. Rocha: Acción vecina La Paloma; Ecoparque costa azul; Unión grupos de la costa.	Canelones: Ecoparque; Comisión de vecinos/as de Laguna del Cisne; Liga de Fomento La Floresta; Asociación de vecinos Las Toscas. Maldonado: Organización Vecinos de Playa Verde. Residents of the 6 municipalities.
Executing Entity	CND (Executing Entity of the Binational Project – Adaptation Fund)	Coordinator of the Argentina-Uruguay Binational Project

With all these actors, it was possible to validate the threats and impacts of erosion and coastal flooding exacerbated by climate change, as well as non-climatic issues present in each department. Institutional strengthening needs were identified, concluding that work on risk prevention, mainstreaming gender perspective, environmental and social safeguards management, and monitoring the impacts of adaptation measures are essential. Various adaptation measures were explored, consistently promoting an ecosystem-based adaptation approach.

Discussions with representatives of the local population provided a better understanding of the impacts of urbanization, dependence on tourism as a livelihood and local income source, improper practices related to waste and sanitation, beach access, and the effectiveness of past beach recovery and drainage improvement measures. Once the measures were prioritized, technical and budgetary details were worked on. Thanks to these numerous joint analyses and collaboration between technical teams and the reality of the territory, the measures included in this proposal were defined.

These exchanges informed the development of the Environmental and Social Management Plan, which includes Guidelines for Dissemination and a Participatory Strategy aligned with the provisions of the Adaptation Fund's Environmental and Social Policy. Consultations were also conducted with organizations and agencies specializing in gender matters to validate activities and design the Gender Action Plan that guides activities based on the specific gender-related needs identified.

2. DESCRIPTION OF THE CONSULTATION PROCESS FOR THE CONCEPT NOTE PREPARATION PHASE

The following sections describe the different consultations conducted by the consulting team and the key results of each.

2.1 KICK-OFF WORKSHOPS WITH KEY NATIONAL STAKEHOLDERS

Three initial workshops were held: one with DINACC of the Ministry of the Environment, another with other areas of the Ministry of the Environment that would be involved in the proposal, and another with the Departmental Governments. CAF was present in all of them.

2.1.1 KICK-OFF WORKSHOP WITH THE DINACC

On February 22, 2022, the first coordination meeting was held between CAF, DINACC (Ministry of Environment) and the consultant team. The project timeline was reviewed, and consultations were planned. DINACC shared information on the previous work done with the NAP Costas Working Group and the consultation schedule for the processes being developed in parallel. The need to incorporate the validation of the local population was discussed and visits to the territory were agreed upon. The joint analysis of the sites to be prioritized was initiated. This is the beginning of a prioritization process that will be finalized in April. The key stakeholders to be involved were also discussed, after which the consulting team drew up a first mapping of key stakeholders. This is presented in **Annex 1.**

2.1.2 KICK-OFF WORKSHOP WITH AMPLIFIED MINISTRY OF ENVIRONMENT

On March 3, the start of the process was extended to some of the areas of the Ministry of Environment that would be directly involved throughout the process. These were the Department of Coastal and Marine Management and the Division for the Promotion of Sustainable Development (Planning) and ESIA (later, DINAGUA would also be involved as part of the follow-up team for the formulation process). The scopes, prioritization criteria of the Adaptation Fund and information needs were reviewed jointly.

2.1.3 KICK-OFF WORKSHOP WITH DEPARTMENTAL GOVERNMENTS

On March 7, 2023, the project was launched with the representatives of the Departmental Governments, the Intendancies. The participants of this virtual session are listed below. Thirty-three people (63.3% women) from national and departmental governments and CAF participated in this meeting.

Table 2. Participants of the Kick-Off Workshop with Departmental Governments.

Ministry of Environment – National Directorate of Climate Change (DNCC)	CAF - Climate Action and Positive Biodiversity Management
• Mariana Kasprzyk – Climate Change Directorate. • Mónica Gómez, Coordinator of the NAP Costas • Macarena Mo, Climate Finance and Environmental and Social Safeguards Technician. • Mario Jimenez – DINACC • Mariana Ríos, Director of the Biodiversity Area – Coastal Management Ministry • Carolina Segura – Directorate of Coastal and Marine Management • Paloma Nieto – EAE –Strategic Planning Management • Marisa Hutton– Directorate of Environmental Impact Assessment	• Carolina Cortés, Senior Executive, Climate Change • Daniela Yáñez, Officer, Directorate of Climate Action and Environment. • Gianna Gregori • Luciana Fainstain – CAF
Departmental Governments	
• Sumila Detomasi – Intendancy of Canelones, DGGA.	• Gabriel González – Intendancy of Colonia – Planning and Heritage Area.
• Gerardo Vanerio – Atlántida – Intendancy of Canelones – Directorate of Environmental Management	• Jimena Risso – Intendancy of Montevideo
• Pablo García – Intendancy of San José	• Josefina Villarmarzo – Intendancy of Canelones.

• Carlos Mikolik – Intendancy of Montevideo	• Adriana Bentacur – Municipality A - Climate Change Group.
• Andrea Fernández – Intendancy of san José – Land Use Area.	• Andrea de Nigris – Intendancy of Montevideo
• Jimena Risso – water quality in Montevideo, environmental management system of beaches	• Mónica Facio – Intendancy of Maldonado. Territorial Planning, Urban Planning Directorate together with Natalia di Paula and Soledad
• Federico Steffenino – Municipality of Maldonado – Directorate of Environment.	
Viridia Projects (consulting firm)	
• Laura Abram Alberdi, Project Leader • Soledad Moreiras, Specialist in structuring climate projects and MEL • Lucía Bergós – Specialist in coastal management and ecosystems	• Guadalupe Meroño – Specialist in Environmental and Social Safeguards • Sofía Reibel – Economist • Karol Sánchez – Civil Engineer

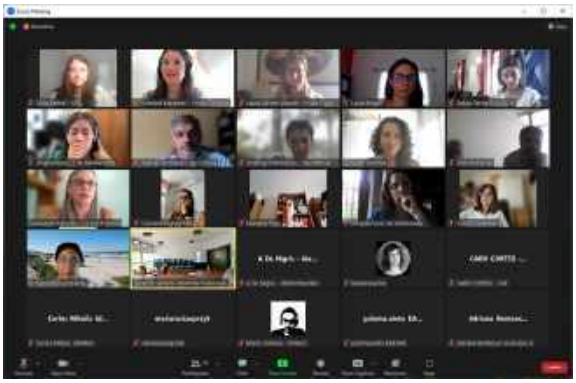
The meeting's primary objective was to present the consultancy's goals and expected deliverables, along with the proposed timeline, approach, methodology, and activities for developing the concept note formulation. These elements were seamlessly integrated into a structured timeline, highlighting the various initiatives contributing to the advancement of the National Adaptation Plan (NAP) for Coastal Areas by the National Directorate for Climate Change (DINACC).

During the session, there was an informative exchange with stakeholders, focusing on current and planned investments in coastal areas. Lessons learned from similar processes were shared, enriching the ongoing formulation efforts.

Participants expressed a positive reception to the proposal, emphasizing the importance of focusing on coastal areas. The next steps include reaching out to Intendancies for bilateral meetings, and an upcoming mission scheduled for April was announced to further drive the consultancy's objectives.

The interview guides are included in **Annex 2** and the summary of this meeting in **Annex 3.**

Figure 2. Screenshots of the meeting with departmental governments.



2.2 WEEKLY MEETINGS WITH MINISTRY OF ENVIRONMENT AND CAF

From the beginning of the formulation of the project formulation process, weekly meetings were held with CAF, the extended team of the Ministry of Environment (DINACC, Department of Coastal and Marine Management, DINAGUA, SEA) and the consultant team. These meetings have allowed for planning, joint reflections, and progress in the structuring of the project at a good pace.

In addition to these weekly meetings, additional meetings were held when it was necessary to delve deeper into specific topics (e.g., to develop the socioeconomic and ecosystem vulnerability analyses, separate meetings were held with DINAGUA, DINABISE, Department of Coastal and Marine Management, among others).

2.3 INITIAL BILATERAL MEETINGS WITH LOCAL GOVERNMENTS

During the months of March and April 2023, initial bilateral meetings were held with the six municipalities to delve into the reality of each of the territories. The format of these meetings varied: in the case of Colonia, it

was virtual and in the case of the other Intendancies it was hybrid, since, although some of the teams connected virtually, there were always DINACC staff, and in some cases, the Viridia team, who travelled to the site. The initial meeting with the Municipality of Canelones could not take place with the consulting team (but with DINACC) and was transferred directly to the time of the meeting during the origination mission.

Figure 3. Photographs of a hybrid meeting at the City Hall (left) and a tour of Playa Penino (right) in San José.

During these meetings, efforts were made to focus on adaptation solutions to the main impacts of climate change on the coast, which are flooding and coastal erosion, caused by sea level rise and an increase in the frequency and intensity of extreme events; and to explore which sites could be prioritized for interventions under Component 2 of the project. The order of topics is summarized below, although it can be seen in detail in the interview guides for these meetings presented in Annex 2. In addition, the meeting minutes from these initial meetings are presented in Annex 3.

- Discussion on site prioritization and alignment with Adaptation Fund eligibility criteria.
- Past, current, and planned projects.
- Population and ecosystem vulnerability.
- Lessons learned.
- Communication channels with the population.
- Inter-institutional articulation spaces.
- Access to financing.

2.4 ORIGINATION MISSION WITH FIELD TRIP AND WORKSHOP

The origination mission aimed to work directly with the relevant stakeholders for the Project formulation process to obtain the necessary information for the description of the context, the vulnerability analysis, the identification of adaptation measures, the preliminary identification of environmental and social risks, and an approach to gender issues; to provide a first direct vision of the territory to the formulation team, corresponding to the Concept Note stage.

The following is the planning of the mission week, which took place from April 18 to 21, 2023. On behalf of the formulation team, Carolina Cortés (CAF), Mónica Gómez (DINACC), Carolina Segura and Mariana Ríos (Coastal and Marine Management Division), Guadalupe Meroño, Lucía Bergós and Karol Sánchez (Viridia Projects) participated in all the week's programming. At different times, other members of the Ministry of Environment teams joined the group. Finally, the workshop was widely attended by national and departmental governments, academia, and implementing and executing entities.

Table 3. Concept Note Origination Mission Itinerary.

	Tue April 18th	Wed April19th	Thu April 20th	Fri April 21th

	Visit Site 1: Montevideo	Visit Site 2: Rocha	Visit Site 3: Canelones	Workshop day: Montevideo
Morning	10:30 Presentation in the Intendency of Montevideo	Transfer of the delegation from Montevideo to La Paloma 11:00 Meeting with officials from the Intendancy.	Movement of the delegation to Atlántida 10:00 Meeting with officials of the Intendancy and the Coastal Committee in Atlántida.	Movement of stakeholders to Montevideo. 12:00 Lunch with workshop participants.
Afternoon	13:00 Visit and group interview with representatives of organizations linked to Playa del Cerro.	13:30 Tour of La Paloma and La Aguada.	13:00 Group visit and interview with representatives of organizations linked to the Arroyo Solís Chico.	13:00 Workshop and proposal origination with expanded NAP Costas Working Group.

The following is a description of the activities carried out during the tour (April 18 to 20) and during the workshop (April 21).

• FIELD VISIT

During April 18, 19 and 20, visits were made to 3 prioritized sites.

The objective of these visits was to contact the local population to validate climate problems and discuss possible adaptation measures, environmental, social and gender risks. It is proposed to discuss the feasibility of the measures, and to find out what other actions are being carried out by civil society that have not been mapped. It is necessary to show the Adaptation Fund that the information gathered with the stakeholders is considered in the formulation of the Concept Note.

Figure 4. Photographs of visits to prioritized sites in Canelones (top), Rocha (center) and Montevideo (bottom).

In Montevideo and Canelones, the team was able to meet with representatives of the local population and local organizations. The attendance lists are presented in Annex 4.

The following table lists the institutions and organizations that were interviewed in each location.

Table 4. Institutions and organizations present on the tour.

Montevideo	Rocha	Canelones
Municipality of Montevideo Intendancy of Montevideo Organization Vecinos x la Playa Centro Cultural 11 Cultural Oeste Independent neighbours DINABISE DINACC CAF	Intendancy of Rocha Department of Coastal and Marine Management DINACC CAF	Municipality of La Floresta Municipality of Atlántida Municipality Parque del Plata Ecoparque Organization Comisión Vecinos/as de la Laguna del Cisne / Solís Chico LFLF Liga de Fomento La Floresta Intendancy of Canelones Department of Coastal and Marine Management DINACC CAF

The main points discussed at each location were:

Table 5. Main points discussed at each prioritized site.

Montevideo	Rocha	Canelones
• Presence of grass on the beach. • Presence of storm drains. • Importance of universal access to the beach. • Presence of settlements in close proximity. • Possible adaptation measures.	• Ownership of land on the coast. • Damage and loss of beaches. • Urbanization in wetland areas. • Vulnerability of ecosystems. • Impact on the population that lives from tourism. • Current and planned projects in this area. • Actions that are planned to be carried out with other funds such as the GCF. • Influence of the Port in La Aguada. • Possible adaptation measures.	• Movement of sandbars at the mouth of the Solís Chico Stream • Erosion in La Floresta. • History of relationships with neighbors. • Background of works carried out. • Sensitive ecosystems: crabs and others. • Sports and tourist use. • Importance of democratic use of the beach. • Possible adaptation measures.

Figure 5. Photograph of exchanges with representatives of the local population in Montevideo.

- WORKSHOP

On April 21, the workshop for the origination of the REACC Costas proposal was held with the NAP Costas Working Group. The objective of the workshop was to work with the NAP Working Group on the fundamental bases of the proposal to the Adaptation Fund, so that all participants would have a good understanding of the requirements of the funding source, the climate rationale of the project and the feasibility of the measures and possible implementation arrangements.

A total of 52 participants (65.4% women) participated in the workshop, of which 44 were face-to-face (70.5% women) and 8 virtual participants (38% women). The institutions represented were CAF, DINACC, CND, IMFIA, DINACEA and the six intendancies.

The Powerpoint presentation that guided the meeting is included in **Annex 5.**

Table 6. Workshop Agenda.

Time	Activity
13:00-13:20	**Welcoming remarks** • François Borit, CAF Representative in Uruguay: CAF in Uruguay and as implementing entity of the FdA (replaced by Gianna Gregory). • Natalie Pareja, National Director of Climate Change.
13:20-14:20	**Update on the progress of the consultancy** • Mónica Gómez, NAP Costas Coordinator: Introduction. • Carolina Cortés, CAF Senior Executive: The Adaptation Fund • Viridia Projects – Formulation process: activities, project logic, sites, adaptation measures.
14:20-15:20	**Work in groups by intendancy** Proposal for group work by Intendancy (Zoom rooms): 1. Digital Whiteboard Work (Miro) 2. Working on Activity Sheets 3. Discussion on adaptation experiences to share.
15:20-16:10	**Plenary**: Presentations on Group Conclusions: • Adaptation measures for prioritized sites. • Positive or negative experiences, to share with the other attendees.
16:10-16:30	**Open Comments and Consultations**
16:30-17:00	**Conclusion and closing.**

The following are some of the key points of the various interventions in the first two sessions of the Workshop:

- DINACC seeks to submit solid documents to the Adaptation Fund and implement the most urgent measures. It will promote joint work with the Intendancies.
- The NAP Costas has organized access to the different possible climate financing. The NAP Costas Five-Year Plan involves advancing activities and strategies, of which this project is part along with the initiatives.
- CAF highlights the importance of democratizing the use of beaches. It is necessary to argue appropriately the climatic and social rationality. CAF brings lessons learned and has already worked with CND and the Government of Uruguay.
- The measures do not have to be only gray infrastructure but (preferably) green infrastructure, training, monitoring, management, finance, community-based adaptation.
- Possible interventions and approaches to be incorporated (gender, generations, environmental and social safeguards, ecosystem-based adaptation) were presented.

Figure 6. Screenshot of one of the moments of CAF's presentation.

At the beginning and end of the workshop, they were asked how much they thought they knew about appropriate adaptation measures for the prioritized sites, what other Intendancies are doing to prepare for the expected impacts of climate change, and what they know about the Adaptation Fund. The responses obtained show that participants perceived that they had increased their knowledge on all these topics.

Figure 7. Answer on knowledge, at the beginning and at the end of the workshop (Mentimeter).

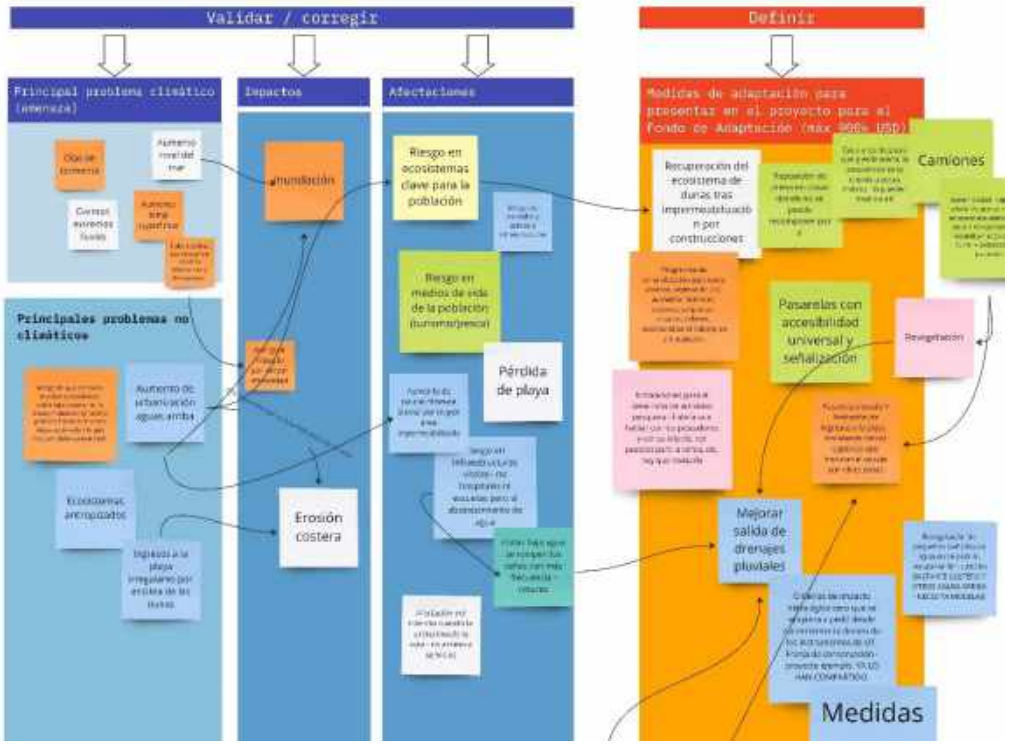
Another key question was about the barriers to action on adaptation in coastal Uruguay. There was strong agreement on lack of funds as the main barrier, followed by lack of institutional arrangements. The responses to the Mentimeter survey are presented in **Annex 6.**

Figure 8. Screenshot of the answers to the question about what the barriers to adaptation on the coast of Uruguay (Mentimeter) are.

For the group work, the participants were divided into 6 groups, one for each Municipality. In each group, a Viridia consultant helped to facilitate the exchange and manage the digital whiteboard. The instructions were:

- Validate the most relevant threats and impacts for the prioritized site and define adaptation measures.
- Link impacts with adaptation measures with arrows.
- Once the work on the Miro was completed, they were asked to answer a QUESTIONNAIRE INSTITUTIONAL CAPABILITIES, complete a FACT SHEET on possible adaptation measures and think about the EXPERIENCE (good or bad) to share.

Figure 9. Screenshot of the work done on the digital whiteboard with the teams of the Municipalities (in this case, Maldonado).



Finally, each quartermaster's office reported the conclusions of the group work and shared a good or bad experience with the other participants. Some of the most important recommendations were:

- Listen to the neighbors, to the people. Incorporate them from the beginning of the interventions.
- Need to look for new ways to avoid vandalism.
- Need to seek guidance for handling situations related to settlements.
- Need to better evaluations / find alternatives to breakwaters.

They recognized good results related to:

- Use of catchment fences and reconstruction of dune chains.
- Revegetation.
- Sanitation.
- Rain gardens.

2.5 ADDITIONAL BILATERAL CONSULTATIONS

Following the origination mission, between May and June 2023 it was necessary to continue with some bilateral consultations that took place virtually. The institutions and organizations that could be consulted were:

- Organization Organización Playa Verde (Maldonado)
- Foundation Fundación Tierra de Humedales (San José)
- Intendancy of Montevideo (Montevideo)
- Municipality of La Paloma (Rocha)
- Municipality of Juan Lacaze (Colonia)

Figure 10. Screenshot of the interview with the organization *Organización Playa Verde* (Maldonado).

2.6 MEETING WITH DEPARTMENTAL GENDER REFERENCES

A meeting was convened with the departmental gender focal points to present what progress has been made so far, how the proposal is being structured, and what Viridia has identified as key aspects to be considered from a gender perspective (based on the consultation processes and reports generated within the framework of the NAP Costas).

The intention was also to take advantage of the opportunity to establish contact with the referents in preparation for the Gender Analysis stage and the Action Plan in accordance with the measures and interventions of the project.

Figure 11. Screenshot of the meeting with departmental gender referents.

Participants included representatives from five of the six municipalities (all except Colonia), as well as gender specialists from DINACC, CAF and the consulting firm.

They shared how gender issues are being addressed in the formulation of the concept note, the data sources being considered, the gender strategies and the gender co-benefits, component by component. Each point was discussed, and next steps were reviewed with the Adaptation Fund.

3. DESCRIPTION OF THE CONSULTATION PROCESS OF THE FULL PROPOSAL PREPARATION STAGE

The development of the Full Proposal took place between September and December 2023. This section describes the stakeholder engagement activities carried out during this period.

3.1 REGULAR MEETINGS WITH THE DEPARTMENTAL INTENDANCIES

Regular meetings were held to define the activities. The consultant team prepared validation and information survey forms adapted for each of the municipalities. On September 12, the teams from the 6 municipalities were convened to explain how the forms work and to define the next steps. The consultant team followed up with these teams over the following weeks, which were key to advancing the work prior to the mission to the territory.

3.2 SPECIFIC MEETING WITH DEPARTMENTAL GENDER REFERENTSDE

A meeting was convened with the departmental gender focal points to present how the actions of the Gender Action Plan are being considered. The meeting was attended by the departmental gender focal points, the Ministry of the Environment's gender focal point, CAF's gender focal point, and Viridia Projects' gender focal point and coordinator.

Figure 12. Screenshot of the second meeting with departmental gender referents.

The main comments were:

- Importance of having a specific budget for the actions of the Gender Action Plan.
- Emphasis on having a gender expert hired for the implementation of the project, while also ensuring coordinated governance with the municipalities.
- Interest in incorporating cross-cutting actions, such as awareness-raising campaigns against harassment in coastal areas.
- Follow-up with an understanding of the work sheet.
- They are interested in how to work with young people.
- Regarding dune restoration, there are experiences in the coast of Canelones with community nurseries and planting in the dunes, with the communities.

3.3 THEMED MEETINGS

The following are the thematic meetings held between September 20 and November 8 virtually with: Intendency de Maldonado on Hydrobiological Safeguards, the Ministry of Tourism, the group Unión Grupos de la Costa and the Institute of Fluid Mechanics and Environmental Engineering to discuss various topics of interest for the formulation of the complete Project Proposal. Representatives of CAF, the Ministry of the Environment, DINACC and DINABISE also participated in these meetings, in addition to the consultant team.

The minutes of the meetings are attached as Annex 3.

The following is a summary of these meetings and a summary of the main topics discussed and conclusions reached.

3.3.1 MEETING ON HYDROBIOLOGICAL TRUSTEESHIPS

On September 20, a meeting was held with the Municipality of Maldonado and the Ministry of the Environment to advance the definition of the inclusion of Hydrobiological Safeguards in the project.

The purpose of the meeting was to understand what Hydrobiological Safeguards are, how they differ in each department and how they should be applied depending on the site and the activities carried out there.

The main points discussed were:

- Background and development process of the Hydrobiological Safeguards: existing or necessary studies, analysis, and definition of the areas of influence, measures, and control systems.
- Request for definition of the areas of influence and key mechanisms to be considered according to each course and by department. Depending on the activities is the type of action to be implemented: conservation or regeneration.
- Possible complementary projects and definition of concrete actions in the field.
- Needs to carry out the implementation of the trusteeships once they have been defined.
- Request for determining budgets considering studies, implementation of protection measures, restriction measures and control mechanisms. As well as according to type of area (rural / urban).

3.3.2 MEETING WITH THE MINISTRY OF TOURISM

On September 26, a meeting was held with the Ministry of Tourism, with the participation of the Ministry of the Environment (DINACC) and the consulting team. The purpose of the meeting was to learn about the current situation between the activities carried out by the Ministry of Tourism and climate change.

The main points discussed during the meeting were:

- Progress of the Concept Note and information on the National Adaptation Plan for the coastal zone (NAP).
- Problems of the current mechanisms for communicating climate warnings and their respective impacts on tourism. A proposal was made to incorporate a warning and communication system that would allow timely action to reduce the climate impact on tourism activities.
- Proposal to improve the system for measuring-quantification and analysis of damages and losses that climate change inflicts on tourism by establishing a defined model.

3.3.3 MEETING WITH THE UNIÓN GRUPO DE LA COSTA NETWORK

On October 3, a meeting was held with Unión Grupos de la Costa, with the participation of the Ministry of the Environment (DINACC), DINABISE and the consulting team.

The purpose of the meeting was to present the functioning of the network, the evolution over time of the groups involved and the activities carried out by the network.

The main points discussed were:

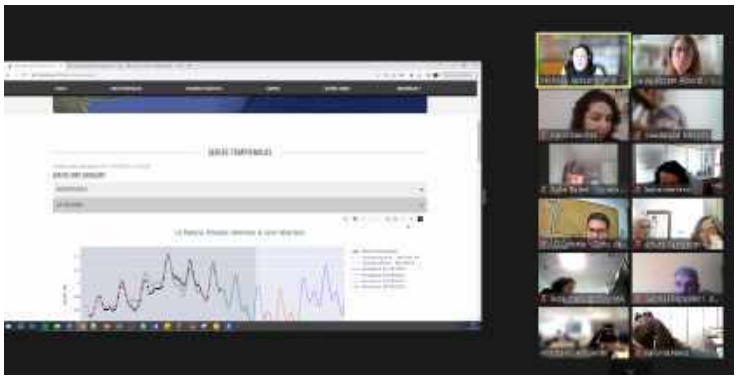
- Composition of the network: Integrated by 70 groups (40 of Argentine origin that have been incorporated in the last 3 years) with the participation of organizations, neighborhood commissions, scientists, and the national association of park rangers, among others.
- Functioning of the network: They have a web page and carry out communications and exchanges through network groups where they maintain a horizontal relationship with each other. Decisions are made during meetings and are guided by specialized technicians and scientists.
- Problems identified:
    - Conflict of interest in EIAs, since those who finance and manage them have driving interests in these territories. Lack of training of those who interpret such assessments.
    - Legislative conflict where interested parties are left out of the decision-making process. It is proposed to change the law or include a procedure in the coastal strip in order to be able to consult with interested parties.
    - Lack of organization in the authorization corroboration mechanism. This is carried out by the prefecture, currently by telephone.
- Conclusions and proposals:
    - Implementation of a mechanism for early access to information.
    - Training for prefecture and police personnel to strengthen the process of corroboration of authorizations for activities in the area.
    - Establish a participation structure modeled after Montevideo's Beach Committee.

3.3.4 EARLY WARNING SYSTEM (EWS) MEETINGS FOR JUAN LACAZE

Throughout the preparation of the proposal, there were several instances of discussion about the possible EWS in Juan Lacaze. Two of the most important technical meetings are summarized below.

On October 2, a meeting was held with the Institute of Fluid Mechanics and Environmental Engineering, with the participation of the Ministry of Environment and the consulting team. The purpose of the meeting was to learn about the current monitoring measures and models, as well as the key improvement objectives to be developed.

Figure 13. Screenshot of the meeting with the Institute of Fluid Mechanics and Environmental Engineering and the Ministry of the Environment.



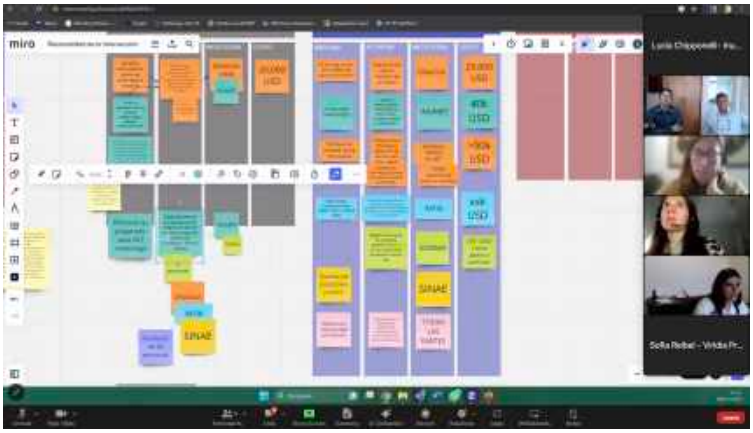
The main topics discussed were:

- Possibility of improving the scale of the models generated by IMFIA. Current situation in the different departments, variables needed and accessibility to measurements.
- Current operation of precipitation measurements and meteorological forecasts. Communication system for precipitation, forecasts and alerts.
- Definition of security levels by the binational. Consultation process with neighbors in the area.
- Background of work plans with the community. Intention to continue with the mechanisms of communication with the population: migrate from the use for land use planning to the warning systems that are currently required.
- Need for stakeholder mapping and flood map.

On November 8, the second thematic meeting was held to determine the needs of the Early Warning System (EWS) to be implemented in Juan Lacaze.

The objective of the meeting was to advance in the understanding of the gaps, activities, institutions, and costs of the components of the Early Warning System to be developed. The meeting was attended by a total of 10 participants of which 7 belonged to the different institutions involved in the development of the EWS: INUMET, DINAGUA, SOHMA and IMFIA; CAF and the consultant team were also present.

Figure 14. Screenshot of the second meeting for the development of an EWS in Juan Lacaze.



The main points discussed were:

- Validation of the need and feasibility of carrying out the EWS. Validation of the area chosen as a dual alert point (intersection between hydrological phenomena and sea level rise).
- Definition of the location of the monitoring station for Juan Lacaze. Definition of the characteristics and costs of the station and its sustainability over time.
- Institutions involved in each of the components and coordination among them for the management of the EWS: SINAR as temporary responsible for the management with the possibility of relocation.
- Gaps, activities, and budgets on climate risk knowledge.
- Gaps, activities and budgets on detection, monitoring, analysis and forecasting of hazards and their possible consequences.
- Gaps, activities and budgets on preparedness and response capabilities.
- Gaps, activities and budgets for communication and dissemination of warnings.
- Costs and quantity of equipment, training, and consultancies to be budgeted.

A consultation meeting has been held with SINAE to deepen the understanding of the needs for the implementation of the EWS. It was concluded that it is essential to include contingency plans and to develop an articulated strategy between governmental levels in order to establish a coordinated and effective warning system. The need to include an impact assessment that can be cross-referenced with meteorological data has also been mentioned, allowing the construction of an integrated system that can then be replicated at the national level.

3.4 PREPARATION AND VALIDATION MISSION OF THE FULL PROPOSAL

Within the framework of the mission for the formulation of the Full Proposal, CAF and the consultant team was received by the Ministry of Environment to conduct meetings and workshops with the parties involved, as well as situation surveys and visits to the prioritized sites. During a week and a half, between October 9 and 17, meetings were held with the 6 municipalities involved in this project, with various organizations and neighbors of vulnerable areas within these departments, as well as workshops with the population on adaptation measures. On behalf of the formulating team, the following participated in the mission: Angélica Pino and Martha Castillo (CAF), Mónica Gómez, Laura Marrero (DINACC), Carolina Segura, Tiago Pérez and Mariana Ríos (Coastal and Marine Management Division), Guadalupe Meroño, Lucía Bergós, Karol Sánchez, Laura Abram Alberdi and Soledad Moreiras (Viridia Projects). At different times, other members of the Ministry of Environment teams joined the group.

The structure of the visits was made considering that the population had been offered to hold the workshops starting at 6:00 pm to facilitate equal participation of men and women. Please refer to Annex 7 of this report, which contains the photographic records of the visits. The following table shows a summary of the activities carried out during the week.

Table 6: Mission Agenda

	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.
	9th	10th	11th	12th	13th	14 th	15 th	16th	17th	18th
10 a.m.	Rocha La Paloma – Meeting Local Government	Maldonado Piriápolis – Meeting Local Government	Canelones Atlántida – Meeting Local Government	San José Playa Penino – Meeting Local Government	Montevideo Edificio municipal – Meeting Local Government				Colonia JL – Meeting Local Government	Montevideo Internal REACC Costas workshop
2 p.m.										
4 p.m.	Tour of pilot site	Tour of pilot site	Tour of pilot site	Tour of pilot site	Tour of pilot site				Tour of pilot site	
6 p.m.	Civil Society Workshop Hybrid modality	Civil Society Workshop Hybrid modality	Civil Society Workshop Hybrid modality	Civil Society Workshop Hybrid modality	Civil Society Workshop Hybrid modality				Civil Society Workshop Hybrid modality	

The proposed activities have been repeated in the different departments but maintain the same 3-stage structure: In the mornings, technical work sessions were held with the local governments to review budgets, review activities, and establish priorities for action and agree on the next steps. After noon, a tour of the prioritized site was conducted in each of the localities and between 5 and 6 p.m., depending on the location, the meetings with civil society began with the aim of publicizing the activities and understanding the population's vision of the proposal. The latter will be detailed below:

- Day 1 – Monday October 9th, 2023 - La Paloma, Rocha

Attended by 18 participants (71% women).

Main points discussed and conclusions:

- Need to implement effective monitoring that coordinates the activities of all the ministries involved in the area.
- Participation of the population in the project consultation and decision-making process.
- Sensitization and development of tools that can be incorporated by departmental managers.
- Analysis of the impact of activities in residential areas and their consequences on the coast. Proposal to incorporate a bioretention and rainwater harvesting system. Mapping and consultation with stakeholders to move forward with the project.
- Measures to be implemented to ensure ecosystem health and prevent biodiversity loss: Good practice guidelines and their dissemination.

- Importance of articulating projects with gender issues to ensure women's participation in decision making.

- Day 2 – Tuesday October 10th, 2023 – Piriápolis, Maldonado

Attended by 28 participants (57% women)

Main points discussed and conclusions:

- The approval, planning, execution, and monitoring processes for coastal and upstream projects were discussed.
- The need to increase citizen participation and make it binding. They wish to formally participate in the projects and propose the creation of a civil society that would oversee the execution of certain activities or a component in the projects that would prioritize their participation.
- Implementation of a concrete methodology for the process of denouncing activities that negatively impact native territories, flora, and fauna.

- Day 3 – Wednesday October 11th, 2023 – Atlántida, Canelones

Attended by 10 participants (60% women)

Main points discussed and conclusions:

- Request for the integration of isolated problems as a joint environmental problem. Coordination between activities and organizations to strengthen efforts and achieve effective results against the problems.
- Concern about the increase of storms and their possible consequences on the promenade. Proposal to implement measures that have worked very well in other areas, such as catch fences.
- Request for measures to control access to the beaches and control of the activities carried out.
- Importance of disseminating information to raise awareness. Proposal to increase signage and generate groups and workshops with a gender perspective and in schools. It is proposed to create a group of environmental promoters and neighbors who work to raise awareness and disseminate information on environmental care.
- Involvement of different stakeholders. It is proposed to create a neighborhood commission that can exercise social control during the planning and execution of the projects.
- Increase measures/workshops/programs that strengthen community capacities.

- Day 4 – Thursday October 12th, 2023 – Playa Penino, San José

Assisted by 9 participants (56% women)

Main points discussed and conclusions:

- Concern about the lack of knowledge on the part of the inhabitants about the importance of living in a natural reserve (wetland) and the need to protect the area and regulate activities. Need for load studies of the area and regulation to ensure sustainable exploitation of the resources.
- Subsistence activities (fishing, harvesting, and logging) that put the wetland area at risk. Lack of information, regulation, and alternatives for these groups. Presence of vandalism of implemented measures.
- Proposal to facilitate access to information, signage, and the development of tourism activities that provide new opportunities for residents.
- Importance of the junqueros in ecosystem maintenance. They are the closest thing to an environmental protection group since the resource is their livelihood. Proposal to formalize employment.
- Ecotourism as the main form of tourism, including training for tourist guides in bird watching and information on wetlands. Tourism today is external, and this possibility is lost.
- Proposal for synergistic work of handicraft activities (mainly women), fishing and tourism.
- Involvement of the government, municipalities, and the Ministry of the Environment, DINACC and DINABISE, as well as neighbors and local organizations/institutions to generate an environmental roundtable and concrete and coordinated projects that can be sustained over time.

- Day 5 – Friday October 13th, 2023– Playa del Cerro, Montevideo

Assisted by 16 participants (63% women)

Main points discussed and conclusions:

- Current state of the drains, consequences of sand removal and possible solutions to be implemented in the future.
- Five-yearly meetings between neighbors, who are organized through the networks.
- Effectiveness of the dissemination of information through billboards in schools.

- Day 6 – Thursday October 17th, 2023- Juan Lacaze Colonia

Assisted by 16 participants (56% women)

Main points discussed and conclusions:

- Current situation of the beaches: Accumulation of sand and loss of vegetation due to this. Ramps for access to the beaches but flooding of houses (up to 1m high) with storms. Request for an increase in natural defenses to reduce the impact of flooding (geotextile mesh and vegetation).
- Proposal for a park design to protect vegetation and increase runoff by signaling trails. Importance of making it a pedestrian area that generates sustainable, inclusive and gender-sensitive mobility.
- Proposal of involvement from the beginning of the projects by neighborhood groups and environmental organizations. Complementation of projects with existing land-use plans.
- Increased control and supervision of activities carried out in these areas.
- Training of workers who carry out projects and/or use machinery in the area.
- Existence of a study carried out in Cañada Blanca where the impact zone was studied. Participation of various entities such as DINAGUA and SINAE.
- Importance of incorporating the Willow Creek into the projects since it used to serve as a river outlet to prevent flooding.
- Proposal for a community radio system to disseminate information and alerts.

- Day 7 – Wednesday October 18th, 2023- Internal REACC workshop - Montevideo

The closing workshop held on Wednesday 18 in Montevideo was attended by 23 participants (95.56% women). The detailed list is presented in **Annex 4** and the presentation that guided the workshop in **Annex 5.**

During the closing workshop, concerns, and measures to be implemented in each locality were discussed, as well as cross-cutting issues of the program. The main topics discussed were the improvements to be implemented by zones, budgets and action plans, management, and organization for project execution. The intervention maps by zones were also reviewed and possible eventualities that could counteract the expected results or prevent the correct implementation of the measures were discussed. The articulation of entities, organizations and ministries and the involvement of the population were highlighted as key points for the successful execution of measures and their maintenance over time.

4. ANNEXES

ANNEX 1 – INITIAL IDENTIFICATION OF KEY STAKEHOLDERS

See attached Excel file.

ANNEX 2 – SAMPLE INTERVIEW GUIDES FOR MEETINGS WITH MUNICIPALITIES AND THE LOCAL POPULATION

See attached folder.

ANNEX 3 – MINUTES OF THE MAIN MEETINGS WITH DEPARTMENTAL GOVERNMENTS AND THEMATIC MEETINGS

See attached folder.

ANNEX 4 – LIST OF ATTENDANCE DURING CONCEPT NOTE ORIGINATION AND FULL PROPOSAL FORMULATION MISSIONS (April 18th-21th, 2023 - OCTOBER 9th-18th, 2023)

See attached folder.

ANNEX 5 – POWERPOINT PRESENTATIONS TO GUIDE THE CONCEPT NOTE ORIGINATION AND FULL PROPOSAL FORMULATION WORKSHOPS

See attached folder.

ANNEX 6 – RESULTS OF THE MENTIMETER SURVEY CARRIED OUT DURING THE CONCEPT NOTE STAGE WORKSHOP

See attached folder.

ANNEX 7 – PHOTOGRAPHIC RECORD OF THE VALIDATION MISSION AND THE FORMULATION OF THE FULL PROPOSAL.

See attached folder.

Consultancy for the structuring and formulation of a Concept Note and Full Proposal to be submitted to the Adaptation Fund for the REACC-COSTAS Project, Uruguay.

Gender Analysis

FINAL REPORT | December 4th, 2023

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ACRÓNIMOS

EbA	Ecosystem-based Adaptation Approach
CAF	Development Bank of Latin America
ENGCC	National Gender and Climate Change Strategy
ENIG	National Gender Equality Strategy
AF	Adaptation Fund
GCF	Green Climate Fund
INMUJERES	National Institute of Women of Uruguay
MIRA	Comprehensive Monitoring of Risks and Affects
NAP Costas	National Adaptation Plan for the coastal zone
GAP-CC	Gender and Climate Change Action Plan
NAP	National Adaptation Plan
PNCC	National Climate Change Policy
NAP	National Adaptation Plan
REACC Coasts	Increase in socio-ecological resilience in the Uruguayan coastal zone and strengthening the adaptive capacity of its infrastructure: Implementation of adaptation measures to climate change
SINAE	National Emergency System

1. INTRODUCTION

This document is part of the Annexes that are attached to the design of the Full Proposal and compiles relevant information to analyze what are the main gender inequalities that the REACC Costas project will address through specific measures and actions, through the implementation of a Gender Action Plan.

This gender analysis is also part of the requirements of the Adaptation Fund, according to its Gender Policy [1], and may be updated during the execution of the project, if required. To ensure that gender considerations are successfully integrated into the Fund's projects and programmes, the Fund requests that available initial information and data on potential gender dimensions related to planned adaptation measures be collected during the project identification phase. or program. This requires that women, men and people with other gender identities (if applicable) and of different ages, socio-economic backgrounds or ethnicities, with disabilities or from Indigenous Peoples be involved in initial stakeholder consultations at this early stage. about the project, in a gender-sensitive manner and using an intersectional approach [2](see more in the Environmental and Social Management Plan and the Stakeholder Engagement Report). The gender analysis presented here is intended to be a tool to identify gender differences and gender roles, in relation to the activities proposed by the project, as well as to address the needs and opportunities that contribute to closing the main gaps and inequalities.

This analysis is understood as a document that is not static but can be updated and reviewed throughout the execution in response to the monitoring and progress reports presented by the implementing and executing entities, and their conclusions as part of the necessary management. adaptive of the project.

The project

The REACC Costas project has been conceived within the framework of the NAP Costas, which has established solid bases of evidence of threats and vulnerability and has carried out a broad multi-stakeholder and gender-sensitive consultation process to define priorities.

This project will be implemented by CAF, Development Bank of Latin America and the Caribbean, together with the Ministry of Environment, and will work in the six departments of the coastal zone of the Río de la Plata and Atlantic Ocean of Uruguay: Colonia, San José , Montevideo, Canelones, Maldonado and Rocha, to increase the adaptive capacity of the population and the resilience of coastal ecosystems exposed to the risks of flooding and erosion increased by climate change. The proposed activities will strengthen coastal planning considering climate change based on evidence, promote investments in green and hybrid infrastructure to restore and conserve coastal ecosystems, improve drainage, and protect homes and buildings, and raise awareness and build capacities of the different actors of the coast to ensure that they are aware of the risks and adaptation measures and actively involved in climate action.

REACC Costas is based on a comprehensive and participatory approach, which considers gender and generational aspects, supported by scientific evidence and the collaboration of various actors. It is aimed at promoting the ecosystem-based adaptation (EbA) approach, seeking to transform the perception of the coast, promoting its care and resilience as a shared and accessible space for all people. It will focus on promoting democratic access to public space on the coast in the long term, recognizing its value as a fundamental natural and social resource. In this way, it aims to achieve sustainable and equitable development of the coast in the context of climate change.

Document structure

The gender analysis presented here is organized in the following sections and subsections, concluding with an identification of recommendations that must be included in the Gender Action Plan (which is also annexed to the Full Proposal to be presented to the Adaptation Fund).

The first section includes a brief analysis of the main aspects related to the gender and climate change approach, in the specific sector addressed by the REACC Costas project (adaptation in coastal areas). Then, the current institutional framework in Uruguay in relation to gender and climate change is summarized, also detailing how each department institutionalizes this approach. The third section details a synthesis of demographic and socioeconomic data for each of the coastal departments, as included in the Concept Note.

This analysis also takes up the main data and conclusions that the Ministry of Environment of Uruguay collected during the consultation process with the population for the design of the NAP Costas, since the departments consulted coincide with those of REACC Costas, and it is the information most up-to-date available. At the same time, it is complemented with what has emerged from the population and civil society organizations during the consultations carried out within the framework of this project, in order to try to compile the main needs that can be addressed as part of the REACC-Costa interventions.

Finally, in the Recommendations section, those emerging ideas and actions that have to be addressed by the project are identified, through its Gender Action Plan, assigning those human and economic resources that guarantee its implementation.

2. GENDER AND CLIMATE CHANGE

In recent decades, the intersection between gender and climate change has been increasingly recognized, since its consequences and impacts do not affect all people in the same way, and furthermore, they deepen and perpetuate already existing structural inequalities. , such as poverty, access to basic services, access and maintenance of sources of employment, among others. In contexts where women's activities, both those related to formal and informal work, or those linked to household and personal care tasks, are directly linked to natural resources, they are the main ones affected by climate change. , and therefore those that need resources and specific attention measures to address these difficulties.

[1] https://www.adaptation-fund.org/wp-content/uploads/2016/04/OPG-Annex-4_GP_ES_SP-FIN.pdf

[2] Updated Guidance Document for Implementing Agencies on compliance with the Adaptation Fund Gender Policy

Gender gaps in central areas such as education or the workplace, as well as the persistent prevalence of gender violence and discrimination, further aggravate the consequences of climate crises on women [3].

Coastal areas are natural spaces and ecosystems especially affected by the impacts of climate change, which also have consequences on the lives of all the people who use coastal services, from living in those areas, working there, or traveling through them. Planning and adaptation to climate change in coastal areas, therefore, must also incorporate the gender perspective to more effectively and sustainably address the specific challenges faced by women and men, young people and adults, in these areas. particular areas.

For example, women often face higher levels of vulnerability due to gender stereotypes that make them significantly dependent on natural resources for their livelihoods and livelihoods. In turn, extreme weather events can exacerbate women's workload and increase health risks due to specific roles, such as child care or water management.

These differences and inequalities have to be compiled and analyzed as a necessary prior step to defining any adaptation measure to climate change, to reflect the particular needs of the entire population. Likewise, women's voices must have a space for participation and representation in decision-making mechanisms, for any adaptation strategy to be effective. Effective strategies must take into account the specific contributions of both genders to increase community resilience.

Recognizing and addressing gender inequalities is essential to ensure that responses to climate change are equitable and respect the human rights of all people, regardless of gender, age, social class or ethnic origin.

3. CURRENT INSTITUTIONAL FRAMEWORK ON GENDER AND CLIMATE CHANGE IN URUGUAY

Public gender equality policies in Uruguay are governed by the National Gender Equality Strategy 2030 (ENIG) [4], approved by Executive Decree number 137/18 of May 7, 2018, and prepared in light of the framework of regional reference Montevideo Strategy [5]. The ENIG, whose monitoring responsibility is carried out by the National Institute of Women of Uruguay (Inmujeres) [6], is structured into strategic aspirations, policy guidelines and strategic lines towards action. With regard to climate change, policy guideline XI.3 details the following strategic lines, which fall within the "Collective and environmental rights" dimension of the Montevideo Strategy:

- Promote adaptation measures to climate change and encourage the use of environmentally friendly products by all members of families dedicated to agricultural production, implementing actions with technical assistance, considering the differential impacts they have on women and men according to the place they develop within the production and the property.
- Stimulate the development of research that relates the use and management of agrochemicals and water pollution, with the prevalence of diseases, especially in women, girls and boys in areas of intensive use.
- Promote opportunities to reduce gender gaps in productive and economic processes low in greenhouse gas emissions, identifying adaptation capacities and promoting women's resilience to climate change, at the city and rural level, considering the intersection of poverty and vulnerabilities.
- Generate information systems with indicators for adaptation and mitigation to climate change with a gender perspective.
- Integrate the gender perspective in education and the generation of knowledge about climate change and resilient, low-carbon development.

Since 2016, Uruguay has had a National Climate Change Policy (PNCC) that, in addition to containing mitigation and adaptation measures to be implemented until 2050, also promotes the promotion of the adaptation and resilience capacities of the population with criteria of equity and social inclusion, emphasizing the social groups most vulnerable to climate change. The PNCC explicitly incorporates the concepts of human rights, gender, and youth as part of the country's climate action. When in 2017 Uruguay presented the First Nationally Determined Contribution (CND), the construction of georeferenced information on social vulnerabilities associated with adverse climate events was proposed as an action, adopting human rights and gender perspectives, and looking at children and others. groups in vulnerable situations, so that Uruguay can be better prepared to respond to the challenges generated by climate vulnerability [7]. As part of the efforts to incorporate the gender approach into environmental and climate policy, in 2018 the Gender Working Group was formed [8], within the framework of the National System for Response to Climate Change and Variability (SNRCC). In this way, the PNCC begins to be aligned with the National Gender Equality Strategy 2030 (ENIG).

In 2019, Uruguay approves its National Gender and Climate Change Strategy (ENGCC), integrating the approach and methodologies necessary to integrate the gender perspective into climate change policy instruments, such as the CND, the National Adaptation Plans , the National Greenhouse Gas Inventory and the Country Program of the Green Climate Fund (GCF).

The National Adaptation Plans (NAP) that can be specifically linked to the REACC Costas project are the National Coastal Adaptation Plan (2020) ("NAP Costas") and the National Adaptation Plan in Cities and Infrastructures (2020), which include a right to city, urban sustainability

[3] https://climatepromise.undp.org/es/news-and-stories/que-relacion-existe-entre-la-igualdad-de-genero-y-el-cambio-climatico
[4] https://oig.cepal.org/sites/default/files/uruguay_estrategia_nacional_para_la_igualdad_de_genero_2030.pdf
[5] Montevideo Strategy for the Implementation of the Regional Gender Agenda in the Framework of Sustainable Development towards 2030 . ECLAC, 2016
[6] Inmujeres is the governing body for gender policies in Uruguay.
[7] Gender and Climate Change Strategy. Towards an Action Plan 2020-2025. SNRCC, Uruguay.
[8] The Gender GoT is co-coordinated by the National Women's Institute and the Ministry of Housing, Territorial Planning and Environment from the Climate Change Directorate, and is made up of technical references in gender, representatives of the Gender Mechanisms of Public organizations are part of the SNRCC.

and access to urban land. With respect to the GCF Country Program, it can be highlighted that it integrates the gender perspective, to reduce existing inequalities in the climate change response measures that are included.

Both the NAP Costas and the NAP Cities include the need to disaggregate by sex those adaptation indicators related to the population, such as, for example, household composition, employment rates, overall workload or education indices, to study social vulnerability and adaptive capacity differentiated by gender. In the particular case of the NAP Cities, institutional strengthening activities on gender for management and decision-making were also included, through training for decision-makers at different levels of government.

The participation of communities in the identification of risks is a priority in the Coastal Adaptation NAP, from which Workshops on Local Perception of Risks to Climate Change were developed. In these activities, reflection on vulnerabilities differentiated by gender was stimulated, promoting the identification of differential impacts and response measures that address these inequalities (this is presented in greater detail and disaggregated by site and department in sections 4 and 5 of this document).

In turn, the NAP Costas Gender Action Plan includes the following specific measures, in line with the ENIG:

- Use of inclusive language in all instances of calls and dissemination, to explicitly address men and women.
- Establish meeting times (or any instance of participation), considering the differential possibilities of women and men attending.
- Drive to give women a voice and the ability to impact participatory processes, so that they can make their needs visible. For example, separating certain discussion groups so that women express themselves with greater freedom and confidence or generating specific instances for women.
- Organize care and recreation strategies for girls and boys, so that the burden of care is not a barrier to women's participation in meetings and activities (considering the structure of the sexual division of labor).
- Include women's associations or organizations, technical personnel experts in gender issues, council departments, units, areas or specific equality departments in participatory instances.
- The construction of gender-sensitive indicators, the promotion of the integration of the gender perspective in consultation spaces and the effective participation of women in the preparatory processes of National Plans and Adaptation projects aims to define measures of gender-sensitive and responsive adaptation.

Finally, as part of the current institutional tools for mainstreaming the gender perspective in national climate change policies, Uruguay approved the Gender and Climate Change Action Plan to 2025 (GAP-CC) in 2021, which prioritizes actions oriented towards gender equality in this area of intervention. This is an inter-institutional, multi-actor and multi-level action plan that is part of the SNRCC.

The GAP-CC is organized into the following priority areas [9], which will in turn be reflected in the Gender Action Plan of the REACC Costas project, so that it is aligned with the current institutional framework of Uruguay:

- Strengthening capabilities, knowledge management and communication
- Gender balance, participation, women's leadership
- Implementation with a gender perspective
- Gender integration in the instruments of the National Climate Change Policy

The Gender Action Plan that emerges from this analysis prepared for REACC- Costas is framed and aligned with all the institutional instruments mentioned above and takes up the incorporation of the gender approach of the Costas NAP and the Cities NAP. The NAP Cities and NAP Coasts integrate the gender perspective in the identification of key indicators and carry out a process of institutional strengthening in gender for management and decision-making. The participation of communities in the identification of risks is a priority in the Coastal NAP, from which Local Perception Workshops on Climate Change Risks were developed.

Laws and strategies with an impact on women's rights that make up the institutional framework in force in Uruguay, and that should be taken into account during the implementation of the REACC Costas:

- Law 19,555 on the equal participation of both sexes in the integration of national, departmental and leadership elective bodies of political parties (2017).
- Law 19,353 "National Integrated Care System" (2015).
- Law 18,651 on the comprehensive protection of persons with disabilities (2010).
- Law 19.580 Violence against women based on gender (2018).
- National Strategy for Gender Equality 2030 (2018)
- National Strategy for Gender and Climate Change (2019)
- Gender and Climate Change Action Plan 2020-2025 (2021)

3.1 National Emergency System

The National Emergency System (SINAE) leads the National Disaster Risk Management Policy and implements the MIRA system (Comprehensive Monitoring of Risks and Affects), created by the National Emergency Directorate of the Ministry of the Environment. The MIRA records information on adverse events, in a disaggregated manner to understand the characteristics of the affected population: sex, age, disability, composition of the family nucleus, socioeconomic characteristics, etc. On the other hand, the National Disaster Risk Management Policy includes the international agreements to which Uruguay subscribes and compiles the instruments, plans and programs

[9] Gender and Climate Change Action Plan. SNRCC 2020/2024, Ministry of Environment of Uruguay .

that it will develop to comply with said agreements. One of these programs is *People-Centered Management with a Human Rights Perspective* , which promotes inclusive risk management based on the identification of vulnerabilities and differentiated abilities and capacities of the population, as well as analyzes of differentiated exposure according to gender and generations.

As part of this Policy, training activities for journalists and communicators are also included, as well as annual dissemination campaigns and dissemination activities by public institutions specialized in risk issues (universities, institutes, technical offices, among others).[10]

The REACC Costas project falls within the People-Centered Management initiative with a human rights perspective, proposing the implementation of an Early Warning System in the town of Juan Lacaze, and includes strengthening and training activities for communicators and communicators, as part of the actions of its Component 3. Both proposals are also taken up in the REACC Costas Gender Action Plan, so that specific criteria, measures and actions in this regard are included.

3.2 Local gender institutions

As mentioned in the introduction of this document, the REACC Costas project will work in the six departments of the coastal zone of the Río de la Plata and Atlantic Ocean of Uruguay: Colonia, San José, Montevideo, Canelones, Maldonado and Rocha. The Full Proposal has identified a set of pilot sites for the implementation of coastal adaptation measures, promoting investments in green and hybrid infrastructure to restore and conserve coastal ecosystems, improve drainage, and protect homes and buildings, among others.

These investments must be designed and implemented with gender and generational equality criteria, according to the current national framework, as detailed at the beginning of this section. For this, the involvement of local technical teams is central, especially the Departmental Gender Directorates of each of the Municipalities.

Although the local institutionality of departmental gender varies from intendancy to intendancy, all of them have made progress in having a specific Directorate formalized. Furthermore, in the case of Montevideo, the Gender Equality Advisory Division is organized into different work areas (Life Free of Gender Violence, Territorial References, Mainstreaming Area for Gender Equality, Participation and Empowerment of Women, and Communication), and has designed and implemented 3 Gender Equality Plans, since 2002. Another notable example is that of San José, which has launched the Departmental Gender and Diversity Roundtable since 2022 with the objective of to form an inter-institutional work environment that generates public policies aimed at preventing discrimination and violence based on gender and sexual orientation. On the other hand, Colonia has recently created the Gender and Generations office, in charge of addressing the development of policies, strategies and plans in the areas of women and family, children and adolescents in vulnerable situations, disabled people, diverse groups and social development in general, and carries out coordination actions with other agencies that work in that line.

Regarding the political representation of women in the coastal Departments, according to data collected by the Uruguay Territory Observatory, in 2020 only 2 of the 19 departments were governed by women: Montevideo and San José. Although the proportion is a little higher when gender parity is analyzed in municipal bodies, the data show that the local political scene is still dominated by men, at least in the positions of greatest authority. In the 125 municipalities of Uruguay, as of 2020, only 19 were led by women. In the coastal departments, the case of Rocha stands out, where there are no female mayors, and conversely the case of Canelones, which is the coastal department that has more female mayors in relation to the rest. When the data on municipal authorities is looked at in detail, the gender gap continues to be maintained in favor of men, since no department exceeds the figure of 38% of female municipal authorities, highlighting once again the case of Rocha, and also that of Colonia, with the lowest participation of women in municipal positions (25.8% for both cases).

During the preparation stage of the Conceptual Note, the Viridia Projects team applied a questionnaire to know the institutional capacities installed in each local government, which also revealed the perception of each Municipality about its specific capacities to mainstream the gender approach in adaptation to climate change and for the management of environmental and social safeguards.

	Colonia	San José	Montevideo	Canelones	Maldonado	Rocha
Mainstreaming the gender perspective	2	3	s/d	2	3	1
Management of environmental and social safeguards	1	3	s/d	3	5	2

The Viridia team also presented the Conceptual Note to the Departmental Gender Directorates, so that they were aware of it, and so that during the formulation stage of the Full Proposal they could provide their assessment and suggestions to be incorporated into the Action Plan. Gender (see Stakeholder Engagement Report). During the formulation stage of the Full Proposal, exchanges were carried out with the Departmental Gender Directorates to incorporate their suggestions into the specific activities of the Gender Action Plan. The sheets prepared for each Department were shared, on which the suggestions and proposals of the Gender Directorates were collected. Likewise, the Gender Action Plan in its draft version was shared with the person responsible for gender and climate change at the Ministry of the Environment. On the other hand, during the mission of the Viridia Projects team to prepare the Full Proposal in Uruguay, the gender and generational approach was included in the meetings held with the local population in each site and with the responsible technical teams.

The general structure of the Gender Action Plan for the REACC Costas project was shared with each of the Departmental Gender Directorates and their proposals were compiled in the final version of the same.

[10] Paragraphs taken from Gender and Climate Change Action Plan. SNRCC 2020/2024, Ministry of Environment of Uruguay .

The REACC Costas project and its Gender Action Plan propose the involvement and active participation of the Departmental Gender Directorates both in the organization and implementation of specific activities, as well as in the governance scheme of the project, with a specific mention to participate in the Technical Committee meetings whenever the Municipalities are invited to be part of that Committee. Likewise, they are the target population for training and capacity building to strengthen their capacities on climate change, adaptation, and gender issues.

4. SOCIO-DEMOGRAPHIC CHARACTERIZATION OF THE COASTAL DEPARTMENTS

According to data from the 2011 Population Census, 3,286,314 inhabitants live in Uruguay, of which 52% are women. 70% of Uruguay's population is concentrated in coastal territory, which represents 2.9% of the country's total surface area (for more information on other demographic data see Part I - section A) of the Full Proposal, ' Social, environmental and economic context').

The population disaggregated by sex that inhabits the coastal departments that are part of the REACC Costas interventions is characterized according to the table below.

Table 1. Population data of the coastal departments.

Coastal departments		Montevideo	Canelones	Colonia	Maldonado	Rocha	San José	Total Country
Population	in absolutes	1,319,108	520,187	123,203	164,300	68,088	108,309	3,286,314
	In % of the total	40.1%	15.8%	3.7%	5.0%	2.1%	3.3%	100.0%
	% female population	53.4%	51.3%	51.1%	50.7%	51.1%	fifty%	52%

As part of the design of the NAP Costas, certain sites on the Uruguayan coast were prioritized to implement a set of adaptation measures. During this process, 6 gender analysis reports were prepared [11]with socioeconomic information and information on the use of public space, mobility and security perception of the prioritized localities of the coastal departments involved in the NAP Costas with recommendations for respective corrective actions, based on information from the 2011 Census of Housing, Homes and People, from the Characterization Report on micro-territories in the study areas prepared by the Ministry of Social Development (MIDES, 20218), but also based on a process of consultation and participation of the population through semi-structured interviews with those responsible for the Gender Area of the municipalities involved and work meetings in an exchange workshop format with social organizations at the territorial level, where women actively participated (Workshops on Local Perception of Risks to Climate Change) .

The municipalities involved in the implementation of the NAP Costas are the same as those that will be involved in the REACC Costas, but some of the sites prioritized in the former differ from the latter. However, these reports contain all the relevant information to understand the main gender inequalities at the departmental level. In this report for REACC Costas, the data for the sites that coincide are recovered, as well as the main conclusions and recommendations that have emerged as part of the consultations with the population and with the women who live and work in the 6 coastal departments.

Table 2. Prioritized sites in NAP Costas and in REACC Costas, by department.

Department	NAP Costas prioritized sites	REACC Costas prioritized sites
Colonia	Colonia del Sacramento	Juan Lacaze
San José	Kiyú and Ciudad del Plata	Ciudad del Plata – Penino Beach and Autódromo neighborhood
Montevideo	Cerro and Carrasco neighborhood/beach	Cerro neighborhood/beach
Canelones	Atlántida	Solís Chico river mouth – Parque del Plata and La Floresta
Maldonado	Piriápolis	West of Piriápolis - Playa Grande, Playa Hermosa and Playa Verde
Rocha	La Paloma and Punta del Diablo	La Paloma - Playa Los Botes and Playa La Serena and Playa La Aguada

4.1 Sociodemographic and economic characterization for the prioritized sites in NAP Costas and REACC Costas

There are 31,145 inhabitants [12]in **Ciudad de Plata (San José),** of which women constitute 51.2% and men 48.8%. The distribution by age can be seen according to the population pyramid with a significant widening at the base thanks to a significant presence of people under 20 years of age, especially men. 45.9% of women have at least 1 NBI, while 47.8% of men have. 2.9% of the population is below the poverty line, with men being poorer than women (3.3% versus 2.6% respectively).

Although there is no information on women without their own income at the local level, the approximation of the data shows that in San José 19.6% of women over 14 years of age do not have their own income, a value very similar to the national figure: 19.7% (ECH/OPP-FCS: 2016, 2017, 2018).

[11] Consultancy report for the identification and systematization of social, economic and productive information with a focus on gender and generations, in the intervention areas of the climate change adaptation measures prioritized in the coastal zone of Uruguay, Project URU/18/G31 "Creation of institutional and technical capacities to increase transparency within the framework of the Paris Agreement."

[12] 2011 Census and ECH-INE (2016, 2017, 2018).

58.1% of the households in Ciudad del Plata are headed by men and 41.9% are headed by women. In these homes, 72.6% have people of inactive ages, that is, those under 15 years of age and over 64 years of age. In households headed by men, this percentage drops to 63.0%. When the headship in single-parent households is observed, the female headship rises to 86.5%. On the other hand, of the total number of households headed by women, 16.8% belong to the lowest income quintile, while in the case of households headed by men the percentage is 15.6%. In turn, data from the ECH/OPP-FCS (2016, 2017, 2018) show that 1.5% of households in Ciudad del Plata are below the poverty line. At the same time, if attention is paid to the household according to the sex of the head, it is obtained that 40.0% of the households below the poverty line are headed by women, and 60.0% are headed by men.

In Ciudad del Plata, the female activity rate is 48.1% while that of males is 68.4%. Similar behavior occurs with the employment rate, showing a percentage difference of 21.4 points. Regarding the unemployment rate, the female unemployment rate is 5.4% while the male unemployment rate is 4.3%. When observing then how the population is distributed according to activity status and sex: 64.1% of men are employed, 17.3% are retired or pensioners and 10.9% are students. These three categories account for 92.3% of all men. On the other hand, 42.7% of women are employed, 21.7% are retired or pensioners and 19.3% are dedicated to household chores. These three categories account for 83.7%. Of the employed population, women represent 43.2% while men represent 56.8%, however, the category that shows the greatest percentage difference by sex is "Housework", which is made up of 96.6% of women.

The secondary data collected from the 2011 Census and the ECH/OPP-FCS (2016, 2017, 2018) are complemented by what the women consulted and interviewed have expressed, who highlight that the labor insertion of women is varied depending on educational level, but domestic service stands out as the predominant activity of women in Ciudad del Plata, activities in the commercial sector but also in the industrial sector. In this regard, the great loss that the closure of the Fabriesa Factory meant was mentioned. where 400 women worked making car upholstery. On the other hand, it was also mentioned that one of the characteristic jobs of the area is the collection of reeds, mainly carried out by men because it requires great physical effort. Women tend to use it for fabrics, but the big beneficiaries are the junk-making companies that sell the products on the beaches of Rocha or Maldonado. In turn, many women work at the municipal landfill in Delta del Tigre, and it is considered one of the most precarious jobs carried out in this town.

There are 28,306 inhabitants [13]in the **Cerro neighborhood (Montevideo),** of which 47.6% are men and 52.4% are women. Among the female population, 28.2% have at least 1 NBI, while in the case of men this indicator rises to 30.4%.
In relation to women without their own income, it is recorded that 22.4% of women over 14 years of age do not have their own income, a value higher than that recorded at the departmental level, which is 17.9% [14].
Single-parent households represent 13.3% of total households, being the second locality, according to the 2011 Census, that presents such high values (Ciudad del Plata is the first, with 13.0% of single-parent households.

48.4% of the households in the Cerro neighborhood are headed by women and 51.6% by men. Regarding single-parent households, the percentages of female heads rise to 88.8%, while in nuclear households (with or without children) the figure of head of household is mostly male: 62.9% and 73.4% respectively. Regarding the distribution of income, it is observed that there is a higher proportion of households headed by women in the first quintile (12.7%) in relation to those households headed by men (7.2%). According to data from the ECH-INE (2016, 2017, 2018), 8.0% of Cerro households are below the poverty line, of which 62.3% are headed by women.

Regarding the activity rate in the Cerro neighborhood, 52.4% are female while that of their male peers is 67.0%.
In relation to the unemployment rate, the female unemployment rate is 5.2% while the male unemployment rate is somewhat lower: 4.5%.
If we look at the occupation of women, 47.2% are employed, 24.1% are retired or pensioners, and 13.4% are dedicated to household chores. These three categories concentrate 84.7% and the student category would be the fourth in this case with a lower percentage than that registered by men: 8.5%. Of the employed population, women represent 46.6% while men represent 53.4%. However, the category that presents the greatest differences is that of those who dedicate themselves to housework, a category made up of 91.4% of women.

The most feminized sectors of the economy in the Cerro neighborhood are:

- "Household activities as employers, undifferentiated activities of production of household goods and services for own use": 93.9% of women.
- "Teaching": 78.2% women.
- "Social and human health-related services": 76.9% of women.

On the other hand, men are distributed in occupations such as officers, workers and artisans of mechanical arts and other trades (26.4%); as service workers and salespeople in shops and markets (19.6%) and in "Elementary occupations" (15.9%). In total, these 3 categories cover 61.9% of the employed male population. Women do so as service workers and salespeople in shops and markets (38.9%), in "Elementary occupations" type tasks (24.0%) and as administrative support personnel (14.3%). In total, these 3 categories make up 77.2% of the employed female population.

About 3,495 inhabitants live [15]in the town of **La Paloma,** of which women represent 50.7% and men 49.3%. When analyzing the distribution of the population by age and sex structure, through the population pyramid, a broad base of young population can be observed.

[13] Ditto _
[14] ECH-INE (2016, 2017, 2018)
[15] 2011 Census and ECH-INE (2016, 2017, 2018).

29.8% of men have at least 1 NBI compared to 27.5% of women. Although there is no information on women without their own income at the local level, the approximation of the data shows that in Rocha 19.3% of women over 14 years of age do not have their own income [16].

49.7% of households are headed by women and 50.3% are headed by men. On the other hand, 64.8% of households headed by women have people under 15 and over 64 years old. Of households headed by men, 52.4%. And in the case of single-parent households, 81.3% are headed by women. Women are also the majority of heads in nuclear households with children (33.5%). However, among female-headed households, 25.9% have at least 1 NBI.

Women represent 49.3% of the employed population and among men this percentage is 68.8%. The same information, but observed by age, shows that of the unemployed people, 30.9% are between 14 and 24 years old and 20.2% are between 25 and 34 years old. If the sex variable is incorporated, 59.2% of women between 14 and 24 years old are inactive and 30.4% are employed. The behavior of men in that age group, however, is different: the percentage of employed people between 14 and 24 is 52.2% while the percentage of inactivity for other reasons is 41.4%. Likewise, in the next age group (25 to 34 years) the percentage of inactive women is 20.2% while that of men is 2.5%. In this age group, 70.4% of women are employed compared to 94.5% of men.

The most feminized sectors of the economy in La Paloma are:

- Activities of households as employers. undifferentiated activities of production of household goods and services for own use: 86.9% of women.
- Teaching: 53.4% women.

In turn, if the occupation categories are disaggregated by sex, of women: 29.3% work as service workers and salespeople in shops and markets, 26.9% as unskilled workers and 17.7% as office workers. . Men, for their part, are mainly concentrated in the category of officers, operators and artisans of mechanical arts and other trades (27.7%), in second place, as are women, although to a lesser extent, in unskilled jobs. (23.6%) and in third place as service workers and sellers in shops and markets. Women are a minority as private employees and as self-employed workers (46.5% and 37.9% respectively), but not as public employees, although the distribution is practically equal: 50.3% of women and 49.7% of men.

The representatives consulted mentioned the high dependence on the climate in relation to the economic activities of women, since many of the jobs are outdoors. Other relevant characteristics of female employment in the area are the high dependence on tourism, little training, and informality: the beach for women implies a great job opportunity strongly associated with street vending, although informal, during the summer season. In relation to the activities carried out by women, the fishing sector is also highlighted, associated with the work of filleting, selling crafts at the local fair and domestic service.

There are 8,830 inhabitants [17]in Piriápolis , of which women constitute 52.0% and men 48.0%. The population is an aging population, with a high proportion of people aged 65 or over (18.1%).

24.9% of women have at least 1 NBI, compared to 28.4% of men. Although there is no information on women without their own income at the local level, the approximation of the data shows that in Maldonado 19.3% of women over 14 years of age do not have their own income [18].

If the sex of the head of the Piriápolis households is considered, it is found that 55.0% are headed by men and 45.0% are headed by women. But in the case of single-parent households, it is observed that 84.7% are headed by women. In turn, women are mostly heads of households in single-person households (38.3%), that is, where there is no male presence, followed by single-parent households where there is no male presence either (22.5%). 0.4% of the households in Piriápolis are below the poverty line and if they are disaggregated by sex of the head, it is observed that there are no households with female heads below the poverty line [19].

According to data from the ECH-OPP/FCS (2016, 2017, 2018) for Piriápolis, the female activity rate is 45.2% while that of males is 61.3%. In relation to the unemployment rate, the female unemployment rate is 2.4% while the male unemployment rate is slightly higher: 2.7%. 58.6% of men are employed, 26.3% are retired or pensioners, and 7.6% are students; these three categories account for 92.5% of all men. On the other hand, 42.8% of women are employed, 32.0% are retired (or pensioners) and 12.1% are dedicated to household chores. These three categories account for 86.9%. Of the employed population, women represent 45.6% while men represent 54.4%. However, the category that presents the greatest percentage differences is that of those who dedicate themselves to household chores as their main activity, made up of 86.8% of women.

The 3 main sectors of activity in which women are the majority are:

- Activities of households as employers, undifferentiated activities of production of household goods and services for own use: 83.2% of women.
- Social and human health-related services: 80.2% women.
- Teaching: 75.6% women.

[16] ECH-INE (2016, 2017, 2018)

[17] 2011 Census and ECH-INE (2016, 2017, 2018)

[18] ECH-INE (2016, 2017, 2018)

[19] Same as previous

Men are distributed in occupations such as officers, workers and artisans of mechanical arts and other trades (28.0%); unskilled jobs (19.8%) and service workers and salespeople in shops and markets (17.8%). In total, these categories cover 65.5% of the employed male population. Women do so as service workers and salespeople in shops and markets (33.3%); unskilled workers (23.5%) and office employees (17.5%). In total these 3 categories represent 74.3%.

Female participation in tourism activity

The tourism sector is very important for the economic activity of the project area in terms of the level of income and employment it generates. Between the years 2015 and 2019, the economic generation of this sector was equivalent on average to 7.5% of the national GDP and had a 43% impact on the country's exported services income, with Maldonado being the main destination, followed by Montevideo and Rocha. Regarding job creation, in 2019, 7.2% of total jobs were tourism jobs, and were made up of 40.4% in the gastronomic sector, 21.2% in the Transportation sector (land 16.8%, aquatic 3% and air 1.4%), 16.6% from the Accommodation sector and the remaining 21.8% was distributed between travel agencies, financial, recreational, and cultural activities. Among the departments, in Maldonado it represented 12.3%, in Colonia 9%, in Rocha 7.2%, in Montevideo 6.9%, in Canelones 6% and in San José 3.6% of the total jobs.

According to ECH 2019 data [20], female employment in the tourism sector represents 44% of the total, standing out spatially in activities related to Accommodation, Restaurants, Travel Agencies and Cultural Services, sectors whose female workforce exceeds fifty%. On the other hand, the tourism sectors related to Transportation, Leisure Services and Various Tourist Services employ mostly men (83% and 64%, respectively). In the case of the departments of Rocha, Canelones and Maldonado, tourism jobs, mentioned as the first activity, are occupied by more than 50% by women. And in the case of Montevideo, 21,625 women were registered working in tourism activity, being the department with the most female jobs in Uruguay. When analyzing the data by age range, women up to 29 years of age have their first job in tourism in a higher percentage than in the economy (30% in tourism and 22% in the total economy), being employed mainly in restaurants (38%) and Travel Agencies (32%). In the case of men up to 30 years old, their first employment in tourism is 27% (and in the economy, 24%).

Regarding gender institutions in this sector, the Ministry of Tourism has a specialized Unit, which advises the Ministry on compliance with the National Gender Equality Policy, and whose responsibilities include linking the issues of gender, change climate and tourism with the aim of mainstreaming these in the development of public tourism policies [21].

In meetings held with representatives of the Ministry of Tourism as part of the consultations for the design of the Complete REACC Costas Proposal, it has been mentioned that internal working documents have been prepared that link the areas of tourism, climate change and gender. Coordination with the Gender Unit of the Ministry of Tourism is mentioned in the Gender Action Plan for the implementation of specific activities related to the sector (see attached Gender Action Plan).

4.2 Education data for prioritized sites in NAP Costas and REACC Costas

Ciudad del Plata presents the lowest indicator in relation to the average number of years of study for people over 18 years of age. In relation to differences by sex, no major disparities are observed: 7.9 for women and 7.6 for men. 49.6% of men reached the maximum level of Secondary education while 49.2% of women did so, Primary 42.9% and 40.7% respectively.

According to the ECH-INE (2016, 2017, 2018), the average number of years of study in the Cerro neighborhood is 9.4 for women over 18 years of age versus 9.1 in the case of men.

According to information from the Census (2011), in La Paloma 30.4% of the population reached the highest level of education: Primary, 51.6% Secondary and 13.6% Tertiary level. When analyzing the information disaggregated by sex, it is observed that 11.4% of males The latter reached the highest educational level and 15.7% of the women did so.

In Piriápolis it is observed that women have more years of study on average than men: 9.7 and 9.2 respectively.

In relation to access to information and new technologies, the data collected from 2019 show that almost 83.3% of the population in Uruguay uses mobile phones and 82.9% has access to the internet. These numbers are similar in the coastal departments, except for Colonia, where the population that has access to the internet represents the lowest number (75.7%). Regarding how men and women are linked to access to connectivity and the use of computers, in all departments, women show greater use of mobile phones, as well as greater access to the internet. In some cases, the differences are wider, such as in San José, where the percentage of women with internet access is 83.5% compared to 78.8% of men, or in Canelones and Rocha where there are more women with cell phones than men (85.6% and 83.5% respectively).

This information, added to education data, better positions women to design climate information management interventions and similar, which are incorporated as part of the Gender Action Plan of the REACC Costas project.

4.3 General characterization of the Departments of Canelones and Colonia

[20] Data systematized in Itmark, S. and Larruina, K. (2021). Tourism employment and total employment in Uruguay as of 2019, with incorporation of a gender perspective (Working Document Series; no. 06/21). Montevideo: University of the Republic. Faculty of Economics and Administration Sciences, Institute of Statistics . https://www.colibri.udelar.edu.uy/jspui/handle/20.500.12008/1051

[21] Gender and Climate Change Action Plan. SNRCC 2020/2024, Ministry of Environment of Uruguay .

Because the sites prioritized by NAP Costas and by REACC Costas differ in the Departments of Canelones and Colonia, the 6 local gender analyzes taken here as a reference to characterize the REACC Costas sites do not provide specific information for the localities of Juan Lacaze and the beaches located on both sides of the Solís River Mouth. Therefore, some data taken from secondary sources are summarized below to identify relevant gender indicators in both Departments, because a specific gender survey has not been done for these two prioritized sites in REACC Costas as part of the design of the Full Proposal. Likewise, the main problems and perceptions of the population, and of women in particular, which are systematized in section 5 of this gender analysis, will be interpreted at the departmental level.

The information detailed below corresponds to the publication prepared by Inmujeres (MIDES, 2011), based on data from the 2011 Census, "Territorial inequalities from a gender perspective."

in the Department of Canelones, of which women represent 51.3% of the population. The distribution by sex and age of the population of Canelones shows an aging population structure, with an aging index of 76, that is, there are 76 adults over 60 years of age for every 100 children up to 14 years of age. This value is ten points lower than the country as a whole (where the aging index is 86).

7.5% of people residing in Canelones claim Afro-racial ethnic ancestry, with the percentage of men (7.6%) being slightly higher than women (7.4%).

Regarding the composition of households in Canelones, 23% of households are made up of a single person (single-person households), and 9.8% are single-parent female households. Likewise, it is observed that the proportion of two-parent households with children of both parents, 28.9%, is higher than the country as a whole (25.6%), which can be interpreted as the adoption of traditional family arrangement patterns.

A third of the households in Canelones are made up of at least one person aged 65 and over. At the same time, 14% of households have at least one child from 0 to 3 years of age, and 28.2% of school age (4 to 12 years). These data show that many households have a high burden of domestic work and care, associated with the dependency that these population groups represent. In relation to this, 86.9% of women aged 14 and over have declared that they are in charge of household chores, while only half of the men in Canelones reported the same.

Regarding participation in the labor market, the female activity rate was 53.4% versus 72.2% in the case of the male activity rate, showing a gap of 18 points. When analyzing the same indicator but by age groups, the largest gap is between those between 30 and 64 years old (female activity rate 69.9%, versus male activity rate 89.6%). One of the explanations for the differences in behavior in the labor market between men and women is associated with the reproductive pattern and traditional gender roles, which give women greater responsibility in domestic and care tasks, partly explaining the decline. of their predisposition to enter the labor market at certain ages.

On the other hand, the unemployment rate of men (4.6%) is lower than that of women (9.9%), highlighting the case of young people with an unemployment rate of 29% for men and 16%. % for the women .

When analyzing the occupation categories of the population by sex, it is observed that 1 in 5 women are retired or pensioners, and 26% are inactive for other reasons. These other causes could also be related to the exclusive responsibility for domestic tasks and caring for dependent people.

The majority of people employed in Canelones work outside the towns or places where they usually reside. Canelones represents the department with the highest proportion of men in this situation; 59.7% followed by San José
and Maldonado (36% and 32% respectively). When observing these statistics by sex, it is evident that women tend to work within the home to a greater extent as they age. Canelones constitutes the third department with the lowest proportion of women working in housing, which stands at 6.7% (Montevideo 5.4% and Colonia 6.2%). For men, work within the home is detected to occur mainly from 65 years of age and older.

in Colonia , of which women represent 51% of the population of this department. Colonia has the lowest proportion of people who claim Afro-descendant ethnic-racial ancestry at the national level, representing 3% according to census data. In turn, the aging index is 100, which means that for every 100 children up to 14 years old there is the same number of adults over 60 years old, a value substantially greater than the country as a whole.

Regarding the structure of households in Colonia, one in four households is made up of a single person (single-person households), this value being greater than the country as a whole. The largest proportion of households are two-parent households with both children, and single-parent female households represent 8.8% of the total.

The potential number of people, by sex, included in the dependent population groups defined as priorities for the National Care System (SNC), highlights a high feminization in the groups of both People aged 65 and over (11,582 women and 8,201 men), as well as people with limitations (1,230 women and 1,058 men).

Regarding the distribution of responsibility for household chores between men and women, the data show that while 87.7% of women in Colonia aged 14 and over declare that they carry out these tasks, in the case of men the The proportion is 47.5%, showing a gap of 40 points of difference.

Regarding participation in the labor market, of the total number of women aged 14 and over, 52.5% work or look for work (activity rate), while this value increases to 72.4% in the case of men, evidencing a 20% gap.
When analyzing this indicator by age group, the largest gender gap for the activity rate is between 30 and 64 years of age.

As mentioned in the case of Canelones, the assignment of greater responsibility to women in domestic and care tasks partly explains the lower predisposition to enter the labor market at certain ages.

Men in Colonia present higher employment rates than women for all age groups, not presenting significant differences on this point, with respect to the values at the country level. The female employment rate in Colonia is 49.3% against the 70.6% male employment rate. When looking at the unemployment rate, men also perform better, with just 9% unemployment compared to 19.5% unemployment among women. More specifically, the unemployment rate for men in Colonia for 2011 was the lowest in the entire country. For its part, the female unemployment rate in this department according to census data also presented the lowest value in the entire country (6.2%).

Regarding the occupation category, 71.7% of men are employed, while 50.4% of women are in the same category. 21.7% of women in Colonia are inactive for other reasons, this department having the lowest percentage of women inactive for other reasons in the entire country, followed by San José 24.9%.

5. GENDER ANALYSIS FOR THE INTERVENTIONS PROMOTED AT REACC COSTAS

The 6 gender analysis reports [22]that were prepared as part of the NAP Costas contain, in addition to socioeconomic information on the population of each department and site, the main results and conclusions of consultations that were carried out with the community and with women's groups, that reveal their perceptions about how climate change impacts different aspects of their lives, such as the use of public space, mobility or the perception of security in the prioritized localities of the coastal departments involved in the NAP Costas. In turn, these analyzes include recommendations for action, which have been considered for the definition of the activities and measures that are part of the REACC Costas Gender Action Plan, which is presented attached.

Below, some of the most significant findings are summarized in relation to the interventions proposed in REACC Costas to understand at the local level the main problems of women and the population in relation to the impact of climate change in the coastal areas where they live, and they work. The perceptions collected in these 6 analyzes are complemented by the opinions and voices of the women who participated during the community consultations carried out by the Viridia Projects team within the framework of the design of the Full Proposal (see Stakeholder Plan for more information).

Coastal ecosystems provide essential regulatory services for the maintenance of life and human activities, such as artisanal and sport fishing in both oceanic and freshwater waters, the collection of reeds in wetlands and their use in construction, recreational activities and economic activities associated with sun and beach tourism, the collection of plant material and shells to produce crafts, port and sports activities, among other cultural services. The use of the beach as a public space is part of both the recreational and economic and cultural activities of the local population (seasonal tourism and recreation). The differential use of this public space from a gender perspective shows that it is also perceived by women as a place where care activities are also carried out, when they oversee children and adolescents.

In the town of Piriápolis, Maldonado, the use of the beach is recognized both at a recreational level for the entire population, but also as a space where a hyper-intensive tourist activity takes place, where women also have a leading role in providing of services (see section Female participation in tourism activity). Women not only occupy the coastal space to work or provide tourist services, but they are also the ones who spend the most time there, especially in tasks related to caring for children or recreationally, such as hiking or other sports activities. The representatives consulted in this town also expressed that the beach represents employment opportunities for them, and that is why it is important to raise awareness about its care and as a public space.

In Ciudad de Plata and Autódromo (San José), the perception of the coast and the beach is associated with something "natural" that at the same time is part of daily life since the center of the city is the coast. Here too, the use women give to this public space is linked to recreation, rest, and leisure, especially in the summer season. In this regard, during the consultations, the high impact of domestic tourism during that time has been mentioned as a concern, perceiving it as something negative since the use made of the beach as a natural resource intensifies. At the same time, although the coast is the public space most used by the population for leisure and recreation, it is still not adequately suitable for people with reduced mobility. For example, it was mentioned that the decks leading down to the beach have stairs, but not ramps.

The participants of the consultations in La Paloma, Rocha, add to this characterization of the coast as a public space, the importance it has for them as a workspace, since many of the women work as street vendors on the beach, in the production crafts, fishmongers, etc. But they also do not fail to mention how important it is as a recreation space for boys and girls, which in turn influences it being considered a space where women can establish links and networks (due to what is described in the previous section on the care tasks carried out mainly by women).

The women who circulate and use the Cerro beach in Montevideo are mainly dedicated to selling fried cakes, but they believe that, if the area were recovered, they could provide other types of services. Currently, a deterioration of the coast is perceived, mainly due to climatic events and the presence of waste, but also because it is an area mainly for barbecues and is heavily wooded, which does not seem to be a very safe place for women.

[22] Consultancy report for the identification and systematization of social, economic and productive information with a focus on gender and generations, in the areas of intervention of the climate change adaptation measures prioritized in the coastal zone of Uruguay, Project URU/18/G31 "Creation of institutional and technical capacities to increase transparency within the framework of the Paris Agreement."

In the case of the Department of Canelones, the women expressed that the coastal area is mainly used for physical exercise, however, they also expressed feeling "exposed" in this space since the promenade in general does not have good lighting. The gender representative consulted in Canelones also reported on some beach infrastructure problems, such as the lack of a dune cord and the presence of ravines, as well as large drainage channels that have been clogged, which negatively impacts businesses. of the area. At the same time, the influence of breakwaters on coastal erosion was questioned, highlighting the danger for people when bathing. It was also possible to reveal that the speed bumps built for the circulation of water (because of the collapse of a section of the boulevard due to constructions on the ravines) are flooded, causing difficulties for pedestrian circulation. They also expressed serious difficulties in accessing the beach for people with reduced mobility, including people carrying baby strollers or people in wheelchairs.

The use and perception of public space is an aspect that is directly related to **gender violence.** If the space that women use to move, to work or for their recreational and leisure activities deteriorates because of climate change, that same space becomes an unsafe space and a space from which they perceive themselves as expelled.

In Montevideo, for example, the increase in insecurity and violence in the Cerro neighborhood, and therefore on Cerro beach, has conditioned the use of the beach by women, who usually used it to play sports. At the same time, this deterioration of the beach associated with insecurity impacts the impossibility of establishing economic ventures there, especially during the summer season, such as, for example, selling street food.

In Ciudad del Plata and Autódromo the presence of situations of gender-based violence and street harassment in public spaces is also recognized, although the lack of prevention measures is mentioned. This impacts the use that women can make of the beach at night, since situations of theft or insecurity were also reported, since these are areas without adequate lighting or with little signage.

On the beaches of Rocha, on the other hand, although no problematic or dangerous situations linked to gender-based violence are perceived, concern is mentioned about cases of domestic violence that appear out of season, especially during the winter, since There is less social life in public space and more seclusion in private space. It is also recognized that during the 3 months of the summer season there is a greater "cultural and socioeconomic shock" due to the amount of tourism received, where situations of street harassment can increase.

Regarding the perception and assessment of the **impacts of climate change in the coastal areas** that REACC Costas will work on, women in Maldonado have been perceived as one of the most affected population groups, especially when extreme events occur. In these situations, the most precarious homes are the most damaged by floods, and it particularly affects people with reduced mobility or in situations of greater vulnerability.

In Ciudad del Plata, women identify that during the southeastern seasons the advance of water on the beach is significantly greater, and that this produces floods that have more negative impacts in the neighborhoods of Penino and Autódromo.

In La Paloma, Rocha, women have expressed that they are the ones who organize more quickly in situations of climate catastrophes to organize the necessary help, especially during floods, despite not seeing themselves represented in departmental emergency committees or councils. neighbors.

The women consulted in Canelones also identify a causal relationship between the impacts of climate change and their economy, since they are the ones who are generally employed in the most informal jobs, and when the most extreme climate events arrive, problems such as who is left to care of boys and girls, or the possibility of maintaining work or not at that time of rain or floods.

The **housing conditions** are also something that is associated with the impacts of climate change, especially due to previous characteristics such as materiality, access to services or ownership itself. Of all the project intervention sites, Autódromo is the one with the greatest problems related to housing conditions 23. "Housing is a factor to address in relation to the response to climate change, given that it is a substantive part of the environmental conditions of a home and is related to access to economic, educational, and material resources, among others. The ability to resist extreme events, thermal inertia, ventilation, insulation, as well as the number of people who live in a home have an impact, among others, on people's health, which is why the possibility of modifying it and adapting it to better conditions must be considered" (Marrero, s/d) 24.

6. RECOMMENDATIONS FOR THE GENDER ACTION PLAN

Below are a series of recommendations on courses of action to follow, activities and measures necessary to incorporate a cross-cutting gender and generational approach in the interventions proposed as part of the REACC Costas, and which will be included and operationalized in the document. of the Gender Action Plan. These recommendations emerge from the 6 gender analysis reports prepared for the 6 coastal Departments, which in turn take up the main characteristics of the population and women in relation to their ways of life, their economic activities, and the use of space. public, all affected by the consequences and impacts of climate change.

- Improve physical accessibility and access to beaches for people in wheelchairs, restricted mobility, and baby strollers, and ensure management for their maintenance.
- Promote the incorporation of (efficient) lighting on the coast, as well as the pruning of bushes to promote visibility and safety.

[23] MIDES, 2021

[24] Gender perspective in coastal adaptation to Climate Change

- Promote the hiring of local labor for the new/adaptation of coastal infrastructure.
- Promote greater appropriation of local identity that contributes to the revaluation of public spaces.
- Implement campaigns that aim to denature gender-based violence and street harassment.
- Disseminate information on care service(s) for women in situations of gender-based violence, both on infrastructure posters and in communication and dissemination materials.
- Disseminate information and evidence on the impacts of climate change in the coastal zone.
- Increase the dissemination of information on climate characteristics linked to extreme events.
- Increase access and knowledge of departmental and local emergency plans, especially through information media used by women, such as, for example, incorporating text messages into Early Warning Systems
- Promote female representation on emergency management committees at the departmental and local level.
- Promote the involvement of women in the definition and implementation of nature-based solutions in the coastal zone, such as landscape restoration, ecosystem conservation, disaster risk reduction, among others.
- Promote the implementation of participatory and inclusive measures for the design of territorial planning and sustainable development instruments (plans, guidelines, regulations, etc.) by calling on women representatives of the localities from the diagnosis stage, as well as for the design, monitoring, and evaluation.
- Inform the population about environmental management measures to educate, raise awareness and contribute to the care of ecosystems.
- Disseminate experiences of good practices and lessons learned about the incorporation of the gender perspective in processes of appropriation of coastal public space.
- Promote knowledge about financing mechanisms associated with climate change and gender.
- Encourage the training of technical teams/decision makers at the local level in gender equality and the environment and climate change.
- Strengthen local institutional capacities for understanding gender transversality in environmental and climate change policies, including the production and use of statistical data disaggregated by sex and age for evidence-based decision making.
- Contribute to making departmental and local organizations and women's representatives visible, linked to gender equality, the environment and climate change.
- Promote processes to strengthen social organizations, especially women leaders, for advocacy on climate change issues.

Consultancy for the structuring and formulation of a Concept Note and Full Proposal to be submitted to the Adaptation Fund for the REACC-COSTAS Project, Uruguay.

Gender Action Plan

FINAL REPORT | December 4th, 2023

The REACC-Costas project has been conceived within the framework of the NAP Costas project, which has established solid bases of evidence of threats and vulnerability and has carried out a broad multi-stakeholder and gender-sensitive consultation process to define priorities. This project will be implemented by CAF, together with the Ministry of Environment of Uruguay, and will work in the six departments of the coastal zone of the Río de la Plata and Atlantic Ocean of Uruguay: Colonia, San José, Montevideo, Canelones, Maldonado and Rocha, to increase the adaptive capacity of the population and the resilience of coastal ecosystems exposed to the risks of flooding and erosion increased by climate change. The proposed activities will strengthen evidence-based coastal planning considering climate change (Component 1), promote investments in green and hybrid infrastructure to restore and conserve coastal ecosystems, improve drainage and protect homes and buildings (Component 2), and raise awareness and It will build the capacities of the different actors on the coast to ensure that they are aware of the risks and adaptation measures and are actively involved in climate action (Component 3). The REACC-Costas project is based on a comprehensive and participatory approach, which considers gender and generational aspects, within the framework of the public policy instruments in force in Uruguay, as detailed in the Gender Analysis. The project activities are aimed at promoting the ecosystem-based adaptation (EbA) approach, seeking to transform the perception of the coast, promoting its care and resilience as a shared and accessible space for all people, regardless of their gender and age. It will focus on promoting democratic access to public space on the coast in the long term, recognizing its value as a fundamental natural and social resource. In this way, it aims to achieve sustainable and equitable development of the coast in the context of climate change. The Gender Action Plan presented here is framed within this general objective and proposes concrete and specific activities, actions and measures to mainstream the gender and social inclusion approach in each of the Components of the project and its activities.

In line with the NAP Costas Gender Action Plan and the National Gender Equality Strategy, the following GAP for the REACC Costas contemplates the following criteria and guidelines for all the activities and actions of the program, allocating the economic budget necessary to ensure compliance:

- Use of inclusive language in all instances of calls, communication and dissemination, to explicitly address men and women.
- Establish meeting times (or any instance of participation), considering the differential possibilities of attending for women and men, young people and older adults.
- Organization of meetings or activities separately between men and women, separating certain discussion groups so that women express themselves with greater freedom, security and confidence or generating specific instances for women.
- Organize care and recreation strategies for girls and boys, so that the care burden is not a barrier to women's participation in meetings and activities (considering the structure of the sexual division of labor), as well as the adaptability of meeting spaces and training workshops suitable for people with disabilities.
- Include women's associations or organizations, technical personnel experts in gender issues, council departments, units, areas, or specific equality departments in participatory instances.

On the other hand, this GAP not only emerges from the Gender Analysis prepared for the REACC- Costas within which it is framed but is aligned with all the institutional instruments mentioned there and resumes the incorporation of the gender approach of the NAP Costas and of the NAP Cities. From the NAP Cities and the NAP Costas, the gender perspective is integrated into the identification of key indicators and a process of institutional strengthening in gender is carried out for management and decision-making. The participation of communities in the identification of risks is a priority in the NAP Costas, from which Workshops on Local Perception of Risks to Climate Change were developed, whose conclusions and recommendations have been considered to design the activities, measures and actions presented below.

The GAP for the REACC-Costas aims to be a guide of actions, with economic and human resources secured in the complete budget, so that all the interventions that are part of the complete proposal guarantee an equal distribution between men and women, young people and adults/ as, of all the benefits and knowledge that REACC Costas leaves installed on the Uruguayan coast for coastal adaptation to climate change. Its implementation will accompany the implementation of the project, and must be coordinated with all the actors involved, as detailed in the "Responsibilities and necessary resources" column, reporting progress with monitoring and monitoring indicators specifically included, as well as reporting the Achieved goals. The implementation of the GAP is the responsibility of the Project Management Unit (UGP, or PMU), which will have resources to hire a Specialist in Social Safeguards and Gender Approach (SSGS), in charge of the only of the execution and supervision of the GAP but also of the ESMP, as mentioned in said document, and in close coordination with the Environmental and Social Evaluation and Monitoring Coordination of CAF and with the Gender Coordination of CAF.

Although the activities included in the GAP follow the general schedule of the project, it is expected that as a first activity, the GAP will be presented to the entire PMU, and that annual updates and socializations will be made with the PMU team, in order to ensure that its implementation is adequately integrated into that of the project as a whole, identifying achievements and challenges.

Activities	Indicators and goals	Responsibilities and resources required	Schedule	Costs
Component 1. Strengthening evidence-based coastal planning considering climate change				
Output 1.1 Planning instruments with mainstreamed climate change				
1.1.1 Gender and generational focus in the guidelines, guides, sectoral technical guidelines and recommendations for the national and departmental government (including the Territorial Use Plan)				
Act. G.1.1.1.a. Drafting of chapters and/or specific sections in the review and updating of each of the documents, to specifically make visible and analyze the inclusion of the gender and generational approach: • National Coastal Area Directive • Coastal planning instruments at the local level and beach management (on discharges and ravines associated with water courses, identification of minor discharges, characterization of the vegetation associated with ravines and discharges, development of at least one protection, restoration and implementation plan value of ravines and discharges, development of a management plan for the Cerro beach to organize the uses of the beach and contribute to reducing erosion and flooding). • Hydrobiological guardianships in the Department of Maldonado. • Guides and standards to implement adaptation measures on the coast. • Land Use Plans	To be defined: 3 individual consultancies, 6 months each. # of guidelines, guides, sectoral technical guidelines and national and departmental recommendations include content on gender equality and social inclusion	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas Consultants for the review of documents and instruments and drafting of specific chapters.	1 consultancy per year (year 2, 3 and 4)	USD37,800
1.1.2 Validation of documents with representatives of civil society and departmental governments				
Act. G.1.1.2.a Working meetings with the Departmental Gender Directorates to share each of the documents of the instruments that are updated or new documents that are generated as part of this Component of the REACC Costas project. Act. G. 1.1.2.b Guarantee the participation of departmental gender directorates in the meetings for the presentation and validation of documents and instruments. Act. G. 1.1.2.c. Consider the general inclusion criteria in each of the activities with civil society where the results of this Component are presented, as detailed in this Gender Action Plan.	# of meetings with DDG At least 50% of the people who participate in the socialization workshops are women and young people. # of women and young people from civil society who participate in validation meetings	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas Departmental Gender Directorates	Year 2, 3 and 4 1 business meeting per year	USD400
Output 1.2 Improved climate change impact recording and monitoring systems				
1.2.1 Improved registration and monitoring systems for climate change impacts, including a gender and generational approach. Access with gender and generational equity to the registration and monitoring system.				

Activities	Indicators and goals	Responsibilities and resources required	Schedule	Costs
Act. G.1.2.1. a Preparation of a document of guidelines and recommendations for the registration and monitoring of the impacts of climate change on children, young people, women, the elderly population, and the disabled population. Act. G. 1.2.1.b Incorporation of the guidelines and recommendations in the improvement of the registration and monitoring system (incorporation in the *dashboard* mentioned in the Full Proposal document). Act. G. 1.2.1.c Training workshop aimed at the technical teams in charge of the registration and monitoring system for the effective inclusion and monitoring of specific indicators on impacts differentiated by sex and age of climate change. Act. G. 1.2.1 d Training workshops directed by representatives of civil society and representatives of local governments, to learn how to feed the registration and monitoring system with information related to the impacts differentiated by sex and age of climate change. Specific training activities may be organized for these population groups, in coordination with the Departmental Gender Directorates. Act. G. 1.2.1.d Generation and dissemination of annual reports on the differentiated impact of climate change on children, girls, youth, women, and the elderly population (within the framework of the REACC Costas project), and on the evaluation of losses and damages due to climate change (in coordination with the SNRCC Damage and Loss Group) as part of the reporting reports generated in the project.	1 document of guidelines for recording and monitoring the impacts of climate change on children, young people, women, the elderly population, the disabled population 1 national workshop on inclusion and monitoring of gender indicators 6 workshops, 1 per mayor, on gender focus and social inclusion in the registration and monitoring system At least 50% of the people who participate in the socialization workshops are women and young people. # of women and young people from civil society who participate in workshops on registration and monitoring At least 1 dissemination material per year (infographic, factsheet, short animated video, etc.)	Specialist in Social Safeguards and Gender Approach (SSGS) of REACC Costas, in coordination with the team in charge of the registration and monitoring system. Representatives of local governments. Departmental Gender Directorates. SNRCC Damage and Loss Group	Year 1 Year 1 Year 1 Years 1, 2, 3 and 4	0 USD, included in the SSGS tasks. USD1,000 USD1,200 USD10,000
Output 1.3 Early Warning System installed				
1.3.1 Early Warning System installed, focused on people, with information disaggregated by gender and age to mitigate or reduce the impacts of coastal flooding for Juan Lacaze (pilot site)				
Act. G. 1.3.1.a Preparation of a risk and vulnerability study with a gender and generational perspective, to understand the differential impacts of climate change and the specific risks of coastal flooding on young and adult women, boys, girls and older adults in Juan Lacaze.	1 individual consultancy for the study	Specialist in Social Safeguards and Gender Approach (SSGS) of REACC Costas, in coordination with SINAE-CECOED (Departmental Emergency	Year 1	USD15,750

Activities	Indicators and goals	Responsibilities and resources required	Schedule	Costs
Act. G. 1.3.1. b Incorporation of the results of the study in the design of the EWS, to feed the necessary information of the System and the definition of roles and protocols, which guarantee the concrete visibility of the entire population. Act. G. 1.3.1.c Specific training on the gender approach in early warning systems, aimed at the technical teams in charge of the EWS, with the objective of incorporating the necessary knowledge to design and implement contingency plans and exercises simulation with a gender perspective, with special focus on the differentiated needs of women, children, young people and older adults. Act. G. 1.3.1.d Identification of communication channels that can be associated and included in the EWS, to especially reach young and adult women, the young population in general and the older adult population, based on the available information on the composition of households and economic activities, especially those headed by women, in Juan Lacaze. Act. G. 1.3.1.e General considerations of gender and inclusion in the development of the communication strategy linked to the EWS, following the general guidelines of this Action Plan. Act. G. 1.3.1.f Working days with the local population in Juan Lacaze and with local authorities on the importance of the operation of early warning systems with a focus on social inclusion. As part of these sessions, teaching and dissemination material will be developed aimed at the local population. Act. G. 1.3.1.g Consider the criteria included in this Gender Action Plan in reparation and response actions: preparation of contingency plans, simulation exercises, etc. The work with the local population and key actors of the territory in these actions must also consider the criteria of gender equality and social inclusion mentioned.	EWS designed with gender equality and social inclusion criteria. 1 training workshop on gender focus in EWS Specific channels identified and included as part of the EWS EWS communication strategy designed with gender and social inclusion criteria. 2 days of work/workshop (1 day every two years). 1 dissemination material Contingency plans and simulation exercises with the participation of women, young people, and older adults, and adapted to people with reduced mobility	Committee) and Emergency Directorate (responsible in charge of the EWS). Technical team in charge of EWS-SINAE and Training and Gender Area of SINAE Consulting for the study of risk and vulnerability with a gender and generational perspective Local authorities linked to the implementation of the project. Departmental Gender Directorates – Colonia Civil society organizations – Juan Lacaze	Year 1 Year 1 Year 1 Year 3 Year 2, 3 and 4	0 USD, included in the SSGS tasks.
Component 2. Green and hybrid infrastructure to increase the resilience of coastal areas				
Output 2.1 Conserved and restored coastal ecosystems: *2.1.1 Recovery of the dune range structure, 2.1.2 Conservation and regeneration of vegetation, 2.1.3 Management of income to and uses of the beach, 2.1.4 Conservation and restoration of vegetation on the margins of watercourses coastal water and wetlands*				
2.1.1. Incorporation of gender perspective and social inclusion in the contracting documents of public works companies				

Activities	Indicators and goals	Responsibilities and resources required	Schedule	Costs
Act . G. 2.1.1.a Use of inclusive language in the signage of the work, both in the signage used during the construction stages and the signage that remains installed (2.1.2. to 2.1.5). This includes posters adapted for blind people, and signage with non-sexist images and icons, as well as posters that promote that the work is free of gender violence. Act. G. 2.1.1.b In the adaptation of the accesses to the beaches, the promenades and parking lots will have adequate signage to inform and sensitize the population about the primary care services in the area (medical emergencies, care cases of gender violence, etc.). (2.1.3) Act. G. 2.1.1.c In the works to recover the dune ridge (2.1.1) and access and entrances to the beaches (2.1.3), companies will have to plan and include in the work adequate access for the people with disabilities and reduced mobility, making the necessary installations and adaptations. These accesses must be safe for children and pregnant women. Act. G. 2.1.1.d In the works related to the management of access to the beaches (2.1.3), specific parking spaces will be created for people with disabilities and reduced mobility, which includes specific parking spaces for pregnant women and for people in charge of transporting children. Act. G. 2.1.1.e All works that contemplate the installation of lighting must take into account criteria that contribute to the safety of women who circulate through those spaces. To do this, the company in charge of the work will have to make the necessary consultations with the local population, in coordination with the Specialist in Social Safeguards and Gender Approach and the Departmental Gender Directorates (where applicable and according to the criteria of participation and consultation included in the ESMP). Act. G. 2.1.1.f When the incorporation of native vegetation species is promoted (2.1.1 and 2.1.2), it will be evaluated whether the height of the vegetation can contribute to the formation of unsafe spaces for the circulation of women. , adults and young people. This will be consulted with the local population, in coordination with the Social Safeguards and Gender Approach Specialist and the Departmental Gender Directorates (where applicable and according to the participation and consultation criteria included in the ESMP). Act. G.2.1.1.g. The companies assigned to carry out the works will have to include between 40%-50% of women in their technical staff, as well as work	Environmental and Social Evaluations for each work and at each site prepared with social inclusion criteria. Tender documents published with gender equality and social inclusion requirements (environmental and social requirements, and gender equality requirements). # of public works contracting companies with technical staff made up of women (40%-50% of the total technical staff)	Social Safeguards and Gender Specialist (SSGS) at REACC Costas Adaptation and Environmental Safeguards Specialist (AESS) at REACC Costas Responsible for construction supervision of REACC Costas PMU REACC Costas	Year 2, 3 and 4	0 USD, included in the SSGS tasks.

Activities	Indicators and goals	Responsibilities and resources required	Schedule	Costs
plans (Environmental and Social Management Plan) that incorporate gender and gender violence awareness activities. all people who work on the construction sites. Act. G. 2.1.1.h Participation and consultation with the local community will be taken into account to understand their interests and needs, with special involvement of women and youth groups.				
Output 2.2. Improved and sustainable drainage and stormwater systems (2.2.1 *Readjustment and/or redirection of stormwater discharges on the beach, 2.2.2. Bioretention, 2.2.3 Accumulator ditches, adaptation of channels and buffer lagoons, 2.2.4 floodable parks).*				
2.2.1. Incorporation of gender perspective and social inclusion in the contracting documents of public works companies				
Act. G. 2.2.1.a Use of inclusive language in the signage of the work, both in the signage used during the construction stages and the signage that remains installed (2.2.1 to 2.2.4). This includes signage adapted for blind people, and signage with non-sexist images and icons. Act. G. 2.2.1.b The drainage ditches that are built as part of 2.2.3 must include the necessary protection for the care of children, people with reduced mobility and the elderly population, as well as the installation of the Necessary signage indicating the location of the ditches. The necessary maintenance must also be included to prevent the proliferation of mosquitoes and other insects. Act. G. 2.2.1.c The design of floodable parks (2.2.4) must include inclusive recreation spaces that allow the use of public space by both women and men. The design of the work must consider the safety of movement of women and young people, as well as the adaptation of spaces for the movement of older adults, people with disabilities and people with reduced mobility. In the event that the consideration of this detail in the bidding document cannot be incorporated, the REACC Costas project will support the preparation of a specific preliminary project with specialists in the subject that can later be incorporated into the work project. Act. G. 2.2.1.d Participation and consultation with the local community will be taken into account to understand their interests and needs, with special involvement of women and youth groups. Act. G. 2.2.1.e All works that contemplate the installation of lighting must take into account criteria that contribute to the safety of women who circulate through those spaces. To do this, the company in charge of the work will have	Environmental and Social Evaluations for each work and at each site prepared with social inclusion criteria. Tender documents published with gender equality and social inclusion requirements (environmental and social requirements, and gender equality requirements). The preliminary projects/studies prior to work for floodable parks include a specialist in the subject.	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas and Responsible for construction supervision. PMU Specialist in Adaptation and Environmental Safeguards (AESS). Resources for the inclusive design of the flood park – Preliminary construction project (2.2.1.c).	Year 2, 3 and 4 Year 1, 2, 3 and 4	0 USD, included in the SSGS tasks.

Activities	Indicators and goals	Responsibilities and resources required	Schedule	Costs
to make the necessary consultations with the local population, in coordination with the person responsible for Gender of the REACC Costas project. Act. G. 2.2.1.f. The companies assigned to carry out the works will have to include between 40%-50% of women in their technical staff, as well as work plans (Environmental and Social Management Plan) that incorporate gender awareness and gender violence activities. all people who work on the construction sites.				
Output 2.3. Homes and commercial buildings protected against floods (implementation of a financial mechanism to promote the adaptation of homes and other buildings in areas with risk of flooding (revolving fund mechanism)				
2.3.1 Compilation of information and evidence for the design of the financial mechanism for adaptation with gender equality and social inclusion criteria.				
Act. G. 2.3.1.a Preparation of a survey study of specific adaptation measures that can be included in the financing criteria of the revolving fund, according to the specific needs of single-parent households headed by women, of households headed by women, homes with people with disabilities, and commercial premises run by women. The objective of this survey is to be able to recommend specific actions to be included in the operating manual of the revolving fund that will be designed as part of the REACC Costas project. Act. G. 2.3.1.b Diagnostic study on access to credit by young and adult women in the specific areas of project intervention. This information can serve as a baseline to know the specific instruments and requirements that the revolving fund must take into account so as not to hinder the access of young and adult women. The results of this study will be taken into account for the preparation of the operating manual of the revolving fund	1 survey / 1 individual consultancy 1 study / 1 individual consultancy	Specialist in Social Safeguards and Gender Approach (SSGS) of REACC Costas, in coordination with the National Housing Directorate (DINAVI) of the Ministry of Housing and Territorial Planning in charge of the administration of the revolving fund. Consulting for the survey study (2.3.1.a) Consulting for the diagnostic study of access to credit (2.3.1.b)		USD10,000
2.3.2. Inclusion of gender equality and social inclusion criteria in the design of the operating manual of the revolving fund .				
Act. G. 2.3.2.a Include eligibility criteria in the operating manual of the revolving fund, linked to the prioritization of recipients taking into account the diversity in the composition of the population, considering gender and generational criteria, with special attention to single-parent households headed by women. Act. G. 2.3.2.b Ensure that the operational manual does not include criteria or requirements that block the access of women and youth to the financing options of the revolving fund for adaptation. Act. G. 2.3.2.c Consider and include as eligible financing adaptation measures that are necessary for households headed by women (according to the results of Act. G. 2.3.1.a).	1 Operational manual with specific criteria for access to financing by women and single-parent households headed by women (with quota or incentive)	Specialist in Social Safeguards and Gender Approach (SSGS) of REACC Costas, in coordination with the National Housing Directorate (DINAVI) of the Ministry of Housing and Territorial Planning in charge of the administration of the revolving fund.	Year 1, 2, 3 and 4	0 USD, included in the SSGS tasks.
Output 2.4. Reinforced hybrid infrastructure for the development of sustainable ecotourism (Design and development of a sustainable ecotourism project in Playa Penino)				

Activities	Indicators and goals	Responsibilities and resources required	Schedule	Costs
2.4.1 Design and development of the sustainable ecotourism project with a gender and social inclusion perspective				
Act. G. 2.4.1.a The study to design the ecotourism project will include a section that details the socio-economic activities carried out by women in Playa Penino, especially those linked to tourism. This analysis will serve as a baseline to then identify specific investments that support your needs and economic endeavors. Act. G. 2.4.1.b The marketing and promotion/dissemination plans that are financed with the objective of including Playa Penino on the national tourist map will include those ventures run by women in the area, so that they are promoted as part of the overall strategy. Act. G. 2.4.1.c The design of the financed work will include spaces suitable for people with reduced mobility and blind people, as well as the necessary adaptation for the safe movement of boys and girls. This includes the creation of specific parking spaces for people with disabilities and reduced mobility when applicable, as well as including specific parking spaces for pregnant women and for people in charge of transporting children. Act. G. 2.4.1.d The infrastructure adaptation that is financed will include signage with non-sexist language as well as signage adapted for blind people. Act. G. 2.4.1.e. The ecotourism project will place special emphasis on generating job opportunities for women as environmental promoters or nature guides (see Act. G. 3.4.1.a of this Gender Action Plan, which is also detailed in the Proposal document Complete, on the promotion of the activities of women who are dedicated to local tourism in quality ecotourism training) . Act. G. 2.4.1.f Participation and consultation with the local community will be considered to understand their interests and needs, with special involvement of women and youth groups.	1 sustainable ecotourism project design study with a specific section on women's socio-economic activities. # of marketing and promotion plans that include ecotourism ventures run by women Tender documents published with gender equality and social inclusion requirements (environmental and social requirements, and gender equality requirements). The preliminary projects / previous studies include a specialist in the subject.	Specialist in Social Safeguards and Gender Approach (SSGS) of REACC Costas, in coordination with the SNAP and the Ministry of Tourism (Gender Unit). Environmental and Social Manager of REACC Costas. Departmental Gender Directorate of San José. ToR for the preparation of the design of the ecotourism project includes the Acts. G. 2.4.1.a and b, and a person with ecotourism and a gender and social inclusion approach. Resources for the inclusive design of the flood park – Preliminary construction project (2.4.1.c).	Year 1 Years 1 and 2 Years 2, 3 and 4	0 USD, included in the SSGS tasks.
Component 3. Stakeholders build their capacities, understand climate risks and engage in climate action				
GA Activity "Harassment-Free Coast" awareness campaign GA1. Design an awareness campaign on harassment in public spaces, linked to the use of coastal space by women, young people, boys, girls and older adults - "Costa Libre de Acoso" GA2. Campaign presentation workshop, aimed at technical teams and decision makers linked to the REACC Costas project.	1 campaign – 1 consultancy 1 national presentation workshop (50 people) 6 local workshops (1 workshop per Municipality)	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas Departmental Gender Directorates	Year 1	*USD10,500*

Activities	Indicators and goals	Responsibilities and resources required	Schedule	Costs
GA3. Local workshops to present the Campaign in each of the municipalities, aimed at representatives of civil society, technical teams and decision makers linked to the REACC Costas project.		Hiring a consultancy for the awareness campaign, which includes presentation workshops. Coordination with the National Women's Institute (Inmujeres)		
Activity B. Governance scheme and areas of project coordination operate with gender equality criteria. B.1 Hire a person responsible for supervising and implementing the Gender Action Plan, as part of the Project Management Unit (PMU) B.2 Present the implementation of the Gender Action Plan to the Steering Committee B.3 Organize a training meeting for the Steering Committee on a gender approach and social inclusion B.4 Participation in the Technical Committee meetings of the Social and Gender Responsible Person, as part of the PMU B.5 Present the implementation of the Gender Action Plan in the Technical Committee B.6 Organize training and awareness activities aimed at the members of the Technical Committee on the gender approach and social inclusion B.7 Encourage the participation of the Departmental Gender Directorates when the Municipalities are invited to participate in the Technical Committee meetings ('Gender Group Sites') B.8 Ensure financial resources for the participation of women from civil society in Technical Committee meetings, when this sector is invited to participate.	Specialist in Social Safeguards and Gender Approach (SSGS) is part of the PMU. The Steering Committee is familiar with the GAP (1 GAP socialization meeting) and is trained in the gender and social inclusion approach (1 training workshop) 1 meeting per year with the Technical Committee on the implementation of the GAP The Technical Committee is trained on the gender approach and social inclusion (2 training workshops, 1 every two years) # of meetings of the Technical Committee with participation of the Departmental Gender Directorates # of meetings of the Technical Committee with the participation of women from civil society	Specialist in Social Safeguards and Gender Approach (SSGS) of the PMU PMU steering committee Technical Committee Departmental Gender Directorates	Year 1, 2, 3 and 4	*USD2,160* 0 USD, included in the SSGS tasks. *USD2,025*

Activities	Indicators and goals	Responsibilities and resources required	Schedule	Costs
	# of women invited to participate and who participate in Technical Committee meetings.			
Output 3.1 Decision makers, technicians and population sensitized and involved with climate change.				
3.1.1 Communication strategy with a gender and generational perspective				
Act. G. 3.1.1.a Preparation of a specific chapter or section within the communication strategy to address how to communicate with a gender and generational perspective. Act. G. 3.1.1b Identify young and adult women, young people and adolescents, and economic and tourism ventures led by women as part of the campaign's target audience, to adapt communication materials. Act. G. 3.1.1c As part of the implementation of the Strategy, communication materials will be prepared with inclusive language, which includes the use of images and illustrations without gender bias. Act. G. 3.1.1d The Action Plan of the Communication Strategy will include specific indicators disaggregated by sex and age, in order to measure the differentiated reach to different population groups.	1 Communication Strategy with information and recommendations to communicate with a gender perspective (Act. G. 3.1.1.a – d are detailed in the ToR)	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas PMU ToR for the preparation of the Communication Strategy include the Acts. G. 3.1.1.a, b and c, and a person with experience in communication and gender perspective as part of the team.	Year 1	0 USD, included in the SSGS tasks.
3.1.2 Incorporation of the gender and generational approach in raising awareness among high-level political decision-makers				
Act. G. 3.1.2.a Include information disaggregated by sex and age in the presentations prepared for meetings at the ministerial level and in the meetings of the Congress of Mayors, with the objective of informing and raising awareness about the impacts of climate change on men, women, young people and adults, and boys and girls. Act. G. 3.1.2.b Organize specific meetings at the ministerial level to analyze the adaptation measures that are being implemented and how they impact the daily lives of women and young people who live and work on the coast, with the objective to sensitize this public in the gender and generational approach. Act. G. 3.1.2.c Organize an annual presentation by Department on the progress of the project in relation to the Gender Action Plan, as a way of raising awareness aimed at local authorities.	Programs and minutes of the meetings with details of gender and generation issues Presentations with specific information prepared for meetings. 2 meetings (1 every two years) at ministerial level to analyze the implementation of the project from a gender and generational perspective. 4 follow-up meetings of the Gender Action Plan	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas Departmental Gender Directorates	Year 1, 2, 3 and 4 Year 2 and Year 4	0 USD, included in the SSGS tasks. USD400 USD424

Activities	Indicators and goals	Responsibilities and resources required	Schedule	Costs
			Year 1, 2, 3 and 4	
3.1.3 Incorporation of the gender and generational approach in raising awareness of local technical teams				
Act. G. 3.1.3.a Preparation of a Manual on Good Practices on incorporating the gender perspective and social inclusion in public works, with the objective that companies contracted within the framework of REACC Costas are aware of and implement the recommendations and equity and inclusion criteria. The Manual may be attached to the contracts as an annex and may be based on similar precedents carried out in Uruguay.[1] Act. G. 3.1.3.b Reflection and training sessions on urban planning and gender perspective, aimed at technical teams of the Ministry of Environment (linked to the implementation of the REACC Costas, on the one hand, and the Municipalities (Departmental Gender Directorates and others). local representatives linked to the management and supervision of REACC Costas works at each site) Act. G. 3.1.3.c Training on gender equality and social inclusion for the Municipal Works Directorates and other related areas, by the Departmental Gender Directorates. Act. G. 3.1.3.d Joint supervision of the works between the person responsible for work supervision for REACC Costas, the Social and Gender Manager and the Departmental Gender Directorates (as appropriate in each pilot site)	1 Manual on Good Gender Practices in public works / 1 consultancy 2 days at national level 1 training day per Municipality 1 training workshop in each Municipality – 6 workshops # joint visits to the works at each pilot site Criteria detailed in Component 2 of the GAP included in the works.	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas Specialist in Adaptation and Environmental Safeguards (AESS) at REACC Costas Responsible for construction supervision of REACC Costas Consulting for the preparation of the Manual Consulting for training in urban planning and gender Departmental Gender Directorates and Work Directorates	Year 1 Year 1 Year 1 Years 2, 3 and 4	USD10,000
Output 3.2 Population sensitized and involved in flood and coastal erosion risk management and climate change				
3.2.1 Participation mechanisms for the local population designed with a gender and generational approach				
Act. G. 3.2.1.a Surveys of local participation spaces will include an analysis of the involvement of young and adult women, how they participate, and what their main barriers to participation are. This survey may include the identification of specific spaces organized and led by women, as well as the degree of formalization.	6 local participation surveys prepared with information on the participation of women and youth.	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas Departmental Gender Directorates ToR for the survey of spaces for local participation and mapping of actors	Year 1	0 USD, included in the SSGS tasks.

[1] The Municipality of Montevideo published " Feminist urbanism in Montevideo ", " Montevideo free of sexual harassment in public spaces ". Another reference may be the publication of the Ministry of Public Works of Argentina " The gender perspective in the Public Works cycle ".

Activities	Indicators and goals	Responsibilities and resources required	Schedule	Costs
Act. G. 3.2.1.b The mapping of actors carried out for each project intervention site will include women and youth organizations, whether formal or informal, and their interests and potential links with other local spaces. of participation. Act. G. 3.2.1.c The local participation mechanism defined for each intervention site will explicitly include how to guarantee the representation and participation of women and young people. This implies prior knowledge of what their specific needs and requirements are for effective participation (for example, time availability, care spaces, appropriate communication channels, etc.)	6 participation mechanisms defined with criteria (and monitoring indicators) that guarantee equal participation.	include the Acts. G. 3.2.1.a, b and c, and a person with experience in gender perspective as part of the team.		
3.2.2 Involvement and awareness of the young population in monitoring adaptation measures				
Act . G. 3.2.2.a Include in the 3 local exchange and awareness activities specific sessions to work on the inclusion of the gender perspective in adaptation measures as well as another topic of linked interest, which can be defined in each department. Act. G. 3.2.2.b 50% of the wages assigned to each department will have to be received by young women, in order to strengthen their role and involvement in monitoring adaptation measures. Act. G. 3.2.2.c The training and awareness activities organized as part of this project aimed at young people will include the participation of 50% of young women. To achieve this, it is important to guarantee that broadcasts and calls reach and challenge them, and that appropriate communication channels are used. Act. G. 3.2.2.d The innovative proposal contests will be designed to promote the presentation of ideas with a gender perspective, through the definition of a score and selection criteria.	The work programs of the exchange activities detail the specific sessions on gender and social inclusion. At least 50% of wages are earned by young women. At least 50% of the participants are young women. Contest rules developed with scores and selection criteria that promote ideas with a gender perspective.	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas Departmental Gender Directorates	Year 1 Year 1, 2, 3 and 4 Year 1 Year 1	0 USD, included in the SSGS tasks.
3.2.3 Local communicators sensitized in climate change communication with a gender and generational perspective				
Act. G. 3.2.3.a The workshops organized in each department will include specific sessions to address climate change communication with a gender perspective. In these workshops or meetings, good communication practices with a gender and generational perspective will be presented, as well as what criteria are key to incorporate to reach the entire population equally with the message.	Work programs for each workshop with a specific session on gender and communication At least 1 good practice on communication and gender perspective presented per workshop	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas Departmental Gender Directorates	Year 1	0 USD, included in the SSGS tasks.
3.2.4 Awareness-raising and involvement of the local community, with special emphasis on the participation of women				

Activities	Indicators and goals	Responsibilities and resources required	Schedule	Costs
Act. G. 3.2.4.a Organize one workshop or meeting per year with women from civil society who are directly affected by the activities of the REACC Costas project, to carry out participatory monitoring of the Gender Action Plan and the implementation of the project in general. These meetings will also include the lessons learned so far, as well as the identification of improvements so that adaptation measures are population-centered. Work will be done through the network of environmental promoters to strengthen their involvement in the implementation of project activities. Act. G. 3.2.4.b The organization of the neighborhood educational outings included in the project will pay special attention to the participation of young and adult women, ensuring that they receive the pertinent invitation in a timely manner, and organizing these outings according to their availability time. Specific outings adapted to boys and girls may be organized to raise awareness about the environment and its care in coastal areas. Act. G. 3.2.4.c Communication products that are designed to raise awareness among the local population will take into account the use of non-sexist language, the use of inclusive images and illustrations that do not reproduce gender stereotypes. Act. G. 3.2.4.d Include in the practical exchange workshops with civil society specific sessions to work on gender and social inclusion issues. Organize these workshops with the general criteria of gender equality and inclusion detailed in this Gender Action Plan. Act. G. 3.2.4.e 50% of the wages assigned to each department/site prioritized for monitoring adaptation measures will have to be received by women, in order to strengthen their role and involvement in said monitoring and follow-up.	1 meeting/workshop per site per year. Educational outings organized with the participation of young and adult women. At least 1 educational outing for children and children Communication products made with non-sexist language. Work programs for each workshop (6 workshops per year, 1 per site) with a specific session on gender and social inclusion At least 50% of wages are earned by women	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas Departmental Gender Directorates ToR for the preparation of communication products to raise awareness of the local population includes what is detailed in the Act. G. 3.2.4.c.	Year 1, 2, 3 and 4 Year 1, 2, 3 and 4 Year 1, 2, 3 and 4 Year 1, 2, 3 and 4 Year 1, 2, 3 and 4	USD52,800 0 USD, included in the SSGS tasks.
3.2.5 MSMEs in the tourism sector, the real estate sector and productive sectors associated with the coastal zone sensitized to the impacts of climate change with a gender and intersectional approach				
Act. G. 3.2.3.a Include information disaggregated by sex and age in the materials prepared for awareness-raising activities with representatives of the tourism, real estate and productive sectors of the coastal zone. Prepare materials that explain how the threats and risks associated with climate change differentially impact men and women, young people and adults, and how this affects the different sectors in their economic activity in particular.	Dissemination materials that include information disaggregated by sex and age of the threatened and impacts of climate change	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas Departmental Gender Directorates ToR for the preparation of dissemination materials aimed at the tourism sector	Year 1	0 USD, included in the SSGS tasks.

Activities	Indicators and goals	Responsibilities and resources required	Schedule	Costs
		include what is detailed in the Act. G. 3. 2.3.a.		
Output 3.3 Improved knowledge management				
3. 3 .1 Identification and dissemination of good practices and lessons learned in coastal areas on incorporating the gender and generational approach				
Act. G. 3.3.1.a Identify case studies on adaptation measures with a gender and generational approach successfully implemented by the project. Act. G. 3.3.1.b Consider specific aspects of gender and social inclusion in the selection and analysis of all case studies. Act. G. 3.3.1.c Include work sessions on the gender and generational approach in the annual reflection workshops. Act. G. 3.3.1.d Guarantee the participation of the Departmental Gender Directorates in the annual reflection workshops, being able to involve them in the preparation of specific presentations. Act. G. 3.3.1.e The communication products developed for the dissemination of lessons learned and good practices will include information disaggregated by sex and age and will make visible the experiences of the women who are the recipients and protagonists of the adaptation measures.	At least 3 case studies on gender and generations 6 case studies (1 per prioritized site) prepared with a gender and social inclusion perspective. 1 reflection workshop agenda per year with specific work sessions on gender and generations. Communication products include information disaggregated by sex and age (videos, learning sheets, infographics and audiovisual material for the population). At least 1 video about the experiences of women who are recipients of the project's actions.	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas Departmental Gender Directorates ToR for the preparation of case studies on good practices and lessons learned include what is detailed in the Act. G. 3. 3.1.a. and b ToR for the preparation of communication products for the dissemination of lessons learned and good practices include what is detailed in the Act. G. 3.3.1.e.	Year 3 and 4	0 USD, included in the SSGS tasks. USD37,200
3.3.2 Exchanges between Departmental Gender Directorates for knowledge management				
Act. G. 3.3.2.a Meetings to exchange and monitor the actions implemented by the REACC-Costas between the Departmental Gender Directorates and their teams. These meetings may include visits to the sites prioritized by the project, with the aim of generating a space for joint learning and cohesion between the municipal teams.	1 meeting/visit per year to project sites	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas Departmental Gender Directorates	Year 1, 2, 3 and 4	USD2,700
3.3.3 Coastal Space Management Congress				

Activities	Indicators and goals	Responsibilities and resources required	Schedule	Costs
Act. G. 3.3.3.a The organization of the Congress will include specific panels to present and debate how the gender and generational approach is part of the management of the REACC Costas project, as well as the main challenges and progress in this regard. These panels may be made up of representatives from the academy, the Departmental Gender Directorates and women from civil society, and may be organized and coordinated by the Gender Reference person for the project. Act. G. 3.3.3.b Special consideration will be given to guaranteeing the participation of women from civil society with economic resources	At least 1 thematic panel on a gender and generational approach # of women from civil society registered in Congress	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas Departmental Gender Directorates	Year xxx	0 USD, included in the SSGS tasks. USD3,500
Output 3.4. Strengthened capacities of the population for economic autonomy, revaluing the coastal space				
3.4.1 Articulation with training spaces to incorporate local tourism topics				
Act. G. 3.4.1.a Promote the participation of women who are dedicated to activities linked to local tourism in quality ecotourism training and training provided by local and/or national institutions (this activity is also included as part of the project design of ecotourism in Playa Penino – Output 2.4) The promotion of the participation of women in these trainings will be done in coordination with the Departmental Gender Directorates, and the REACC Costas will guarantee the availability of funds for this participation. The project will collaborate with local educational institutions, such as the Universidad del Trabajo del Uruguay (UTU), to facilitate access to ecotourism training programs. It will study the possibility of integrating specific topics related to ecosystem-based adaptation, sustainable practices, cultural identity and natural heritage into the training curriculum.	At least 40-50% of people trained in ecotourism are women. # of women participating in training and training courses	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas Departmental Gender Directorates. Coordination with UTU and similar Coordination with the gender area of the Ministry of Tourism of Uruguay.		USD5,000
3.4.2 Program to Strengthen Women's Employment in Coastal Zones				
Act. G. 3.4.2.a Design and implementation of a program to strengthen access to formal employment and improve the current working conditions of women who carry out economic and productive activities in the coastal zone. The program may include training on topics such as the development of business plans, digital marketing strategies, use of social networks, etc. As part of this program, there will be a systematization of the existing resources in Uruguay and in the Municipalities aimed at strengthening business development and access to sources of credit or specific financing, to disseminate among women who participate in the program.	1 Employment Strengthening Program aimed at women in coastal areas, designed and implemented at the end of the project. # of women participating in the Employment Strengthening Program	Specialist in Social Safeguards and Gender Approach (SSGS) at REACC Costas Departmental Gender Directorates 1 consultancy for the design of the Program National Institute of Employment and Vocational Training Organization of Businesswomen.	Years 1, 2, 3 and 4	USD80,000

Activities	Indicators and goals	Responsibilities and resources required	Schedule	Costs
		Private sector/business organizations that promote women's economic autonomy.		

Consultancy for the structuring and formulation of a Concept Note and Full Proposal to be submitted to the Adaptation Fund for the REACC-COSTAS Project, Uruguay.

Evidence-Based Risk Identification (EBRI)

FINAL REPORT | December 4th, 2023

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1. INTRODUCTION

The Environmental and Social Policy (ESP) of the Adaptation Fund (AF) requires that all projects be reviewed against the 15 principles and across all components and planned activities. This policy ensures that projects supported by the Fund promote positive environmental and social benefits and mitigate or avoid adverse environmental and social risks and impacts.

This document presents the detailed risk identification and categorization (EBRI) of the project "Increasing socio-ecological resilience in the Uruguayan coastal zone and strengthening the adaptive capacity of its infrastructure: REACC Costas" prepared together with the Government of Uruguay with technical assistance from the Development Bank of Latin America (CAF).

The project covers the six coastal departments of Uruguay and proposes 3 components, the majority of whose activities have been clearly identified except for activity 2.3.1 which is considered an unidentified activity or subproject (USP). The particular considerations for the risk analysis of the USP activity are included in this EBRI. Implementation arrangements have been determined for the activities of each component and the roles and responsibilities of the verifiers. The ESMP was developed after intensive consultations with stakeholders, including bilateral and group meetings and visits to the six sites.

Screening and preliminary analysis found that certain project activities could generate few limited adverse social and environmental impacts. The assessment resulted in an overall social and environmental risk categorization of “Type B.” The ESMP is designed to avoid, and where not possible, mitigate and manage these limited potential impacts.

The document is organized to present the following sections: 1. General summary of the project and its activities, 2. Identification and categorization of risks, 3. General characterization.

2. PROJECT SUMMARY

The project will work to increase the adaptive capacity of the population and the resilience of coastal ecosystems exposed to the risks of flooding and erosion, enhanced by climate change with a comprehensive and participatory, gender and generational approach. It is aimed at promoting the ecosystem-based adaptation (EbA) approach, seeking to transform the perception of the coast, promoting its care and resilience as a shared space accessible to all people. It will focus on continuing to guarantee democratic access to public space on the coast in the long term, recognizing its value as a fundamental natural and social resource.

The project has been divided into three components:

Component 1 - Strengthened evidence-based coastal planning considering climate change	Component 2 - Reinforced green and hybrid infrastructure to increase coastal resilience	Component 3 - Stakeholders build capacity, understand climate risks and engage in climate action
Output 1.1 Planning instruments with mainstreamed climate change Activity 1.1.1 Mainstreaming climate change into planning instruments Activity 1.1.2 Development of technical guides to provide guidelines for concrete adaptation measures ***Output 1.2 Improved systems for recording and monitoring climate change impacts*** Activity 1.2.1 Strengthening systems for recording and monitoring climate change impacts. Activity1.2.2 Development of a loss and damage assessment system for the tourism sector on the coast. ***Output 1.3 Early Warning System for coastal flooding installed*** Activity 1.3.1 Development of people-centered, end-to-end coastal flood risk EWS.	***Output 2.1 Strengthened coastal ecosystems to respond to erosion and flooding impacts*** Activity 2.1.1 Recovery of dune ridge structure Activity 2.1.2 Conservation and regeneration of beach vegetation Activity 2.1.3 Management of access to and use of the beach Activity 2.1.4 Conservation and restoration of vegetation on watercourse margins and coastal wetlands ***Output 2.2. Improved and sustainable drainage and stormwater systems*** Activity 2.2.1 Redirection and/or adequacy of stormwater discharges on the beach Activity 2.2.2 Bioretention Activity 2.2.3 Accumulation ditches, adequacy of channels and buffer ponds Activity 2.2.4 Floodable parks ***Output 2.3 Flood-protected housing and buildings*** Activity 2.3.1 Implementation of a financial mechanism to promote retrofitting in housing and other buildings in flood risk areas ***Output 2.4 Enhanced hybrid infrastructure for sustainable ecotourism development*** Activity 2.4.1 Design and development of sustainable ecotourism project	***Output 3.1 Decision-makers, technicians and operators sensitized and involved in coastal adaptation*** Activity 3.1.1 Communication strategy Activity 3.1.2 Awareness-raising for high-level policy-makers Activity 3.1.3 Awareness-raising and training for local technicians ***Output 3.2 Local population sensitized and involved in coastal adaptation*** Activity 3.2.1 Develop and socialize a Dissemination Plan and Participatory Strategy by intervention site Activity 3.2.2 Raising awareness and strengthening participation instances to involve young people in adaptation measures Activity 3.2.3 Awareness raising and training for communicators Activity 3.2.4 Awareness and involvement of the local community Activity 3.2.5 Awareness-raising for MSMEs / productive sectors ***Output 3.3 Improved knowledge management*** Activity 3.3.1 Identification of good practices and lessons learned Activity 3.3.2 Knowledge management exchanges between intendancies Activity 3.3.3 Coastal Space Management Congress ***Output 3.4 Capacities of the population strengthened for economic autonomy by revaluing the coastal space*** Activity 3.4.1 Coordination with educational spaces to incorporate local tourism topics Activity 3.4.2 Program to strengthen women's employment in coastal zones

2.1 Expected results of the project

The proposed project expects to obtain the following products and results:

Table 1. Products and expected results

Components	Expected Concrete Outputs	Expected Outcomes
1. Strengthening evidence-based coastal planning considering climate change	Output 1.1 Planning instruments with mainstreamed CC Output 1.2 Improved systems for recording and monitoring CC impacts Output 1.3 Early Warning System installed	Strengthened evidence-based coastal planning considering climate change. Reduced exposure to climate hazards (flooding and erosion)
2. Reinforced green and hybrid infrastructure to increase coastal resilience	Output 2.1 Coastal ecosystems conserved and restored. Output 2.2 Improved and sustainable drainage and stormwater systems	Reduced coastal erosion. Reduced coastal flooding. Preserved recreation and care spaces

Components	Expected Concrete Outputs	Expected Outcomes
	Output 2.3 Flood-protected housing and buildings Output 2.4. Enhanced hybrid infrastructure for sustainable ecotourism development	
3. Stakeholders build capacity, understand climate risks and engage in climate action	Output 3.1 Decision-makers, technicians sensitized and involved in coastal adaptation. Output 3.2 Local population sensitized and involved in coastal adaptation. Output 3.3 Improved knowledge management Output 3.4 Capacities of the population strengthened for economic autonomy by revaluing the coastal area	Local population sensitized and capable of responding to flooding and implementing practices to prevent coastal erosion. Strengthened institutional capacities to reduce flood and coastal erosion induced risks

3. IDENTIFICATION AND CATEGORIZATION OF RISKS

Based on the guidance document for the Implementing Entities on compliance with the Environmental and Social Policy of the Adaptation Fund, the Checklist for the Detection of Social and Environmental Risks and the Identification and Preliminary Management of Social and Environmental Risks were prepared.

The risk selection process for project activities was developed following the 15 AF ESP principles, including Principles 1 (Law Compliance), 4 (Human Rights) and 6 (Fundamental Labor Rights) which always apply, while the other 12 principles were selected in relation to the project results, products and activities. Establishing the relevance between these principles and the project elements was one of the results of the risk identification process.

3.1 ESP Risk Identification

Based on the AF procedures checklist, environmental and social risks were identified using the following checklist (Table 2).

The identification of risks is developed considering the guidance document for AF Implementing Entities on compliance with the Environmental and Social Policy of the Adaptation Fund and the steps presented in the Manual of procedures and functions of the Basic Environmental and Social Management System in the National Implementing Entities for compliance with each principle.

Table 2 "Risk Identification Evidence Base" will evaluate the three components of the project. The Table has three columns: column 1 refers to the E&S Principles Checklist, and column 2 refers to the Questions, which will guide the determination of whether different types of actions or documentation show the risk of non-compliance with the E&S Principles. principle. Column 3 refers to the response presented. The Yes or No answers mean whether the action, activity, analysis, documentation, etc. were carried out for risk identification. Column 4 describes what evidence from the Full Proposal document supports the Yes or No answers in column 3, and any additional information.

Table 2. Evidence-Base Risk Identification

Checklist of E&S Principles	Questions	Yes/No	Evidence Base Risk Identification
1.Compliance with the law	1.1. Has the project identified all specific national and international laws, regulations, standards, procedures and permits applicable to any of its activities?	YES	Section E National Laws and Regulations and Technical Standards of the Full Proposal (FP) identifies the different laws, regulations, standards, procedures and permits that apply to the project.
	1.2. Does the project demonstrate any non-compliance with applicable national legislation?	NO	The project does not show any non-compliance with the applicable national law.
	1.3. Has the project identified activities that may require prior permits (such as planning permits, environmental permits, construction permits, water extraction permits, emissions and use or production or storage of harmful substances)?	YES	Identified activities may require prior authorization. These permits have been detailed in the Environmental and Social Management Plan (ESMP) – see Annex 6 of the Full Proposal.
	1.4. Has the project identified environmental and social safeguard requirements other than those of the AF (for example, national or co-financing entities)?	NO	Based on its standards, CAF has not identified any additional safeguarding requirements.
2. Access and equity	2.1. Has the project identified the beneficiaries and their geographic area of effect?	YES	The beneficiaries were identified during the Stakeholder Mapping of the project and the different workshops developed in the towns of La Paloma (Rocha), Piriápolis (Maldonado), Parque del Plata (Canelones), Playa Penino (San José), Playa del Cerro (Montevideo) and Juan Lacaze (Cologne). Please see Annex 2 of the Report on Consultations with Interested Parties. The geographical area of intervention of the activities (with the exception of the Revolving fund, USP) in each of the sites is detailed in the FP.
	2.2. Has the project identified any marginalized or vulnerable groups among the potential beneficiaries of the project?	YES	Vulnerable and marginalized groups were identified during the project's Stakeholder Mapping and the different workshops developed in the towns of La Paloma (Rocha), Piriápolis (Maldonado), Parque del Plata (Canelones), Playa Penino (San José), Playa del Cerro (Montevideo) and Juan Lacaze (Colonia). Please see Annex 2 – Stakeholder engagement report. During the preparation of the Proposal, a Socioeconomic Vulnerability Analysis was carried out.
	23. Has the project identified the existing risk to access to essential services and rights?	YES	Component 1: review of plans and policies and in particular the Early Warning System for floods, will include in their analysis the consideration of access to essential services and rights during the emergency.

Checklist of E&S Principles	Questions	Yes/No	Evidence Base Risk Identification
			Components 2: hybrid works will not interfere in any case with access to essential benefits or rights of the population; on the contrary, the project will contribute to making these services stronger and better resist erosion and flooding events, and ultimately provide an improvement in the quality of the environment and the life of the population. The bidding documents will include the requirement for the contractor not to affect access to essential services and rights of the population.
	2.4. Has the project described the mechanism for allocation and distribution of project benefits, and how this process ensures fair and impartial access to benefits?	NO	Most of the project's benefits are common use and public access to flood-prone beaches and parks. The designs of new entrances and walkways will be inclusive and will have security elements (e.g., lighting), to ensure that different groups, including vulnerable and marginalized groups, have facilitated access to the use and enjoyment of the area. Therefore, it is not applicable to design a mechanism for access to the benefits of the project. The revolving fund activity for the protection of homes and buildings against floods (activity 2.3.1) must have a clear access mechanism. It will have a regulation that will establish the conditions to access credit, the requirements that must be met and the investment and repayment obligations. In addition, it will have considerations for vulnerable and marginalized groups (e.g., eligible investments will include infrastructure adapted to people with disabilities), and facilities for women's access to the mechanism.
	2.5. Has the project developed consultations with stakeholders and local authorities?	YES	Yes, please see Stakeholder Engagement Report. Annex 2.
	2.6. Has the project introduced a mechanism to ensure the participation of communities, marginalized and vulnerable groups, stakeholders and local authorities?	YES	The project has ensured several instances of participation and consultation, as reported in the Stakeholder Engagement Report. Annex 2. In any case, the project is presenting within the ESMP a section with the "Guidelines for Dissemination and Participation Strategy" so that before starting the activities, in each of the six sites a Dissemination Plan and Participation Strategy will need to be developed, to ensure the participation of vulnerable, marginalized groups, other actors, and local authorities. (see ANNEX 6). Activity 2.3.1 (USP) must also consider instances of community participation, and particularly vulnerable and marginalized groups, when designing and validating the Revolving Fund Regulations to guarantee its effective response to the needs of events.
3. Vulnerable and marginalized groups	3.1 In the area of influence of the project, has the presence of marginalized or vulnerable groups been identified, including, among others, children, women and girls, elderly people, indigenous peoples, tribal groups, displaced people, refugees, people with disabilities and people who live with HIV/AIDS?	YES	The project has identified the presence of vulnerable and marginalized groups. Please see Vulnerability Analysis whose summary is presented in the context section of the FP. As detailed in this analysis, the most vulnerable low-income population is that of Juan Lacaze and Playa Penino, where there is a medium and high risk of flooding. There is no presence of population that is recognized as indigenous in the entire project. In the case of the cities of Uruguay, the presence of the Afro-descendant population stands out. Its consideration is included in the characterization of social vulnerability.

Checklist of E&S Principles	Questions	Yes/No	Evidence Base Risk Identification
	3.2 Has the project described the characteristics of any marginalized or vulnerable groups, identifying their particular vulnerabilities that would or could make them disproportionately vulnerable to negative environmental or social impacts caused by the implementation of project activities?	YES	The project identified marginalized and vulnerable groups, as indicated in the previous question. The project will promote the integration of vulnerable and marginalized groups in all its components: In Component 1 and 3 through the incorporation of vulnerability analysis in planning; in Component 2, through the vulnerability analysis applied to each of the works, so that the groups are included. In the case of adaptation measures such as those framed in the revolving fund (USP), there is a risk that the adaptation technologies are not adapted and accessible to everyone. This aspect must be taken into account when defining the eligibility of adaptation measures and their characteristics.
4. Human Rights	4.1 Has the host country been cited in any special procedures of the Human Rights Council, appearing in the list of thematic or country mandates?	YES	Thematic mandates and country mandates have been reviewed. The findings are presented below: - Human Rights Council Special Procedures thematic mandates: Uruguay has had reports related to trafficking, torture, privacy, and the elderly. It is confirmed that none are related to the project activities. In 2012, Uruguay received a visit from the Special Rapporteur on the Human Right to drinking water and sanitation. He expressed that, despite the positive situation, in general terms, regarding the provision of water and sanitation in Uruguay, there are still challenges ahead. It is confirmed that this project will not carry out activities that involve sanitation. Uruguay has received recommendations from the Special Rapporteur on the issue of human rights obligations related to the enjoyment of a safe, clean, healthy, and sustainable environment. They recall the function of ecosystems and biological diversity and the importance of conservation through the National System of Protected Areas and other measures. This project is clearly in line with this vision, given that the proposed measures are all in pursuit of coastal rehabilitation and consideration of the Ecosystem-based Adaptation approach. Uruguay has also been urged to ratify the ILO Convention on Indigenous and Tribal Peoples, 1989 (No. 169). It has been confirmed that there is no presence of indigenous communities in the project area. Other recommendations have focused on access to environmental information and community participation in the development of plans and policies. The executing and implementing entities of this project have committed to having transparent communication about their activities and have promoted the participation of communities in the early stages of project formulation. A complaints and grievance mechanism is also being made available in the ESMP during the implementation of the project. - Human Rights Council Special Procedures country mandates: There are no mandates for Uruguay.
	4.2 Is there a risk that rights holders will not have the capacity to claim their rights?	NO	During the consultations, it has been confirmed that there are open channels of communication between the mayors and municipalities, and the communities. In any case, the ESMP includes a complaints and claims mechanism that must be disclosed (see ANNEX 6).
	4.3 Has the project addressed human rights issues during stakeholder consultations during project formulation?	YES	Human rights issues were addressed during consultation meetings with local populations in the design process. Concerns about marginalized and vulnerable groups were communicated and considerations were raised about women, the elderly, children, and people with disabilities.

Checklist of E&S Principles	Questions	Yes/No	Evidence Base Risk Identification
			The people consulted stated that the projects will improve the quality of life in terms of flood prevention, but also from a cultural, economic, and social point of view. They have also stated that there is no risk that these public spaces could exacerbate conflict or the risk of violence in communities.
	4.4 Has the project included the findings of the consultations on human rights issues in the project document?	YES	The findings on human rights issues during the consultations contributed to the design of a human rights-based project. The information on the consultations carried out is presented in ANNEX 2. The main principles inherent to the Articles of the Declaration of Human Rights are contemplated, with respect to impartiality without distinction of race, color, sex, language, national or social origin, property, social status, and the universal human right to life, liberty and security of the person.
5. Gender Equity and Women's Empowerment	5.1 Has the project identified activities that are known to exclude or hinder a gender group for legal, regulatory or customary reasons?	NO	None of the project activities could harm any gender-related group in a discriminatory manner based on legal, regulatory or customary grounds. Legislation related to gender issues is presented in the Gender Assessment and Gender Action Plan for the Project.
	5.2 Has the project carried out or consulted on a gender analysis of the subsidized area, describing the current situation of the assignment of roles and responsibilities in the area?	YES	A gender analysis has been carried out that describes the current situation. In addition to a diagnosis with secondary sources, gender issues have been addressed during consultations with interested parties, both authorities and beneficiaries. During the design of the project, an open channel has been maintained with the people responsible for the gender issue in the DINACC of the Ministry of the Environment and the municipalities, seeking to connect this project to the work that is already being carried out locally. In addition to addressing gender mainstreaming, this project responds to genuine demands that have arisen from women themselves in meetings and job interviews carried out within this framework. Please see Gender Analysis and Gender Action Plan documents (ANNEXES 3 and 4)
	5.3 Has the project identified elements that maintain or aggravate gender inequality or the consequences of gender inequality?	YES	Gender-based vulnerability considerations have been included in the analysis contained in the Gender Analysis. See ANNEX 3. The Gender Action Plan details the specific gender actions associated with each of the project activities. See ANNEX 4. Some particular considerations: In general, all these actions to reduce the risk of flooding and increase social resilience will improve the conditions of women, given that during events they are the ones left with the greatest workload for caring for children and older people and people with reduced mobility. Regarding EWS, it is necessary to pay special attention to women both as a vulnerable group and as active subjects in the management of information and the identification of needs during the response to floods. More on gender considerations in the consolidation of the EWS have been included in the Gender Analysis and Action Plan. The revolving fund to protect houses and buildings against floods (activity 2.3.1, USP) could exacerbate gender inequality if it does not provide facilities for women to access the mechanism. In its design, the barriers that women have in accessing credit will be taken into account and appropriate measures will be taken to address them, based on a diagnostic study planned at the beginning of the project. All interventions in public spaces such as beach walkways, floodable parks, ecotourism consider in their design those solutions that promote the use of space by women. The design of the ecotourism project in Playa Penino, San José (Activity 2.4.1) will include the socioeconomic activities carried out by women in Playa Penino, especially those linked to tourism, to then identify concrete investments that support their

Checklist of E&S Principles	Questions	Yes/No	Evidence Base Risk Identification
			needs and economic ventures (See ANNEX 4). Added to that, activity 3.4.2 considers a Program to strengthen women's employment in coastal areas. In response to the problems raised by women, the project will work for a "Harassment-free Coast" (Sub-activity 3.1.1.1).
	5.4 Has the project identified particular vulnerabilities of men and women that would or could make them disproportionately vulnerable to negative environmental or social impacts caused by project outcomes/activities?	NO	No environmental and social impacts of the project are identified that could increase the vulnerability of men and women. Likewise, to achieve the objective of increasing resilience and improving the quality of life, both from an environmental and social point of view, the participation of all interested parties must be guaranteed to adjust what is necessary and comply with the detailed measures by activity. of the ESMP (ANNEX 6) and GAP (ANNEX 4).
6. Fundamental Labor Rights	6.1 Has the project determined whether the host country has ratified the eight core ILO conventions?	YES	Uruguay has ratified the conventions of the International Labor Organization (ILO).
	6.2 Has the project reviewed the latest ILO assessments of the implementation of standards in the country?	YES	Uruguay has ratified the conventions of the International Labor Organization (ILO). Ratifications: https://www.ilo.org/dyn/normlex/es/f?p=NORMLEXPUB:11200:0::NO::P11200_COUNTRY_ID:102876 Labor Standard: https://www.ilo.org/dyn/normlex/en/f?p=1000:14000:0::NO:14000:P14000_COUNTRY_ID:102876
	6.3 Has the project identified how ILO core labor standards are incorporated into the design and implementation of project products/activities?	YES	The project integrates basic labor rights in all actions and at different levels. Uruguay has a mechanism and laws related to labor rights and has ratified the eight fundamental labor conventions, like the countries in the region, it faces challenges such as child labor, discrimination with respect to employment and occupation, high levels of informality. labor and the protection of the right to association. These aspects will be reviewed and monitored in the contracting processes carried out for the execution of the project.
	6.4 Has the project described the usual labor arrangements in the sector or sectors in which the project will operate, with particular attention to all forms of child labor and forced labor?	YES	As a management measure to ensure the alignment of all project activities with compliance with basic labor rights, the project executing entity obeys ILO labor standards and national labor laws.
7. Indigenous peoples	7.1 Has the project identified whether there are indigenous peoples in the area of influence?	NO	The presence of population belonging to Indigenous Peoples in the project area has not been identified.
	7.2 Has the project quantified the groups of indigenous peoples identified?	NO	Not applicable for project activities.

Checklist of E&S Principles	Questions	Yes/No	Evidence Base Risk Identification
	7.3 Has the project determined whether there are provisions for a realistic and effective free, prior and informed consent process that gives a community the right to give or withhold consent to proposed projects that may affect lands they own, occupy or do they usually use?	NO	Not applicable for project activities.
	7.4 Has the project provided a summary of all reports, specific cases or complaints that the Special Rapporteur on the rights of indigenous peoples has made regarding the rights of indigenous peoples and that are relevant to the project?	NO	No related reports from the Special Rapporteur in Uruguay have been found.
8. Involuntary resettlement	8.1 Has the project determined whether this is voluntary or involuntary resettlement?	NO	The project does not contemplate any displacement, resettlement or relocation of people.
	8.2 Has the project identified stakeholders whose livelihoods may be affected, directly or indirectly?	NO	The project does not contemplate a negative impact on livelihoods. During the consultations with stakeholders (ANNEX 2) it has been confirmed that both the actions to restore coastal ecosystems and those to improve drainage will not affect livelihoods but will help protect them. So will the revolving funds and the ecotourism development of Playa Penino, which aims to promote sustainable livelihoods for the vulnerable population. In the area where the Juan Lacaze flood park is developed, no economic activity is currently taking place.
	8.3 Has the project identified stakeholders whose assets or access to assets may be affected, directly or indirectly, and whether this may lead to resettlement and its consequences, including compensation, compensation, etc.?	NO	Does not apply in any case. See previous answers.
9. Protection of natural habitats	9.1 Has the project identified all critical natural habitats in the region that may be affected? The area considered should be large enough to be credible and should be chosen based on the agent	YES	This principle does not apply to Components 1 and 3 as they are planning and capacity-building activities. At the beginning of the formulation of this Project, an Ecosystem Vulnerability Analysis was carried out. The Context section of the Full Proposal provides a summary of the same. In the prioritized sites, there are, at different territorial scales, different types of ecosystem protection measures. In Juan Lacaze, the protection of the coast has occurred through the categorization of the area as natural rural land in its Local

Checklist of E&S Principles	Questions	Yes/No	Evidence Base Risk Identification
	generating the impact (for example, noise) and the assessment of its propagation capacity. Habitats to be considered include all those recognized as critical in any way, whether legally (through protection), scientifically or socially.		Land Use Plan (LUP). In Playa Penino and Autódromo the categorization as natural rural land is combined ("Local Plan for Territorial Planning and Sustainable Development of Ciudad del Plata and its area of influence") along with the prior declaration of the entire area as a Natural Reserve at the departmental level [1]. This site, in turn, borders a national Protected Area, the Protected Area with Managed Resources Wetlands of Santa Lucía [2], which protects the water basin that provides drinking water to more than half of the country's population. At the mouth of the Solís Chico stream, the determination of natural rural land in the LUP converges, with the identification in the same Plan of the coastal strip and the dune system, as well as the mouth of the Solís Chico stream with the associated wetlands, as areas of ecosystem value relevant to conservation. At the site in the department of Maldonado there is an initiative by a local neighborhood organization to protect small watercourses and vegetated areas that are considered biological and generation corridors of an urban natural reserve in Playa Hermosa, although none of the measures have been implemented. The selected stretches of beach in the department of Rocha are included within the Bañados del Este Biosphere Reserve [3]and to the west the Laguna de Rocha Protected Landscape National Protected Area is located [4].
	9.2 Has the project identified, for each critical natural habitat, the mechanism by which it is especially vulnerable?	YES	The project has identified the vulnerability of ecosystems. Please see answer to question 9.1 Most of the project activities contribute to the preservation of natural habitats. To avoid any negative impact in these areas, prior to the works or interventions, studies and/or Environmental Impact Assessments will be carried out that will detail how to carry out specific actions in critical natural habitats. Component 1 includes Subactivity 1.1.1.1 "Technical contributions to contribute to the regulation of the National Coastal Space Directive, work will be carried out on definitions of criteria and providing specific guides to the national government and departmental governments to characterize the environments. Within this subactivity, the construction of ecosystem maps and survey of vulnerable components, among others, is foreseen.
	9.3 Has the project considered all activities to identify the real risks for each of the identified natural habitats taking into account the specific characteristics of the activity (location, dimension, duration, etc.) and the vulnerability mechanism or	YES	Most of the project activities contribute to the preservation of natural habitats. The necessary precautions will be taken so that the project has the least possible impact. The ESMP includes the necessary measures to protect the ecosystem during execution. It is confirmed that the review of plans and policies of Component 1 and the activities of component 3 will consider these aspects. For Component 2, which involves physical interventions, the following considerations are made:

[1]Resolution 774/996 of the Municipality of San José.

[2]https://www.gub.uy/ministerio-ambiente/politicas-y-gestion/area-protegida-recursos-manejados-humedales-santa-lucia-canelones-montevideo

[3]https://www.probides.org.uy/reserva-biosfera.php

[4]https://www.gub.uy/ministerio-ambiente/politicas-y-gestion/paisaje-protegido-laguna-rocha-rocha

Checklist of E&S Principles	Questions	Yes/No	Evidence Base Risk Identification
	mechanisms of each identified habitat?		To avoid any negative impact in these areas, prior to the works or interventions, studies and/or Environmental Impact Assessments will be carried out that will give details of how to carry out specific actions in critical natural habitats. The activities included in the flood park and ecotourism have low impact on the habitat: roads and bike paths, installation of walkways, planting and conservation of native species and migratory birds. Special attention will be paid to the installation tasks of some minor infrastructure, afforestation with native species suitable for the coastal environment and flood-prone areas. In the Juan Lacaze floodplain park area, a prior flora and fauna survey will be carried out. The dune range restoration and revegetation activities have low impact on the ecosystem. The revegetation will be with native species (not invasive exotic) produced in local nurseries.
10. Conservation of biodiversity	10.1 Has the project identified all the elements of interest for the biodiversity of the region that may be affected? The area considered should be large enough to be credible and should be chosen based on the agent generating the impact and an appreciation of its propagation capacity. In identifying elements of biodiversity interest, it is important not to limit oneself to the species level, but to include all elements of biodiversity interest, including landscapes, ecosystem processes, habitats and hydrological cycles, erosion and sedimentation processes and interactions between taxa. Include all elements that enjoy local or international protection	YES	Project implementation does not pose any risk to the reduction or loss of biological diversity or the introduction of known invasive species. Precisely, the objective of practically all activities is precisely to rehabilitate it, and among others to plant native species that provide ecosystem services that increase resilience to floods. The project has identified the most sensitive biodiversity elements and described their vulnerability. See vulnerability analysis of ecosystems in the FP. It can be said that the project avoids any significant or unjustified reduction or loss of biological diversity or the introduction of known invasive species. The necessary prevention and mitigation measures are included in the ESMP. ANNEX 6.
	10.2 For each biodiversity element identified, has the project identified the mechanism by which it is especially vulnerable? (Changes in the flow regime or water quality of a seasonal wetland or interruption of migratory routes).	YES	See the analysis of ecosystem vulnerability in the "Background and Context" Section of the FP. The project activities do not have negative impacts on biodiversity. In any case, the necessary precautions will be taken in the ESMP, ANNEX 6.

Checklist of E&S Principles	Questions	Yes/No	Evidence Base Risk Identification
	10.3 Has the project identified the possibility of introducing - intentionally or accidentally - known invasive species?	NO	As explained in previous answers, the project has the opposite objective. The project does not entail the risk of introducing invasive species, whether intentionally or accidentally. In any case, the necessary precautions will be taken in the ESMP, ANNEX 6. The project will strengthen local nurseries for the production of native species, in this way the productive capacities are installed to replace this and future projects.
	10.4 Has the project identified the use of living modified organisms resulting from modern biotechnology?	NO	This question does not apply to the project because it does not intend to use living organisms modified as a result of modern biotechnology.
11. Climate change	11.1 Has the project determined whether it falls into a sector mentioned in the guidance document for which a calculation of greenhouse gas emissions is required?	NO	The project does not belong to any of the sectors mentioned in the Guidance document. The only GHG emissions that will be produced due to the project will be during the works, due to the transportation of materials. These emissions are considered not significant. It is confirmed that the project does not generate new sources of greenhouse gas emissions.
	11.2 Energy, transportation, heavy industry, construction materials, large-scale agriculture, large-scale forest products and waste management.	NO	Taking into account the aforementioned, no emissions calculations have been presented for this project.
	Has the project carried out qualitative risk identification of any impact on carbon capture and sequestration capacity?	NO	No qualitative identification of impact on carbon capture and sequestration capacity is presented. On the contrary, ecosystem rehabilitation actions are considered positive for these services.
12. Pollution prevention and efficiency in the use of resources	12.1 Has the project identified activities with avoidable waste or pollution production?	YES	It does not apply to Components 1 and 3 because they are planning and capacity-building activities. In the case of component 2, details are provided below. The potential sources of contamination or waste generation may correspond to the construction stage and during operation, the waste generated by visitors (e.g., trash cans) and that generated by the use of toilets (if applicable). It is considered that the impact will be minor and that these impacts are preventable. The measures to be applied will be those detailed in the ESMP, ANNEX 6.
	12.2 Has the project determined the nature and quantity of the waste, as well as the possible contaminants that may be produced?	YES	The project has identified that waste can be generated in hybrid infrastructure works and household waste during use by tourists or visitors. The considered mitigation measures are included in the ESMP. See ANNEX 6.
	12.3 Has the project determined whether the concept of minimizing	YES	The project has a low impact on waste generation. In any case, the ESMP will take into account the minimization of waste and pollution production during the works and the implementation of all project activities.

Checklist of E&S Principles	Questions	Yes/No	Evidence Base Risk Identification
	the production of waste and pollutants has been applied in the design phase and whether this will be effective during implementation?		
13. Public health	13 .1 Has the project identified, using an appropriate health impact screening tool (checklist), the potentially significant negative impacts on public health generated?	NO	Not applicable. The project will not generate negative impacts on public health. Quite the contrary, it will provide an improvement in the quality of life of the population. The ESMP contemplates some measures, for example, to avoid contamination of canals and storm drains by the population.
14. Physical and cultural heritage	14.1 Has the project determined whether the host country has ratified the UNESCO Convention for the Protection of the World Cultural and Natural Heritage of 1972?	YES	Convention concerning the Protection of the World Cultural and Natural Heritage. Paris, 16 November 1972. 09 March 1989 - Accepted. https:// w ww.unesco.org/en/countries/uy/conventions
	14.2 Has the project determined the national and local legal and regulatory framework for the recognition and protection of physical and cultural heritage?	YES	Section E of the Project presents the "National Laws that must be complied with in all types of project activities" and the applicable "National regulations and technical standards by type of intervention." Ministry of Education and Culture, Uruguay: https://www.gub.uy/ministerio-educacion-cultura/
	14.3 Has the project in the area of influence described all the elements of the cultural heritage, its location and its vulnerabilities? The area considered must be large enough to be credible and must be chosen based on the agent generating the impact (e.g., vibrations, landscape elements) and the assessment of its propagation capacity. Include all elements that enjoy local or international protection.	YES	The project has not been found to cause alteration, damage or elimination of physical cultural resources, cultural sites and sites with unique natural values recognized as such at the community, national or international level. On the contrary, the project activities seek to restore, conserve, and put into use and value the beaches, coastal areas and wetlands that are part of the cultural identity of each of the intervention sites. The projects will not interfere with existing access and use of such physical and cultural resources. Some of the Project activities will be implemented in - or near - areas with unique natural or cultural values recognized at the community, national or international level. - Juan Lacaze, Colonia: declaration of "historical heritage" for the former "Puerto del Sauce" railway station given its relevance in the industrial origin of the city. Juan Lacaze, Arroyo Sauce, have sites of value in archaeological heritage from the legacy of the first settlers. - Playa del Cerro, Montevideo: about 2 kilometers upstream from Playa del Cerro is the Cerro de Montevideo Fortress, a site with regional history and cultural heritage. Panoramic view from the hill towards the capital, where you can see the Cerro beach, the Old City, the Port. Since 1939 it has been a Military Museum with a tourist attraction. Port area, salting industry first and meat processing plants later.

Checklist of E&S Principles	Questions	Yes/No	Evidence Base Risk Identification
			- Penino Beach and Autódromo, San José: The entire area is a Natural Reserve at the departmental level [5]. This site, in turn, borders a national Protected Area, the Protected Area with Managed Resources Wetlands of Santa Lucía [6], which protects the water basin that provides drinking water to more than half of the country's population. For this reason, you can see great biodiversity and especially migratory birds. - At the mouth of the Solís Chico stream, Canelones, includes the towns of Parque del Plata and La Floresta on its banks. The stream and the associated wetlands are areas of ecosystem value relevant for conservation as natural heritage. - Piriápolis, Maldonado, is the first spa city in Uruguay (1893), in addition to the rambla it has buildings of heritage interest with mystical alchemical symbols, such as the Gran Hotel Piriápolis, the Piria castle, the unfinished church, the Argentino Hotel, virgin of the fishermen, Cerro del Toro. In Piriápolis, Maldonado, although it has not yet been finalized, there is an initiative by a local neighborhood organization to create an urban nature reserve in Playa Hermosa. - In La Paloma, Rocha is the Cabo Santa María Lighthouse, a national historical monument (1874) founded at the same time as the spa. The selected stretches of beach in the department of Rocha are included within the Bañados del Este Biosphere Reserve [7]and to the west the Laguna de Rocha Protected Landscape National Protected Area is located [8].
	14.4 Has the project determined whether any of the heritage elements included on the List of World Heritage in Danger are located in the area of influence?	NO	There are none of the elements in the "List *of World Heritage in Danger"* in the area of influence of the project. https://whc.unesco.org/en/danger/
	14.5 Has the project considered all activities to identify the real risks for each of the identified heritage elements taking into account the specific characteristics of the activity (location, dimension, duration, etc.) and the vulnerability mechanism or mechanisms of each identified heritage element?	YES	The Project will not generate interventions that may adversely affect sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture. On the contrary, the project seeks to protect these sites from the impacts of climate change.

[5]Resolution 774/996 of the Municipality of San José.

[6]https://www.gub.uy/ministerio-ambiente/politicas-y-gestion/area-protegida-recursos-manejados-humedales-santa-lucia-canelones-montevideo

[7]https://www.probides.org.uy/reserva-biosfera.php

[8]https://www.gub.uy/ministerio-ambiente/politicas-y-gestion/paisaje-protegido-laguna-rocha-rocha

Checklist of E&S Principles	Questions	Yes/No	Evidence Base Risk Identification
15. Conservation of land and soil	15.1 Has the project identified the presence of fragile soils in the area of influence?	YES	The areas where the project will be implemented are all in the coastal zone. The objective of the project is to protect the soil from coastal erosion and to rehabilitate coastal ecosystems, strengthening them and therefore increasing the resilience of both the ecosystem and the surrounding communities. See details of activities and ecosystem vulnerability maps of the FP for further details.
	15.2 Has the project identified activities that could lead to the loss of otherwise fragile soils?	NO	The project is designed and will be implemented with an Ecosystem-Based Adaptation approach, protecting the soil from coastal erosion, and rehabilitating coastal ecosystems, strengthening them, and therefore increasing the resilience of both the ecosystem and the surrounding communities.
	15.3 Has the project identified productive lands and/or lands that provide valuable ecosystem services within the area of influence?	YES	The areas in which the project intervenes are not productive. Only the presence of mainly sport and tourist fishing activities can be mentioned. Fishing activity is also identified in different areas. It is confirmed that these activities will be able to continue to be carried out. Lands with valuable ecosystem services are identified. The rest of the interventions will be carried out in: a) urban environment (mostly flood-prone parks), where the conservation and strengthening of ecosystem services that cannot be developed today will be promoted; and b) in the natural environment (natural coastal areas), where the same objective of increasing resilience is sought, with the Ecosystem-based Adaptation approach.
	15.4 Has the project identified activities that may lead to land degradation?	NO	The project is designed and will be implemented with an Ecosystem-Based Adaptation approach, protecting the soil from coastal erosion, and rehabilitating coastal ecosystems, strengthening them, and therefore increasing the resilience of both the ecosystem and the surrounding communities.

Following the previous information and analysis presented in Table 2, Table 3 presents the identification of risks by E&S Principle and describes whether there is an associated risk.

Table 2. Risks Identification per E&S Principles

Risks Identification per E&S Principles		
Checklist of E&S Principles	risk Associated	Risks Associated
1. Law enforcement	No	There is no risk of non-compliance with any national or international law since the authorities and organizations responsible for the application of the regulations have participated in this project and in the validation of the activities since its inception. In addition, the EE will be obliged to comply with all laws. Once projects can demonstrate that potential impacts will be managed, approvals can be achieved.
2. Access and equity	Yes	Risk of not including or limiting equitable access to project benefits. The ESMP includes the "Guidelines for Dissemination and Participatory Strategy" that will serve as a guide so that in each of the six sites their "Dissemination and Participatory Strategy Plan" can be worked on and validated with the community in order to guarantee the participation of marginalized and vulnerable groups, stakeholders and local authorities.
3. Marginalized and vulnerable groups	Yes	There is a risk that vulnerable and marginalized people will not be able to access project activities and benefits; Disabled people may not be able to respond adequately to flood warnings, and the works may affect older people and children.

Risks Identification per E&S Principles		
Checklist of E&S Principles	risk Associated	Risks Associated
4. Human rights	No	There is no risk that the project will promote non-compliance with international human rights.
5. Gender equality and women's empowerment	Yes	There is a risk that women do not actively participate on equal terms with men in activities. The PAG and the inclusion of a Social and Gender Safeguards Specialist who will be responsible for overseeing the PAG implementation in the EE Operations Team should minimize this risk. Furthermore, no gender group will disproportionately suffer any adverse effects during the implementation of the project.
6. Fundamental labor rights	Yes	Although there is no risk associated with fundamental labor rights, since the EI must apply all fundamental labor standards defined by the International Labor Organization (ILO). If there are occupational risks for the workers of the construction contractor companies.
7. Indigenous peoples	No	There is no risk associated with indigenous peoples having unequal access to opportunities.
8. Involuntary resettlement	No	There is no risk associated with involuntary resettlements, as there are no interventions related to this.
9. Protection of natural habitats	Yes	Risk of works on coastal ecosystems and wetlands. The ESIAs will provide a reference base to guide the best types of interventions necessary adjusted to the reality of each site.
10. Conservation of biological diversity	Yes	There is a risk associated with the conservation of biodiversity mainly in relation to the interventions associated with the coastal strip works, flood park in Juan Lacaze and ecotourism in Playa Penino and Autódromo. The project execution phase will include the necessary studies, ESIAs and corresponding permits. Once these studies are completed, it will be possible to assess and quantify the extent of biodiversity and ecosystem services, apply monitoring measures and carry out the final design of the interventions. This will ensure that any intervention is specific and selective and therefore has minimal impact. The project interventions will consider the vulnerability approach of coastal ecosystems for the design of ecosystem-based adaptation strategies.
11. Climate change	No	There is no risk of a significant or unjustified increase in greenhouse gas emissions or other climate change factors associated with any of the project interventions.
12. Pollution prevention and efficiency in the use of resources	Yes	The risk at this point has to do with the activities that can generate waste production and the release of contaminants during civil works and during the use of new spaces. The ESMP details the measures to be considered in activities that have to do with training and awareness of the local population.
13. Public health	Yes	Storm drains can occasionally carry waste or polluting effluents that reach the beaches. The projects will require an executive project and, depending on their scale, an E&S Impact Study, which, when dealing with drainage, will include, among other aspects, the analysis of the quality of the discharge water. As mentioned in the ESMP, work will be done to raise awareness and prevent contamination of discharges through the Dissemination Plan and Participatory Strategy of the interested parties at each site.
14. Physical and cultural heritage	Yes	The project will protect cultural sites that are endangered by erosion and flooding. At the same time, special care will be taken in the interventions in areas of interest for the conservation of cultural heritage, such as Playa Penino and Autódromo).
15. Conservation of land and soil	Yes	The Project has been designed to strengthen ecosystems and improve drainage to prevent the progress of erosion and flooding on the coast of Uruguay. Therefore, the very nature of the project itself contributes positively to land and soil conservation.

Considering Table 1. Expected results and activities, Table 2. Risk Identification by Evidence Base and Table 3. Risk Identification by E&S Principles, the environmental and social impacts related to the activities of the proposal were analyzed. An identification of risks and impacts by activity has been developed in greater detail. See Table 4.

Table 4. Activity Identified risks in accordance with AF's E&SP and Potential E&S Impacts

Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize
COMPONENT 1		
Activity 1.1.1 Mainstreaming climate change in planning instruments	E&SP 3, E&SP 5. There is a risk that the planning instruments are only scientifically based on climate change and do not incorporate the impact on people. There is a risk that they will not incorporate the interests of the affected young and adult women, as well as the vulnerable population.	Non-inclusive instruments, Increase in gaps, exclusion of vulnerable population, women and people with disabilities in the instruments.
Activity 1.1.2 Development of technical guides that allow providing guidelines for specific adaptation measures	E&SP 3, E&SP 5. There is a risk that the preparation of technical documents does not incorporate interests and uses of the coast of the vulnerable population and people with disabilities, non-inclusive guides.	Increase in gaps, exclusion of vulnerable population and people with disabilities in the technical recommendations of the guides
Activity 1.2.1 Strengthening registration and monitoring systems for climate change impacts Activity 1.2.2 Development of a damage and loss evaluation system for the tourism sector on the coast.	E&SP 3, E&SP 5. There is a risk of not including the vulnerable population and people with disabilities, and young and adult women	Increase in gaps, exclusion of vulnerable population and people with disabilities
Activity 1.3.1 Development of an EWS for the risk of coastal flooding, end-to-end and focused on people.	E&SP 2 and E&S 3. Risk that not the entire community is aware of the existence and operation of the flood EWS. Risk that the community does not have the capabilities to access and interpret EWS information and respond to the alert appropriately.	If the community is not adequately informed, and local knowledge is not considered, it could happen that the EWS is not taken into account. If the community does not have sufficient capabilities to access and interpret the information, it may not respond to the alert appropriately.
	E&SP 5. There is a risk that the SAT does not incorporate the gender perspective in its consolidation.	If you do not incorporate the gender perspective, you may be leaving out important information regarding access to information, interpretation and response of men, women and diversities.
COMPONENT 2		
Activity 2.1.1 Recovery of the structure of the dune ridge	E&SP 1, E&SP 9 and E&SP 10, E&SP 12 Risk of contamination due to the use of synthetic materials, lack of knowledge of risky species, lack of access restriction to the intervention area	Affectation of beaches and marine species due to the use of plastics, micro-plastics, negative impact on the landscape, spread of exotic species, Trampling and loss of structure of the dune ridge.

Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize
	E&SP 3 Lack of appropriation by the local population and changes in the use of the beach	Trampling and vandalization of captive fences, impact on the aesthetics of the beach, impact on recreational uses and pedestrian circulation
Activity 2.1.2 Conservation and regeneration of beach vegetation	E&SP 1, E&SP 6, E&SP 9 and E&SP 10 plantation of exotic plant species; massive collection of natives	Invasion of exotic plant species, loss of native vegetation, degradation of dunes
	E&SP 3 Non-acceptance or appropriation by the population.	Vandalism, removal or neglect of planted vegetation
Activity 2.1.3 Income management and beach uses	E&SP 1, E&SP 9 and E&SP 10 Poor design of entrances to the beach, paths on the dune	Trampling, dune cutting, generation of wind corridors, blasting and sand loss.
	E&SP 2, E&SP 3, E&SP 5 Risk of not considering sellers; non-acceptance or appropriation of the population. Not universal/equitable access. Creation of unsafe sectors on descents to the beach or walkways, Poor parking design, vehicle circulation	Economic impact of seasonal vendors Impossibility of access to the beach for older people, people with reduced mobility, baby/children strollers. Insecurity mainly for women, soil waterproofing, water accumulation in parking spaces, vehicle accidents.
Activity 2.1.4 Conservation and restoration of vegetation on the banks of watercourses and coastal wetlands	E&SP 1, E&SP 9 and E&SP 10. Undesired impacts of interventions on the ecosystem, Use of exotic species; massive collection of natives	Spread of invasive exotic species, loss of native vegetation
	E&SP 3 risk of non-acceptance or appropriation by the local population	Vandalism, removal or neglect of planted vegetation
Activity 2.2.1 Redirection and/or adaptation of stormwater discharges on the beach	E&SP 1, E&SP 12, E&SP 3, E&SP 6 There is a risk that the project will be affected by pollution of the city's drainage system. Undesired environmental impacts of the works	Impact of the beach due to contaminated drainage, Operator accidents (in case of use of machinery)
	E&SP 3 Risk of non-acceptance or appropriation of the population	Vandalism, discharges of non-polluting liquids
Activity 2.2.2 Bioretention	E&SP 1, E&SP 6, E&SP 12 and E&SP 13. unwanted environmental impacts of the works, risks of accidents, water pollution	Accidents involving soil moving machinery operators, water contamination with waste and household effluents, Accidents to people and/or animals in lagoons
	E&SP 3 Risk of non-acceptance or appropriation of the population, population entry into non-permitted sectors	Vandalism, accidents

Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize
Activity 2.2.3 Accumulator ditches, adaptation of channels and buffer lagoons	E&SP 1, E&SP 6 and E&SP 12 and E&SP 13 unwanted environmental impacts of the works, risks of accidents, water pollution	Accidents involving operators of soil moving machinery, contamination of water with waste and household effluents Accidents among the population in lagoons,
	E&SP 3 Risk of non-acceptance or appropriation of the population, population entry into non-permitted sectors	Vandalism, accidents.
Activity 2.2.4 Floodable parks	E&SP 1, E&SP 9 and E&SP 10 The environmental evaluation standards are not respected, the fragility of the ecosystem is not taken into account during the work, risk of spread of invasive alien species	Pollution and environmental and social impacts of the works. Spread of invasive alien species.
	E&SP 3 risk of non-acceptance or appropriation of the population	Vandalization or neglect of facilities, carrying out activities that are not permitted (hunting)
	E&SP 2 and E&SP 3. There is a risk that the project does not include universal design considerations	Restriction of access and enjoyment of the park to the population with disabilities, reduced mobility, strollers and children
	E&SP 5. There is a risk that the project does not include the gender perspective in its design	Unsafe spaces could be generated.
Activity 2.3.1 Implementation of a financial mechanism to promote adaptation in homes and other buildings in areas of medium flood risk. USP	E&SP 2 and E&SP 3. There is a risk that not all vulnerable and marginalized groups will access the benefits of the project and be involved in the design of the mechanism. Execution of activities without prior E&S risk assessment	The revolving fund may not reach vulnerable and marginalized groups. Without participation in the design, the revolving fund may not fully respond to the needs of beneficiaries. Unforeseen environmental or social impacts
	E&SP 5. The project could increase gender inequality if it does not have facilities for women to access the mechanism	If affirmative measures are not taken for the participation of women, the condition of less access by them to this type of tools can continue to be reproduced.
Activity 2.4.1 Design and development of a sustainable ecotourism project	E&SP 1, E&SP 9, E&SP 10, E&SP 13, E&SP 14, E&SP 15. risk of overload of visitors, tourist access to areas reserved for conservation, generation of waste and effluents	Tourist overexploitation, degradation of the ecosystem, environmental pollution during the work, impact on the migratory bird route
COMPONENT 3		

Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize
Activity 3.1.1 Communication strategy	E&SP 2, E&SP 3 and E&SP5. Lack of participation by stakeholders, especially women and vulnerable groups.	Non-appropriation of the measures by the population, technicians and authorities. Increase in the gender gap in areas of participation. Low positive impact of the measures Low sustainability of project activities
Activity 3.1.2 Awareness raising for high-level political decision-makers	E&SP 2, E&SP 3 and E&SP5. Not including aspects of gender focus on social issues in awareness-raising	The particularities of women and vulnerable groups are not taken into account in high-level and technical decision-making bodies.
Activity 3.1.3 Awareness and training for local technicians		
Activity 3.2.1 Develop and socialize a Dissemination Plan and Participatory Strategy per intervention site	E&SP 2, E&SP 3 and E&SP 5. Lack of participation by stakeholders especially women and vulnerable groups	Non-appropriation of the Project by civil society
Activity 3.2.2 Raising awareness and strengthening participation instances to involve young people in adaptation measures	E&SP 2, E&SP 3 and E&SP 5. Lack of participation by stakeholders especially youth, women and vulnerable groups	Non-appropriation of the Project by civil society, youth
Subactivity 3.2.3 Awareness and training for communicators	E&SP 2, E&SP 3 and E&SP 5. Ineffective communication with communicators, Lack of participation by interested parties, especially key communicators for dissemination	Lack of dissemination or insufficient dissemination of project activities
Subactivity 3.2.4 Awareness and involvement of the local community	E&SP 2, E&SP 3 and E&SP 5. Lack of participation by stakeholders especially women and vulnerable groups	Non-appropriation of the Project by civil society
Activity 3.2.5 Awareness raising for MSMEs / productive sectors	No identified environmental and social risks	N/A
Activity 3.3.1 Identification of good practices and lessons learned	All E&SP. There is a risk that, during the exchange of lessons learned, lessons related to environmental and social issues from the selected experiences are not also shared.	They would make valuable experiences for the population invisible and lack of participation of women and vulnerable groups. By not sharing environmental and social experiences, errors related to these aspects could be repeated.
Activity 3.3.2 Exchanges between municipalities for knowledge management	No identified environmental and social risks	N/A
Activity 3.3.3 Coastal Space Management Congress	No identified environmental and social risks	N/A
Activity 3.4.1 Articulation with training spaces to incorporate local tourism topics	All E&SP., risk of lack of access to technical training in ecotourism, Risk of not considering all environmental and social aspects in training spaces	Technicians without adequate training, Lack of access to training in ecotourism, increasing gender gap in technical training, negative impacts of tourism on the coast

Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize
Activity 3.4.2 Design the Program to Strengthen Women's Employment in Coastal Areas	E&SP 2 and E&SP 5. Lack of consideration of economic interests and activities of women.	Lack of participation of women

General Categorization

Considering the risks identified in Table 4. Activity Risks identified according to the AF ESP and Potential E&S Impacts, Table 5 presents the general categorization of the project:

Table 3. Definition of categorization

Questions	Components Answer YES / NO		
	1	2	3
Do the Project products/activities have various significant adverse environmental or social impacts?	No	No	No
Do the Project products/activities have widespread significant adverse environmental or social impacts?	No	No	No
Do the Project products/activities have significant irreversible adverse environmental or social impacts?	No	No	No
Do the Project results/activities have few adverse environmental or social impacts?	No	Yes	No
Do the Project products/activities have small-scale or widespread adverse environmental or social impacts?	No	Yes	No
Do the Project products/activities have reversible or easily mitigated adverse environmental or social impacts?	Yes	Yes	Yes
Do the Project products/activities have no adverse environmental or social impacts?	No	No	No
Categorization	C	B	C

All proposed projects/programs were classified according to the scale, nature and severity of their potential environmental and social impacts. Category A projects/programs are those that are likely to have significant adverse environmental or social impacts that are diverse, widespread, or irreversible. Category B projects/programs are those with potential adverse impacts that are less adverse than Category A projects, because they are fewer in number, smaller in scale, less widespread, reversible, or easily mitigated. Category C projects/programs are those that do not have adverse environmental or social impacts.

Based on the results of the Component Categorization, there are no components that will have significant impacts. Components 1 and 3 are classified as minimal risk (Category C) due to the nature of their activities, which are related to the creation of instruments and guides, knowledge management, communication, awareness, capacity development, training and articulation and exchanges that are not expected to generate any significant environmental and social impact.

Component 2 was classified as medium risk (Category B) due to its activities related to hybrid or green infrastructure works, such as adaptation of stormwater discharges, canals, bioretention, buffer lagoons, flood parks, hybrid infrastructure for ecotourism. It is worth clarifying that activity 2.3.1 “Implementation of a financial mechanism to promote adaptation in homes and other buildings in

areas of medium flood risk" is a USP type activity. Considering the characteristics and small scale of the Revolving Fund investments, a low-risk classification is foreseen for this activity and, therefore, in no case can the result of the analysis be different from Category C.

Figure 1. Significance of the risk

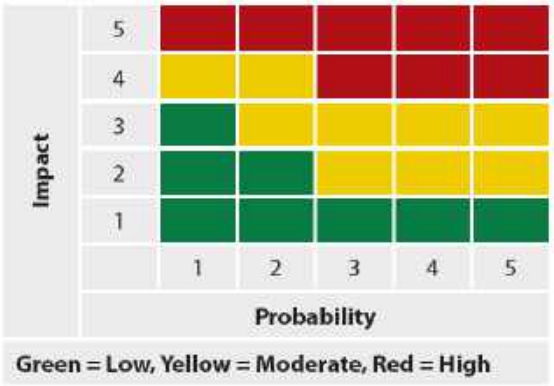

Table 4. Significance of the Risk

Significance of the risk			
Checklist of E&S Principles	Risks Identified by E&S Principles	*Impact and Probability (1-5)*	*Significance Low, Moderate , High*
1. Law enforcement	There is a risk that activities are carried out without prior environmental and social evaluation. Component 2.	3 - 1	Low
2. Access and equity	Risk of not including or limiting equitable access to project benefits. Components 1, 2 and 3	3 - 2	Moderate
3. Marginalized and vulnerable groups	There is a risk that vulnerable and marginalized people will not be able to access project activities and benefits; Disabled people may not be able to respond adequately to flood warnings, and the works may affect older people and children. Components 1, 2 and 3.	3 - 2	Moderate
5. Gender equality and women's empowerment	There is a risk that women will not be able to fully access the benefits of the project or participate in its activities. The Gender Action Plan includes measures by activity. Components 1, 2 and 3.	3 - 2	Moderate
6. Fundamental labor rights	If there are occupational risks for the workers of the construction contractor companies. Component 2	3 – 1	Low
9. Protection of natural habitats	Risk of works on coastal ecosystems and wetlands. Component 1, 2 and 3	3 -2	Moderate

Significance of the risk			
Checklist of E&S Principles	Risks Identified by E&S Principles	*Impact and Probability (1-5)*	*Significance Low, Moderate , High*
10. Conservation of biological diversity	There is a risk associated with the conservation of biodiversity mainly in relation to interventions associated with coastal strip, flood park and ecotourism works. Component 2.	3 - 2	Moderate
12. Pollution prevention and efficiency in the use of resources	The risk at this point has to do with the activities that can generate waste production and the release of contaminants during civil works and during the use of new spaces. Component 2.	2 - 2	Low
13. Public health	Storm drains can occasionally carry waste or polluting effluents that reach the beaches. Component 2 and 3	1 - 2	Low
14. Physical and cultural heritage	The project will protect cultural sites that are endangered by erosion and flooding. At the same time, special care will be taken in the interventions in areas of interest for the conservation of cultural heritage. Component 2.	1 - 2	Low
15. Land and soil conservation	The Project has been designed to strengthen ecosystems and improve drainage to prevent the progress of erosion and flooding on the coast of Uruguay. Therefore, the very nature of the project itself contributes positively to land and soil conservation. Component 2	1-1	Low

With the identification of risks according to the E&S Principles, the proposed project is categorized as B according to the categories established in the E&S Policies of the AF. Category B corresponds to projects with potential adverse impacts with few risks, small scale, less widespread, reversible, or easily mitigated. Annex 6 (ESMP) presents an Environmental and Social Management Plan, a Complaints and Claims Mechanism, the Dissemination Guidelines and Participatory Strategy and a Monitoring, Evaluation and Supervision Program.

Consultancy for the structuring and formulation of a Concept Note and Full Proposal to be submitted to the Adaptation Fund for the REACC-COSTAS Project, Uruguay.

Environmental and Social Action Plan

FINAL REPORT | December 4th, 2023

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1. INTRODUCTION

The Environmental and Social Policy of the Adaptation Fund requires that all projects, after having been analyzed under the 15 principles and having identified the risks and impacts by activity, propose mitigation measures and designate the people responsible for implementing them.

This document presents the Environmental and Social Management Plan (ESMP) of the project "Increasing socio-ecological resilience in the Uruguayan coastal zone and strengthening the adaptive capacity of its infrastructure: REACC Costas", prepared for the Government of Uruguay with the technical assistance of the Development Bank of Latin America (CAF).

The document is made up of the following sections: Environmental and Social Management Plan, Complaints and Claims Mechanism, Guidelines for dissemination and participation strategy, and Follow-up, evaluation and monitoring.

2. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

The comprehensive environmental and social management plan developed for the project includes specific measures to prevent and mitigate the adverse environmental and social risks and impacts identified above for all its activities and designates those responsible for its implementation. In turn, the complaints and claims mechanism is detailed, what the monitoring, evaluation and supervision of the mechanism will be, and the guidelines for the dissemination and participatory strategy that are a fundamental part of this Plan.

As indicated in the AF E&S policy, the results of the E&S evaluation of the Project, including this management plan, will be made available to the communities directly affected by the proposed project. The AF Secretariat will publicly release the final E&S assessment through the Fund's website as soon as it is received. The implementing entity (CAF) is responsible for disseminating the final E&S assessment to people affected by the Project and other interested parties and also the Project Execution Reports including the status of application of environmental and social measures. Any significant changes proposed to the Project during its execution will be made available for effective and timely validation with the directly affected communities.

2.1 Environmental and Social Mitigation Measures

For the entire project, a comprehensive Environmental and Social Management Plan has been developed that includes specific environmental and social mitigation measures to prevent and mitigate adverse environmental and social risks identified for all project activities (see Table 1). Activity 2.3.1 “Implementation of a financial mechanism to promote adaptation in homes and other buildings in areas of medium flood risk” is a USP type activity.[1] It will therefore need to go through the same risk identification process and safeguarding steps as the fully formulated activities included in the proposal, including validation with stakeholders. Considering the characteristics and small scale of the Revolving Fund investments, a low risk classification is foreseen for this activity and, therefore, in no case can the result of the analysis be different from the "type C" classification.

The Project Management Unit (UGP) of the executing entity will have a Specialist in Adaptation and Environmental Safeguards (AESS) and also with a Specialist in Social Safeguards and Gender Approach (SSGS) who will be responsible for supervising the implementation of this ESMP and the Gender Action Plan (GAP – Annex 4 of the proposal package), with the Coordination of Environmental and Social Evaluation and Monitoring (CESAS) of CAF and the Gender Coordination of CAF .

[1]unidentified sub-project

3. REGULATORY FRAMEWORK

Table 1 National laws that must be complied with in all types of project activities:

<table>
<tr>
<td>Environmental and climate change laws:
- General Environmental Protection Law (No. 17,283, December 28, 2000): Establishes the principles of environmental policy and environmental management instruments (EIA, SNAP, among others). In its Regulatory Decree (No. 222/019) it approves the National Environmental Plan for Sustainable Development.
- National Climate Change Policy to 2050 (November 3, 2017).
- Environmental Impact Assessment Law No. 16466 and its Regulatory Decree 349/005.
- Law of creation and management of the National System of Protected Natural Areas (No. 17,234 of February 22, 2000), and its Regulatory Decree (No. 52 of 2005).
- National Water Policy Law (No. 18,610 October 2, 2009).
- Territorial Planning and Sustainable Development Law (No. 18,308 of June 18, 2008) and its Regulatory Decrees (No. 523/009, No. 221/2009)
- National Guideline for Territorial Planning and Sustainable Development of the Coastal Space of the Atlantic Ocean and the Río de la Plata (Law No. 19,772 of July 17, 2019)
- Water Code (Decree-Law 14,859 of December 15, 1978)</td>
<td>Laws and strategies with impact on women's rights:
- Law 19,555 on the equal participation of both sexes in the integration of the national, departmental and leadership bodies of political parties (2017)
- Law 19,353 “National Integrated Care System” (2015)
- Law 18,651 on comprehensive protection of people with disabilities (2010)
- Law 19,580 Violence against women based on gender (2018)
- National Strategy for Gender Equality 2030 (2018)
- National Gender and Climate Change Strategy (2019)
- Gender and Climate Change Action Plan 2020-2025 (2021)

Law approving the Regional Agreement on access to information, public participation and access to justice in environmental matters in Latin America and the Caribbean (Escazú Agreement) (Law No. 19,773 of July 17, 2019)

State Contracting and Acquisitions Law (Law No. 18,446)</td>
</tr>
<tr>
<td>Labor rights laws:
- In Uruguay there are twenty laws that regulate labor law. The main ones are Sickness insurance, Labor credit guarantee fund, Promotion of work for people with disabilities, Unemployment insurance, Annual Complementary Salary or Bonus, Leave regime, Rates or incidences in dismissal, Salaries, Work accidents and occupational diseases Maternity, Overtime, Weekly rest, Vacation Salary, among others.
- Employment Promotion Law No. 19,973, Decree No. 308/021</td>
<td>Worker health and safety laws:
- Law No. 5,032 of 07/21/914 establishes the obligation of employers to take safety measures to avoid workplace accidents and determines their civil liability in the event of an accident.
- Approval of the International Conventions on safety, hygiene and health at work, No. 148, No. 155 and 161 of the ILO, Law No. 15,965 of 06/28/988.
- Ratification of the International Labor Organization (ILO) Convention No. 155 of 1981 on prevention and protection against risks arising from work activities (Decree No. 291/007 of 08/13/007).</td>
</tr>
<tr>
<td colspan="2">Laws or regulations related to children:
- Code of Childhood and Adolescence, approved by Law No. 17,823
- Child labor (under fifteen years of age) is prohibited in Uruguay, the Children and Adolescents Institute (INAU) grants exceptional work permits for adolescents (over fifteen years of age).
- Committee for the Eradication of Child Labor (CETI).
Regional Initiative of Latin America and the Caribbean against Child Labor.</td>
</tr>
</table>

Table 2 National regulations and technical standards by type of intervention

Comp.	Types of intervention	Applicable regulations
1	Strengthening, development of regulations, participatory processes	National Guideline for Territorial Planning and Sustainable Development of the Coastal Space of the Atlantic Ocean and the Río de la Plata (Law No. 19,772 of July 17, 2019) -- Water Code (Decree-Law 14,859 of December 15, 1978) -- Territorial Planning and Sustainable Development Law (Law No. 18,308). Guidelines for the approval process of the Strategic Environmental Assessment of Territorial Planning and Sustainable Development Instruments.
	Installation and operation of monitoring and EWS systems	Water Code (Decree-Law 14,859 of December 15, 1978) -- Occupational Health and Safety Law (Law No. 19,196) -- National Integrated Risk Management Policy for Emergencies and Disasters in Uruguay (2020).
2	Restoration and conservation of coastal ecosystems	Environmental Impact Assessment Law (No. 16,466 of January 19, 1994) and its Regulatory Decree (No. 349/005) -- Water Code (Decree-Law 14,859 of December 15, 1978) -- Article 452 of the Law No. 16,736 of January 5, 1996 (in the wording given by article 171 of Law No. 19,535 of 2017) regulates the entry of vehicles into the coastal defense strip -- Building Code (Decree No. 619/988) -- Occupational Health and Safety Law (Law No. 19,196). UNIT 200:2021 Accessibility for people to

Comp.	Types of intervention	Applicable regulations
		the physical environment - General criteria and requirements for an accessible built environment - Fact Sheet No. 6. Recovery and conservation of the coastal dune ecosystem - Guidelines to strengthen biodiversity conservation criteria in the process of Environmental Impact Assessment (EIA) - Guidance on the interpretation of environmental information for the development of Ecosystem-Based Adaptation measures in urban environments - Extraction of aggregates in the coastal strip: Law No. 15,903 of November 10, 1987: article 193; Environmental Law: Law No. 16,466 of January 19, 1994; Investment Promotion Law: Law No. 16,906 of January 7, 1998; Territorial Planning Law: Law No. 18,308 of June 18, 2008; Large Scale Mining Law: Law No. 19,126 of September 11, 2013. Police and Mining Safety Regulations: Decree No. 1230/946 of September 30, 1946 -- Submarine aggregate extraction permits: Decree N 502/987 of September 2, 1987; General rules on plans and sketches: Service Order No. 1/972.
	Improvement of drainage systems	Building Code (Decree No. 619/988) -- Environmental Impact Assessment Law (No. 16,466 of January 19, 1994) and its Regulatory Decree (No. 349/005) -- Water Code (Decree-Law 14,859 of December 15, 1978) -- Occupational Health and Safety Law (Law No. 19,196). Urban Stormwater Systems Design Manual, Ministry of Housing, Territorial Planning and Environment.
	Protection of homes and buildings at risk of flooding	Building Code (Decree No. 619/988) -- Social Interest Housing Law (Law No. 18,795) -- Occupational Health and Safety Law (Law No. 19,196)
3	Training, education, awareness	Law approving the Regional Agreement on access to information, public participation and access to justice in environmental matters in Latin America and the Caribbean (Escazú Agreement) (Law No. 19,773 of July 17, 2019) -- Strategy National Gender and Climate Change (2019)

4. ENVIRONMENTAL AND SOCIAL SAFEGUARDS

Table 3 Environmental and social safeguards throughout the project (summary table)

Checklist of environmental and social principles	Potential impacts and risks – further assessment and management required for compliance
1. Law enforcement	Some interventions included in components 2 require specific environmental administrative authorizations or permits. To avoid negative environmental or social impacts, the corresponding permit must be processed at the Ministry of Environment / Municipality as appropriate to the scale of the project, before carrying out any intervention in the project area.
2. Access and equity	The ESMP includes the "Guidelines for Dissemination and Participatory Strategy" that will serve as a guide so that in each of the six sites their "Dissemination and Participatory Strategy Plan" can be worked on and validated with the community in order to guarantee the participation of marginalized and vulnerable groups, stakeholders and local authorities.
3. Marginalized and vulnerable groups	The main vulnerable groups in the Project implementation area are identified (see FP Context section). To carry out this proposal, project socialization meetings were held with the different interested parties (see Annex 2 of the FP). The ESMP focused on measures to guarantee the inclusion of vulnerable groups and their universal access to the benefits of the project.
4. Human rights	This is a fundamental principle that applies to all projects. Since there are no proposed projects that negatively affect human rights, evaluation of this criterion is not necessary. Uruguay has signed the Declaration of Human Rights. To reinforce the topic of human rights, it will be included in awareness-raising and training activities. The ESMP includes the Complaints and Claims Mechanism through which concerns regarding human rights may be received within the framework of the project.
5. Gender equality and women's empowerment	The EBRI (Annex 5) and the ESMP (Annex 6) identify activities that may involve risks to gender equality and general mitigation measures. Annexed to the proposal is the Gender Assessment (Annex 3) that served as the basis for the preparation of the GAP. The Gender Action Plan (GAP, Annex 4) was specially designed for each of the activities of this project.
6. Fundamental labor rights	This is a fundamental principle that applies to all projects. Some Component 2 interventions may require the hiring of contractor companies that must comply with labor laws and the regulations of the International Labor Organization (ILO).

	The general requirements for construction contractors are part of ESMP and will be transferred to the bidding documents along with any necessary additional specifications (particular security measures for the task or protection elements) being mandatory for contractor companies.
7. Indigenous peoples	In the area of influence there are no territorialized indigenous communities or living in communities. There are people who perceive themselves as descendants of indigenous people who live together and share all their activities with the rest of the population.
8. Involuntary resettlement	The Project does not include activities that could lead to involuntary resettlement. None of the activities presented will have a risk of relocating people. Nor will they cause the displacement of economic activities.
9. Protection of natural habitats	The project objectives include reducing the vulnerability of coastal ecosystems (restoration and conservation) within and near Protected Natural Areas. Project activities within protected areas (Playa Penino, San José) must consider specific requirements and must be evaluated by the competent authorities (SNAP and MA) before carrying out any intervention in the area. Environmental and social impact assessments must be carried out to ensure that marine ecosystems and natural habitats are not negatively affected by any activities.
10. Conservation of biological diversity	Project interventions will consider the vulnerability approach of coastal ecosystems for the design of ecosystem-based adaptation strategies.
11. Climate change	Project activities are not expected to target sectors that generate GHGs. Where civil works are required, it is recognized that the movement of vehicles can increase emissions, but this impact is considered to be temporary and not significant.
12. Pollution prevention and efficiency in the use of resources	The risk at this point has to do with the activities that can generate waste production and the release of contaminants during civil works and during the use of new spaces. The ESMP details the measures to be considered in activities that have to do with training and awareness of the local population.
13. Public health	Storm drains can occasionally carry waste or polluting effluents that reach the beaches. The projects will require an executive project and, depending on their scale, an E&S Impact Study, which, when dealing with drainage, will include, among other aspects, the analysis of the quality of the discharge water. As mentioned in the ESMP, work will be done to raise awareness and prevent contamination of discharges through the Dissemination Plan and Participatory Strategy of the interested parties at each site.
14. Physical and cultural heritage	The project will protect cultural sites that are endangered by erosion and flooding. At the same time, special care will be taken in areas of interest for the conservation of cultural heritage according to the EBRI. To prevent a project from being designed and implemented in a way that damages a cultural site, this aspect will be included in the environmental and social impact studies and evaluations.
15. Conservation of land and soil	The Project has been designed to strengthen ecosystems and improve drainage to prevent the progress of erosion and flooding on the coast of Uruguay. Therefore, the very nature of the project itself contributes positively to land and soil conservation. The measures have to do with the application of legislation and their own local OT plans, with approval from DINACC when environmental permits are required and Coastal and Marine Management from the Ministry of the Environment when applicable.

5. ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

Table 1. Mitigation measures for the management of environmental and social impacts and risks.

(*) activities in which civil society must participate.

Risks, potential impacts and mitigation measures, by activity				
Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize	Mitigation measures	Responsible for verification
COMPONENT 1				
Activity 1.1.1 Mainstreaming climate change in planning instruments (*)	E&SP 3, E&SP 5. There is a risk that planning instruments are only scientifically based on climate change and do not incorporate the impact of people	Non-inclusive instruments, Increase in gaps, exclusion of vulnerable population, women and people with disabilities in the instruments	E&SP 3: Socialization of the instruments with civil society and women's groups prior to closure for feedback. E&SP 3: In the instance of development of the different instruments such as the "Cerro Beach Management Plan" the community will be disseminated in the meetings indicated in the "Dissemination Plan and Participatory Strategy" and the GAP to gather local perspectives, ensuring acceptance and collaboration in the implementation of the plan and strengthening its long-term effectiveness. E&SP 5: For the transversal instruments, the specific actions of the Gender Action Plan will be considered.	Departmental gender directorates Executing Entity: Adaptation and environment specialist (AESS) Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity
Activity 1.1.2 Development of technical guides that allow providing guidelines for specific adaptation measures (*)	E&SP 3, E&SP 5. There is a risk that the preparation of technical documents does not incorporate interests and uses of the coast of the vulnerable population and people with disabilities, non-inclusive guides	Increase in gaps, exclusion of vulnerable population and people with disabilities in the technical recommendations of the guides	E&SP 3: Socialization with civil society and women's groups of the technical guides prior to closure for their feedback. E&SP 3: Dissemination of the guides will be in the meetings indicated in the "Dissemination Plan and participatory strategy" of each of the project sites. E&SP 5: For the development of the guides, the actions of the Gender Action Plan will be considered.	Departmental gender directorates Executing Entity: Adaptation and environment specialist (AESS) Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity
Activity 1.1.3. Drafting of chapters and/or specific sections in the review and updating of each of the documents, to make visible and specifically analyze the inclusion of the gender and generational approach	E&SP 5. There is a risk that they incorporate the interests of the affected young and adult women, as well as the vulnerable population.	Increase in gaps, exclusion of women in activities of interest to them, disinterest on the part of women	E&SP 5: For the writing of the chapters and sections, what is indicated in activity G.1 must be followed. 1.1.a. _ of the Gender Action Plan	Departmental gender directorates Executing Entity: Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity
Activity 1.2.1 Strengthening registration and monitoring systems for climate change impacts (*) Activity 1.2.2 Development of a damage and loss evaluation system for the tourism sector on the coast. (*)	E&SP 3, E&SP 5. There is a risk of not including the vulnerable population and people with disabilities, and young and adult women	Increase in gaps, exclusion of vulnerable population and people with disabilities	E&SP 3, E&SP 5: The design of these systems must include the gender focus and activities according to the Gender Action Plan (GAP) and to ensure the inclusion of particular interests and needs of women and vulnerable groups and people with disabilities. You must work in the meetings indicated in the "Dissemination Plan and participatory strategy" of each of the project sites.	Executing Entity: Adaptation and environment specialist (AESS) Social and Gender Specialist (SSGS) Departmental gender directorates Last technical and administrative manager: Implementing Entity

Risks, potential impacts and mitigation measures, by activity				
Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize	Mitigation measures	Responsible for verification
Activity 1.3.1 Development of an EWS for the risk of coastal flooding, end-to-end and focused on people. (*)	E&SP 2 and E&S 3. Risk that not the entire community is aware of the existence and operation of the flood EWS. Risk that the community does not have the capabilities to access and interpret EWS information and respond to the alert appropriately.	If the community is not adequately informed, and local knowledge is not taken into account, it could happen that the EWS is not taken into account. If the community does not have sufficient capabilities to access and interpret the information, it may not respond to the alert appropriately.	E&SP 2 and E&S 3: The "Dissemination and Participatory Strategy Plan" by Juan Lacaze who will design the SSGS of the project together with the local population will include the meetings for the EWS contingency plan and protocol. The communication and training strategy for the population will be key to the dissemination of these activities and guarantee the sustainability of the system over time. The best communication strategy for the EWS of Juan Lacaze will be selected according to local preferences and media (proclamation, local radio, text messages, WhatsApp). During the design of the EWS, a preliminary survey will be carried out, house by house, paying particular attention to the participation of vulnerable and marginalized groups in the flood zone. Adequate coordination must be ensured with the activities of Component 1, which include EWS strengthening activities focused on communities at risk and those with greater vulnerability, such as people with disabilities. The contingency plans prepared must be validated with the local population and key actors in the territory (including simulation exercises, set-up and adjustments) who have extensive knowledge of the subject and currently implement contingency measures with assigned roles.	National Emergency System (SINAE) Executing Entity: Adaptation and environment specialist (AESS) Social and Gender Specialist (SSGS) Departmental Gender Directorate CECOED-CDE Last technical and administrative manager: Implementing Entity
	E&SP 5. There is a risk that the EWS does not incorporate the gender perspective in its consolidation.	If you do not incorporate the gender perspective, you may be leaving out important information regarding access to information, interpretation and response of men, women and diversities.	E&SP 5: The equal participation of women and men in participation and training instances will be ensured. This participation will be monitored with indicators disaggregated by sex. Special attention will be paid to providing training adapted to the realities and needs of men and women during floods. At least two instances of community participation are planned for the design and validation of the SAT protocol.	Executing Entity: Social and Gender Specialist (SSGS) Departmental Gender Directorate Last technical and administrative manager: Implementing Entity
COMPONENT 2				
Activity 2.1.1 Recovery of the structure of the dune ridge (*)	E&SP 1, E&SP 9 and E&SP 10, E&SP 12 Risk of contamination due to the use of synthetic materials, lack of knowledge of risky species, lack of access restriction to the intervention area	Affectation of beaches and marine species due to the use of plastics, micro-plastics, negative impact on the landscape, spread of exotic species, Trampling and loss of structure of the dune ridge.	E&SP 1: Process the corresponding environmental permit at the Ministry of Environment (MA) / Municipality as appropriate to the scale of the project, before carrying out any intervention on the coast. E&SP 9 and E&SP 10: The sand capture fences will in all cases be made of plant material (remnants of pruning with abundant volume and foliage of exotic species from the coastal zone itself, outside of their seeding season) . E&SP 12: In no case may synthetic material such as ropes, plastic mats, half shade or other fabrics or plastic materials be used to assemble the captive fences. When the work is carried out by Contractors , they must comply with all the mitigation measures of this ESMP and the specific ones (environmental, social and occupational safety) that the AESS will include in the bidding	DINACEA MA Directorate of Environmental Management and Tourism of the Municipalities Executing Entity: Adaptation and environment specialist (AESS) Last technical and administrative manager: Implementing Entity

Risks, potential impacts and mitigation measures, by activity				
Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize	Mitigation measures	Responsible for verification
			documents according to environmental evaluation and the Environmental and Social Principles of the Adaptation Fund E&SP 9 and 10: the intervened areas require access restriction, for which signs and posts will be placed to limit the passage, and control of the installation of outpatient commerce (sale stands such as beach bars).	
	E&SP 3 Lack of appropriation by the local population and changes in the use of the beach	Trampling and vandalization of captive fences, impact on the aesthetics of the beach, impact on recreational uses and pedestrian circulation	E&SP 3: Campaigns will be carried out with civil and educational society, in relation to the activities proposed in Component 3 of the project. The results or conclusions of all environmental and social studies carried out for the project must be socialized. Each of the "Dissemination plans and participatory strategy" will detail the procedure for communication and coordination of activities with civil society for work with the local population, high schools, neighborhood organizations and especially young volunteers in the assembly and monitoring and surveillance of captive fences that serve as a demonstration case for the community. Even when the work is carried out by contractors, there must be room for the participation of the local population in the monitoring and surveillance of the captive fences.	Citizen monitoring of captive fences (local population) Executing Entity: Social and Gender Specialist (SSGS) Departmental gender directorates Last technical and administrative manager: Implementing Entity
Activity 2.1.2 Conservation and regeneration of vegetation (*)	E&SP 1, E&SP 6, E&SP 9 and E&SP 10 plantation of exotic plant species; massive collection of natives.	Invasion of exotic plant species, loss of native vegetation, degradation of dunes	E&SP 1: Process the corresponding environmental permit at the Ministry of Environment / Municipality as appropriate to the scale of the project, before carrying out any intervention on the coast. E&SP 9 and E&SP 10: Plantation of native herbaceous species (fauna settlement). Planting native psammophilous vegetation to continue the sand capture cycle. To avoid the massive collection of natives, we will work with local nurseries and produce the seedlings themselves. E&SP 6: When it is necessary to control invasive exotic species, such as grass in Playa del Cerro, Montevideo, non-chemical methods will be used, for example: hot water vapor or manual starting. Before using the hot water vapor technique, the safety risks for operators must be thoroughly evaluated, training in the safe use of this technology must be carried out, and the necessary personal protection elements must be provided.	DINACEA - MA Coastal and Marine Management - MA Environmental Management Directorates of the Municipalities Executing Entity: Adaptation and environment specialist (AESS) Last technical and administrative manager: Implementing Entity
	E&SP 3 Non-acceptance or appropriation by the population.	Vandalism, removal or neglect of planted vegetation	E&SP 3: Campaigns will be carried out with civil and educational society for the protection of existing native vegetation and revegetation in relation to what is proposed in Component 3 of the project. The results or conclusions of all environmental and social studies carried out for the project must be socialized. Each of the "Dissemination plans and participatory strategy" will detail the procedure for communication and coordination of activities with civil society for work with the local population, high schools, neighborhood organizations and especially young volunteers in the assembly and monitoring and surveillance of vegetation that serve as a demonstration case for the community.	Citizen vegetation monitoring (local population) Executing Entity: Social and Gender Specialist (SSGS) Gender Directorate Departmental Last technical and administrative manager: Implementing Entity

Risks, potential impacts and mitigation measures, by activity				
Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize	Mitigation measures	Responsible for verification
Activity 2.1.3 Income management and beach uses (*)	E&SP 1, E&SP 9 and E&SP 10 Poor design of entrances to the beach, paths on the dune	Trampling, dune cutting, generation of wind corridors, blasting and sand loss.	E&SP 1: Process the corresponding environmental permit at the Ministry of Environment / Municipality as appropriate to the scale of the project, before carrying out any intervention on the coast. Contractors must comply with all the mitigation measures of this ESMP and the specific ones (environmental, social and occupational safety) that the AESS will include in the bidding documents according to environmental evaluation and the ESP. E&SP 9 and E&SP 10: The pedestrian walkways will be made of wood without chemical treatment (or another more ecological material according to the MA recommendation), their shape must avoid wind corridors and be elevated above the dune range to allow the circulation of sand through below.	DINACEA - MA Environmental Management Municipality Citizen vegetation monitoring (local population) Executing Entity: Adaptation and environment specialist (AESS) Last technical and administrative manager: Implementing Entity
	E&SP 2, E&SP 3, E&SP 5 Risk of not considering sellers; non-acceptance or appropriation of the population. Non universal/equitable access. Creation of unsafe sectors on descents to the beach or walkways, Poor parking design, vehicle circulation	Economic impact of seasonal vendors Impossibility of access to the beach for older people, people with reduced mobility, baby/children strollers. Insecurity mainly for women, soil waterproofing, water accumulation in parking spaces, vehicle accidents.	E&SP 2 and E&SP 5: In coordination with MINTUR, the entrances must guarantee security in their design and universal access for all. The designs will be suitable for public spaces, inclusive and vandal-proof; In each project the need for minimum lighting will be evaluated to guarantee safety and at the same time avoid light pollution and maintain the night landscape. In coordination with the traffic and works area of the mayor's office, the restriction of access for vehicles and quadricycles to the beach will be carried out and the delimitation of vehicle parking spaces in public properties enabled for this purpose, with wooden posts, installation of blocks of infiltration, adequate minimum signage and safe direction of circulation. E&SP 3: The results or conclusions of all environmental and social studies carried out for the project must be socialized. During the draft formulation stage, the results will be shared with the local population to improve the access proposal. Each of the "Dissemination plans and participatory strategy" will detail the procedure for communication and coordination of activities with civil society for work with the local population, high schools, neighborhood organizations and especially young volunteers in the assembly and monitoring and surveillance of facilities that serve as a demonstration case for the community.	Citizen monitoring of walkways and signage (local population) MINTUR DINACEA MA Directorate of Environmental Management and Works, Directorate of Gender Departmental Executing Entity: Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity
Activity 2.1.4 Conservation and restoration of vegetation on the margins of watercourses and coastal wetlands (*)	E&SP 1, E&SP 9 and E&SP 10. Undesired impacts of interventions on the ecosystem, Use of exotic species; massive collection of natives	Spread of invasive exotic species, loss of native vegetation	E&SP 1: Carry out ESIA according to the scale of the project to be carried out and process the corresponding environmental permit in the MA, before carrying out any intervention. E&SP 9 and E&SP 10: Behind the beach area, native herbaceous species (wetland and grassland type vegetation) will be planted to restore ecological functioning and encourage the settlement of fauna. To avoid the massive collection of natives to be replanted, we will work with local nurseries to produce the seedlings themselves.	DINACEA MA Environmental Management Municipality Executing Entity: Adaptation and environmental specialist (AESS) Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity

Risks, potential impacts and mitigation measures, by activity				
Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize	Mitigation measures	Responsible for verification
	E&SP 3 risk of non-acceptance or appropriation by the local population	Vandalism, removal or neglect of planted vegetation	E&SP 3: Campaigns will be carried out with civil and educational society for the protection of existing native vegetation and revegetation in relation to what is proposed in Component 3 of the project. The results or conclusions of all environmental and social studies carried out for the project must be socialized. Each of the "Dissemination plans and participatory strategy" will detail the procedure for communication and coordination of activities with civil society for work with the local population, high schools, neighborhood organizations and especially young volunteers in the assembly and monitoring and surveillance of vegetation that serve as a demonstration case for the community.	Citizen vegetation monitoring (local population) Executing Entity: Social and Gender Specialist (SSGS) Environmental Management Directorate Gender Directorate Departmental Last technical and administrative manager: Implementing Entity
Activity 2.2.1 Redirection and/or adaptation of stormwater discharges on the beach (*)	E&SP 1, E&SP 12, E&SP 3, E&SP 6 and E&SP 13 There is a risk that the project will be affected by pollution of the city's drainage system. Undesired environmental impacts of the works	Impact of the beach due to contaminated drainage, Operator accidents (in case of use of machinery)	E&SP 1: Projects will require an executive project and, depending on their scale, an Environmental and Social Assessment. E&SP 13: the study that will include, among other aspects, the analysis of the quality of the discharge water. In the East and South Beach arcs of La Paloma, Rocha, a study will be carried out to design an executive project to define "type" discharges on the coast that can be replicated in other discharges. E&SP 1: The bidding documents for the works will contain the specific environmental and social requirements of the ESIA for the execution of the tasks safely and in accordance with occupational safety standards, for contractors. E&SP 12 and E&SP 6: Contractors must comply with all the mitigation measures of this ESMP and the specific ones (environmental, social and occupational safety) that the AESS will include in the bidding documents according to the environmental evaluation and the environmental and social principles of the AF and the GAP. And it will have a site E&S manager who will carry out the implementation of the site's Environmental and Social Management Plan according to the specifications.	DINACEA - MA Executing entity: Adaptation and environment specialist (AESS) Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity
	E&SP 3 Risk of non-acceptance or appropriation of the population	Vandalism, discharges of non-polluting liquids	E&SP 3: Campaigns will be carried out with civil and educational society in relation to what is proposed in Component 3 of the project. The results or conclusions of all environmental and social studies carried out for the project must be socialized. Each of the "Dissemination plans and participatory strategy" will detail the procedure for communication and coordination of activities with civil society for work with the local population, high schools, neighborhood organizations and especially young volunteers in the assembly and monitoring and surveillance of vegetation that serve as a demonstration case for the community. Work will be done on awareness and prevention of contamination of discharges.	Executing Entity: Social and Gender Specialist (SSGS) Adaptation and environment specialist (AESS) Gender Directorate Departmental Last technical and administrative manager: Implementing Entity

Risks, potential impacts and mitigation measures, by activity				
Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize	Mitigation measures	Responsible for verification
Activity 2.2.2 Bioretention (*)	E&SP 1, E&SP 12, E&SP 6. unwanted environmental impacts of the works, Accident risks	Accidents involving soil moving machinery operators, Accidents to people and/or animals in lagoons	E&SP 1: Projects will require an executive project and, depending on their scale, an E&S Impact Study. Process the corresponding environmental permit at the Ministry of Environment / Municipality as appropriate to the scale of the project, before carrying out any intervention. The bidding documents for the works will contain the specific environmental and social requirements of the ESIA for the execution of the tasks safely and in accordance with occupational safety standards, for contractors, as well as the requirements detailed in the Work Plan. Gender Action. E&SP 12: Contractors must comply with all the mitigation measures of this ESMP and the specific ones (environmental, social and occupational safety) that the environmental and social specialists will include in the bidding documents according to the environmental evaluation and the environmental and social principles of the AF and the GAP. And it will have an environmental and social project manager who will carry out the implementation of the project's Environmental and Social Management Plan according to the specifications. E&SP 6: The contractor must comply with the necessary security measures that guarantee the protection of the population (especially enclosure for children and animals) and also prevent the procreation of mosquitoes.	DINACEA MA Executing entity: Adaptation and environment specialist (AESS) Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity
	E&SP 3 Risk of non-acceptance or appropriation of the population, population entry into non-permitted sectors	Vandalism, accidents	E&SP 3: Campaigns will be carried out with civil and educational society in relation to what is proposed in Component 3 of the project. The results or conclusions of all environmental and social studies carried out for the project must be socialized. Each of the "Dissemination plans and participatory strategy" will detail the procedure for communication and coordination of activities with civil society for work with the local population, high schools, neighborhood organizations and especially young volunteers in the assembly and monitoring and surveillance of vegetation that serve as a demonstration case for the community. In addition to installing appropriate signage, we will work with the community to raise awareness and prevent accidents in areas designated for bioretention.	Executing Entity: Social and Gender Specialist (SSGS) Adaptation and environment specialist (AESS) Gender Directorate Departmental Last technical and administrative manager: Implementing Entity
Activity 2.2.3 Accumulator ditches, adaptation of channels and buffer lagoons (*)	E&SP 1, E&SP 12, E&SP 6 unwanted environmental impacts of the works, accident risks	Accidents involving soil moving machinery operators, Accidents of the population in the lagoons	E&SP 1: Projects will require an executive project and, depending on their scale, an E&S Impact Study. Process the corresponding environmental permit at the MA / Municipality as appropriate to the scale of the project, before carrying out any intervention. The bidding documents for the works will contain the specific environmental and social requirements of the ESIA for the execution of the tasks safely and in accordance with occupational safety standards, for contractors. E&SP 12: Contractors must comply with all the mitigation measures of this ESMP and the specific ones (environmental, social and occupational safety)	DINACEA MA Executing entity: Adaptation and environment specialist (AESS) Last technical and administrative manager: Implementing Entity

Risks, potential impacts and mitigation measures, by activity				
Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize	Mitigation measures	Responsible for verification
			that the environmental and social specialists will include in the bidding documents according to environmental evaluation and the ESP. And it will have an environmental and social project manager who will carry out the implementation of the project's Environmental and Social Management Plan according to the specifications. Likewise, the incorporation of vegetation that fulfills the function of filtration and nutrient uptake is recommended to avoid eutrophication of these bodies of water. E&SP 6: The buffer lagoons must comply with the necessary safety measures that guarantee the protection of the population (especially enclosure for children), animals and also prevent the procreation of mosquitoes.	
	E&SP 3 Risk of non-acceptance or appropriation of the population, population entry into non-permitted sectors	Vandalism, accidents	E&SP 3: Campaigns will be carried out with civil and educational society in relation to what is proposed in Component 3 of the project. The results or conclusions of all environmental and social studies carried out for the project must be socialized. Each of the "Dissemination plans and participatory strategy" will detail the procedure for communication and coordination of activities with civil society for work with the local population, high schools, neighborhood organizations and especially young volunteers in the assembly and monitoring and surveillance of vegetation that serve as a demonstration case for the community. In addition to installing appropriate signage, we will work with the community to raise awareness and prevent accidents in the buffer lagoons.	Executing Entity: Social and Gender Specialist (SSGS) Adaptation and environment specialist (AESS) Gender Directorate Departmental Last technical and administrative manager: Implementing Entity
Activity 2.2.4 Floodable parks (*)	E&SP 1, E&SP 9 and E&SP 10 The environmental evaluation standards are not respected, the fragility of the ecosystem is not taken into account during the work, risk of spread of invasive alien species	Pollution and environmental and special impacts of the works Spread of invasive alien species	E&SP 1: Process the corresponding environmental permit at the Ministry of Environment / Municipality as appropriate to the scale of the project, before carrying out any intervention on the coast. E&SP 9 and E&SP 10: Contractors must comply with all the mitigation measures of this ESMP and the specific ones (environmental, social, and occupational safety) that the environmental specialist and the social specialist will include in the bidding documents according to environmental evaluation, the E&SP and what is required in the GAP. The municipality will follow the regulations and standards regarding waste to carry out the work and will include the park in the municipal waste management system. Contractors must present to the Executing Entity an Environmental and Social Work Management Plan, which will be followed up by the Environmental and Social Manager of the contractor. In Juan Lacaze, Colonia, actions of the Flood Park that the municipality is carrying out will be complemented, before planting and a survey of the present and potential flora and fauna in the area will be carried out. To provide strength and sustainability, the departmental nursery will be strengthened to generate seedlings of native species. The planting will be all native species identified in the study for the area, on the banks of the ravine	DINACEA MA Local Environmental Management Gender Directorate Departmental Executing entity: Adaptation and environment specialist (AESS) Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity

Risks, potential impacts and mitigation measures, by activity				
Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize	Mitigation measures	Responsible for verification
			and the rest of the park. The infrastructure and zoning of uses of the road park for sustainable mobility (without motor). The design will aim to reduce impacts, guarantee accessibility and zone uses based on soil conditions.	
	E&SP 3 risk of non-acceptance or appropriation of the population	Vandalization or neglect of facilities, carrying out activities that are not permitted (hunting)	E&SP 3: Campaigns will be carried out with civil and educational society for the protection of the park in relation to what is proposed in Component 3 of the project. The results or conclusions of all environmental and social studies carried out for the project must be socialized. Each of the "Dissemination plans and participatory strategy" will detail the procedure for communication and coordination of activities with civil society for work with the local population, high schools, neighborhood organizations and especially young volunteers in the design, monitoring and surveillance of the new facilities, signage.	Citizen monitoring (local population) Executing Entity: Social and Gender Specialist (SSGS) Gender Directorate Departmental Last technical and administrative manager: Implementing Entity
	E&SP 2 and E&SP 3. There is a risk that the project does not include universal design considerations	Restriction of access and enjoyment of the park to the population with disabilities, reduced mobility, strollers and children	E&SP 2 and E&SP 3: The project will include universal access, inclusion, and security in the design to facilitate the use and enjoyment of the area by the vulnerable population. Examples: inclusive play and rest spaces, ramps,	Executing Entity: Social and Gender Specialist (SSGS) Gender Directorate Departmental Last technical and administrative manager: Implementing Entity
	E&SP 5. There is a risk that the project does not include the gender perspective in its design	Unsafe spaces could be generated.	E&SP 5: The project will include the establishment of access to the flood park that allows women to feel safe to travel through it, see measures in the GAP. Regarding lighting, the need and impact will be evaluated, seeking to provide security without affecting the flora, fauna or the night landscape. The contractor must hire a specialist in urban planning and gender (or similar) to enforce the requirements of the GAP.	Executing Entity: Social and Gender Specialist (SSGS) Gender Directorate Departmental Last technical and administrative manager: Implementing Entity
Activity 2.3.1 Implementation of a financial mechanism to promote adaptation in homes and other buildings in areas of medium flood risk. (*) USP	E&SP 2 and E&SP 3. There is a risk that not all vulnerable and marginalized groups will access the benefits of the project and be involved in the design of the mechanism. Execution of activities without prior E&S risk assessment	The revolving fund may not reach vulnerable and marginalized groups. Without participation in the design, the revolving fund may not fully respond to the needs of beneficiaries. Unforeseen environmental or social impacts	E&SP 2 and E&SP 3: The project must have a clear access mechanism. It will have regulations establishing the conditions to access credit, the requirements that must be met and investment and repayment obligations. It will have considerations for vulnerable and marginalized groups (e.g. eligible investments will include infrastructure adapted to people with disabilities), and facilities for women's access to the mechanism. A campaign will be carried out to survey and disseminate the mechanism with a "door-to-door" modality as possible (see specific activities in the GAP). Some eligible investments will be: locks or flood gates, waterproofing of walls, storm valves, non-return valves, adaptation of electrical installations, accessibility measures for people with disabilities or reduced mobility, mechanisms to raise furniture and other valuables to higher floors. .	DINAVI Executing Entity: Social and Gender Specialist (SSGS) Adaptation and environment specialist (AESS) Local Gender Directorate Local Environmental Management Last technical and administrative manager: Implementing Entity

Risks, potential impacts and mitigation measures, by activity				
Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize	Mitigation measures	Responsible for verification
			The participation of women and vulnerable groups will be promoted in the design of the mechanism, as detailed in activity G.2.3.2 a, b and c of the GAP. USP Activity: Before executing this activity, the specialists of the executing entity must carry out the analysis of environmental and social risks, adjust the corresponding mitigation measures and share the results with the community. The evaluation must coincide with the low risk classification.	
	E&SP 5. The project could increase gender inequality if it does not have facilities for women to access the mechanism	If affirmative measures are not taken for the participation of women, the condition of less access by them to this type of tools can continue to be reproduced.	E&SP 5: In its design, the barriers that women have in accessing credit will be taken into account and appropriate measures will be taken to address them. The participation of women in the design of the mechanism will be promoted. See considerations indicated in the GAP.	Executing Entity: Social and Gender Specialist (SSGS) Gender Directorate Departmental Last technical and administrative manager: Implementing Entity
Activity 2.4.1 Design and development of a sustainable ecotourism project (*)	E&SP 1, E&SP 9, E&SP 10, E&SP 14, E&SP 15. risk of overload of visitors, tourist access to areas reserved for conservation, generation of waste and effluents	Tourist overexploitation, degradation of the ecosystem, environmental pollution during the work, impact on the migratory bird route	E&SP 14, E&SP 15: A first study will be carried out to design the Playa Penino ecotourism project in a sustainable way, considering, among other issues, the carrying capacity for the area, to determine when and how it can be exploited for tourism. E&SP 9, E&SP 10: and at the same time without compromising the natural conditions of the place and particularly without generating a negative impact on migratory bird communities. The study project will have a comprehensive approach to sustainability, enhancement and conservation of the wetland ecosystem, its great biodiversity, and especially migratory birds, and also the generation of economic income for the local population, improving their livelihoods, environmental education. and ecotourism of national and international projection. Elevated walkways will be included with spaces for selling reed crafts, among others. The project will place special emphasis on generating work opportunities for women as environmental promoters or nature guides. E&SP 1: Carry out the Environmental and Social Impact Study, process the corresponding environmental permit at the Ministry of the Environment as appropriate to the scale of the project and the sensitivity of the area, before carrying out any intervention on the coast. The detailed environmental impact study will be a key input for the design of the project and for the requirements of the contractor carrying out the work. Contractors must comply with all the mitigation measures of this ESMP and the specific ones (environmental, social and occupational safety) that the AESS and SSGS social specialist will include in the bidding documents according to environmental evaluation, the ESP and what is included in the GAP.	MINTUR SNAP DINACEA MA Local Gender Directorate Local Environmental Management UTU Executing entity: Adaptation and environment specialist (AESS) Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity

Risks, potential impacts and mitigation measures, by activity				
Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize	Mitigation measures	Responsible for verification
COMPONENT 3				
Activity 3.1.1 Communication strategy (*)	E&SP 2, E&SP 3 and E&SP5. Lack of participation by stakeholders, especially women and vulnerable groups.	Non-appropriation of the measures by the population, technicians and authorities. Increase in the gender gap in areas of participation. Low positive impact of the measures Low sustainability of project activities	E&SP 2 Instances of awareness-raising and training in horizontal work with all the different coastal actors - decision-makers, technicians, SMEs and the general population with special focus on the vulnerable population and gender perspective - on the risks and adaptation measures seeking that are actively involved in climate action and participate in the project with Citizen Monitoring, such as: installation and monitoring of sand capture fences, dune revegetation campaigns, awareness events, collaboration in the development of educational material for dissemination , installation and custody of signage and signage, among others. E&SP 3 and E&SP5: To guarantee the success of these activities and not exclude any of the parties, special care will be taken in the different calls, designing the modalities, schedules, and meeting places to ensure the participation of everyone. The "Dissemination Plan and Participatory Strategy" and the GAP (activity G. 3.1.1.a, b, c and d) will be the work guides in this regard. The Awareness Program will understand the role of wetlands and their biotic components, highlighting the role of certain key species. - In particular, in Rocha, local training will be included for municipal staff responsible for the management of green spaces and for individuals to apply adequate management of landscaping and green spaces on their properties. And training for the mayor's architectural staff to promote the adaptation of public buildings for the collection and use of rainwater. - In Playa Penino, San José, work will be done to coordinate with UTU training spaces to promote the incorporation of local tourism training topics in the academic offer that allow valuing local tourism, as well as allowing the professional training of members of the community accompanying the ecotourism development of the area, Component 3.	Local Gender Directorate Local Environmental Management UTU Executing entity: Adaptation and environment specialist (AESS) Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity
Activity 3.1.2 Awareness raising for high-level political decision-makers Activity 3.1.3 Awareness and training for local technicians	E&SP 2, E&SP 3 and E&SP5. Not including aspects of gender focus on social issues in awareness-raising	The particularities of women and vulnerable groups are not taken into account in high-level and technical decision-making bodies.	E&SP 2, E&SP 3 and E&SP 5: Include in a transversal way and information on a gender perspective and specific social aspects of interest to the project in all instances of meeting, training and awareness-raising for high-level politicians and technicians. Measures indicated in the GAP, activities G. 3.1.2.a, b and c will be implemented. We will work with all the different level teams that are involved in the project, those mentioned in this ESMP (such as DINACEA, DINACC, MINTUR, SNAP, DINAVI, SINAE, among others).	DINACC – MA Coastal and Marine Management - MA Executing entity: Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity
Activity 3.2.1 Develop and socialize a Dissemination Plan and Participatory Strategy per intervention site (*)	E&SP 2, E&SP 3 and E&SP 5. Lack of participation by stakeholders especially women and vulnerable groups	Non-appropriation of the Project by civil society	E&SP 2, E&SP 3 and E&SP 5: Carry out the specific "Dissemination and Participatory Strategy Plans" for the Interested Parties with each of the 6 sites according to the guidelines of this ESMP. Disseminate the complaints and claims mechanism of this ESMP.	Local Gender Directorate Local Environmental Management Executing entity: Adaptation and environment specialist (AESS)

Risks, potential impacts and mitigation measures, by activity				
Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize	Mitigation measures	Responsible for verification
				Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity
Activity 3.2.2 Raising awareness and strengthening participation instances to involve young people in adaptation measures (*)	E&SP 2, E&SP 3 and E&SP 5. Lack of participation by stakeholders especially youth, women and vulnerable groups	Non-appropriation of the Project by civil society, youth	E&SP 2, E&SP 3: Work focused on the continuity of "Young Climate Action" of the DINACC of the MA. Awareness will be raised and trained in horizontal work with all the different coastal actors, the community, especially young people and the population in general, with special focus on the vulnerable population and gender perspective, on the risks and adaptation measures, seeking to get them actively involved in the action. climate change and actively participate in the project (installation and monitoring of sand-capturing fences, dune revegetation campaigns, awareness-raising events, collaboration in the development of educational material for dissemination, installation and custody of posters and signage). E&SP 3 and E&SP 5: To guarantee the success of these activities, special care will be taken in the different calls, designing the modalities, schedules and meeting places to ensure the participation of everyone. The Dissemination Plan and Participatory Strategy and the GAP will be the work guides in this regard. The Awareness Program will understand the role of wetlands and their biotic components, highlighting the role of certain key species.	DINACC Local Gender Directorate Local Environmental Management Executing entity: Adaptation and environment specialist (AESS) Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity
Subactivity 3.2.3 Awareness and training for communicators	E&SP 2, E&SP 3 and E&SP 5. Ineffective communication with communicators, Lack of participation by interested parties, especially key communicators for dissemination	Lack of dissemination or insufficient dissemination of project activities	E&SP 2, E&SP 3 and E&SP 5: Journalists and local communication leaders will be sensitized and trained on effective communication of climate change, adaptation on the coasts of Uruguay and the gender approach, seeking to get them actively involved in the dissemination of the information. project activities.	Local Gender Directorate Local Environmental Management Executing entity: Adaptation and environment specialist (AESS) Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity
Subactivity 3.2.4 Awareness and involvement of the local community (*)	E&SP 2, E&SP 3 and E&SP 5. Lack of participation by stakeholders especially women and vulnerable groups	Non-appropriation of the Project by civil society	E&SP 2: Awareness will be raised and trained in horizontal work with all the different coastal actors - decision-makers, technicians, SMEs and the general population with special focus on the vulnerable population and gender perspective - on the risks and adaptation measures seeking that are actively involved in climate action and actively participate in the project (installation and monitoring of sand capture fences, dune revegetation campaigns, awareness events, collaboration in the development of educational material for dissemination, installation and custody of signage and signage). E&SP 3 and E&SP5: To guarantee the success of these activities, special care will be taken in the different calls, designing the modalities, schedules and meeting places to ensure the participation of everyone. The	Local Gender Directorate Local Environmental Management Executing entity: Adaptation and environment specialist (AESS) Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity

Risks, potential impacts and mitigation measures, by activity				
Activity	Risks identified according to the environmental and social policy of the Adaptation Fund	Environmental and social impacts if risks materialize	Mitigation measures	Responsible for verification
			Dissemination Plan and Participatory Strategy and the GAP will be the work guides in this regard. The Awareness Program will understand the role of wetlands and their biotic components, highlighting the role of certain key species.	
Activity 3.2.5 Awareness raising for MSMEs / productive sectors	No identified environmental and social risks	N/A	N/A	N/A
Activity 3.3.1 Identification of good practices and lessons learned (*)	All E&SP. There is a risk that, during the exchange of lessons learned, lessons related to environmental and social issues from the selected experiences are not also shared.	They would make valuable experiences for the population invisible and lack of participation of women and vulnerable groups. By not sharing environmental and social experiences, errors related to these aspects could be repeated.	Good practice experiences will be identified regarding all project activities for coastal adaptation and will produce dissemination material on valuable experiences focused on people and their increased resilience, and the exchange of experiences between municipalities with similar problems will be encouraged. In the lessons learned that are selected for exchange, it will be ensured that learning in environmental and social aspects is included. The measures detailed in the GAP - Annex 4 of the Full Proposal must be implemented.	DINACC Coastal Management Local Gender Directorate Local Environmental Management Executing entity: Adaptation and environment specialist (AESS) Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity
Activity 3.3.2 Exchanges between municipalities for knowledge management	No identified environmental and social risks	N/A	N/A	N/A
Activity 3.3.3 Coastal Space Management Congress	No identified environmental and social risks	N/A	N/A	N/A
Activity 3.4.1 Articulation with training spaces to incorporate local tourism topics	All E&SP, risk of lack of access to technical training in ecotourism, Risk of not considering all environmental and social aspects in training spaces	Technicians without adequate training, Lack of access to training in ecotourism, increasing gender gap in technical training, negative impacts of tourism on the coast	Work will be done to facilitate access to ecotourism training programs. Articulation with UTU to include topics such as climate change, coastal adaptation, information and conservation of coastal ecosystems, recognition of local flora and fauna species, ecosystem services, migratory birds, local cultural identity in relation to the environment, environmental and social risks of tourism on the coast and its mitigation measures, management of waste and visitor effluents, commercial activities and sustainable use of resources, among others. According to the GAP, 40% of people trained in ecotourism will be women.	UTU SNAP Local Gender Directorate Local Environmental Management Executing entity: Adaptation and environment specialist (AESS) Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity
Activity 3.4.2 Design the Program to Strengthen Women's Employment in Coastal Areas (*)	E&SP 2 and E&SP 5. Lack of consideration of economic interests and activities of women.	Lack of participation of women	E&SP 2 and E&SP 5: A program will be designed (within the framework of the GAP) to strengthen access to formal employment and improve the working conditions of women who carry out economic and productive activities in the coastal zone. Training and training must consider the interests of women and possibilities of access to meeting and exchange spaces to achieve the objectives.	Local Gender Directorate Executing entity: Social and Gender Specialist (SSGS) Last technical and administrative manager: Implementing Entity

The implementation of the activities detailed above total USD 387,707

6. ENVIRONMENTAL AND SOCIAL GRIEVANCE REDRESS MECHANISM (ESGRM)

This mechanism will be applied to all project activities without exception and will be disseminated in all instances of communication and relations with interested parties. Likewise, during the preparatory and dissemination activities of the Revolving Fund, it will be socialized and made available to each of the beneficiaries or potential beneficiaries as parties involved in the USP so that they know and understand the operation of this complaints and claims mechanism.

The new "Environmental and Social Grievance Redress Mechanism" (ESGRM) (approved in April 2023) contemplates the basic design and operation requirements established in the AF policies.
The ESGRM aims to:

- Receive, evaluate, manage and respond to complaints related to possible adverse environmental and social impacts on people, communities or the environment caused or that may be caused during the execution of an operation financed by the Institution.
- Timely detect, prevent and mitigate tensions in the social sphere that may be generated or escalate around such complaints, and that may affect the development objectives proposed in the operations or the reputational image of CAF and, in this way, contribute to guaranteeing socially responsible development.
- Strengthen the environmental, social and gender risk management process of CAF operations, transferring the lessons learned from the implementation of the ESGRM to improve the conceptual, regulatory framework and internal processes in this matter, as well as the decision-making processes. decisions.

The ESGRM can be accessed directly from the CAF institutional portal (www.caf.com).
This mechanism has a manual that establishes the objectives, scope, guiding principles on which the mechanism is governed, and all aspects related to its operation. Consult the "ESGRM Environmental and Social Grievance Redressal Mechanism Manual".

In addition to the ESGRM (institutional level), and in accordance with the Environmental and Social Safeguards (SAS), all projects financed by CAF must have a Complaints and Claims Mechanism with a gender focus and first aid for gender violence - the GCM (project level) designed according to risk levels, project characteristics and socioeconomic and cultural particularities of the actors.

In order to respond appropriately and effectively to requests, complaints or claims that may arise at any stage of the project cycle, the proponent must establish a mechanism to receive and respond to them efficiently and quickly. All community members must be informed about these mechanisms, the way in which they can submit a petition, complaint or claim, and the time and manner in which they will receive a response. The mechanism must be agreed with the local population and, where necessary, transparency and privacy must be guaranteed. The results of the cases attended must be disseminated periodically, and this information will also be used as a feedback mechanism to improve project practices.

What kind of complaints can be submitted?
Complaints related to possible adverse environmental and social impacts on people, communities, or the environment caused during the implementation of programs, projects, or activities (Operations) financed by the CAF.

Who can submit a complaint?

- The complainant (two or more persons), who believe that they have been affected or may be affected by any adverse environmental and social impacts allegedly caused, or likely to be caused, to them or the environment by a CAF-financed Operation.

- One organization or one person representing the complainants.

- The complainant has the right to confidentiality unless he/she wishes to waive this right.

- One or more persons, the victim, a representative, a witness, or any informed person, when the complaints are related to Gender-Based Violence (GBV) or any type of discrimination. These complaints will be dealt with by ESGRM, with the advice and permanent participation of specialists in these areas and will be treated confidentially in their entirety, unless the complainant or complainants expressly declare that they waive this right.

What are the requirements for submitting a complaint?

- Prior to submitting a complaint to the ESGRM, the complainant must present evidence of having gone before the specific Complaints and Grievances Mechanism (CGM) of the Operation and not having found a satisfactory response or having exhausted the possibilities of dialogue and extrajudicial channels with those responsible for the Operation.

- Complaints related to allegations of Gender-Based Violence (GBV), or any type of discrimination do not need to be preceded by any filing with the Operation's Complaints and Grievances Mechanism (CGM) of the Operation beforehand, they can be submitted directly to ESGRM.

What is the procedure for submitting a complaint?

- Send an email to the following address ESGRM@caf.com
- Complete the following ESGRM Online Form [2].
- Download the Form, fill it out and send it by mail or submit your complaint in person at any of CAF's country offices [3].

To file a complaint, you must specify:

- The identity of the complainants, their physical addresses, e-mail addresses, and other contact information.
- If an organization or individual submits a complaint on behalf of those allegedly affected, the representative should clearly indicate the identity and contact details of those on whose behalf the complaint is made and provide explicit evidence of their authority to do so, as well as the bylaws of their organization, if applicable. ESGRM may verify that the affected parties have granted such authority. It is the responsibility of ESGRM to verify the validity of the delegation or representation.
- The name and precise location of the Operation to which the complaint refers.
- Evidence of the efforts made by the complainant to resolve the problem, including the details of the approach and the results obtained before the Complaints and Grievances Mechanism (CGM) of the Operation, and the details of the unresolved aspects of the problem.
- Any relevant aspect or fact that the complainant considers relevant and for which it can present documentary evidence.
- Except from the above requirements are complaints related to Gender-Based Violence (GBV) or any type of discrimination, for which the identification and contact details of the complainant will be sufficient, information that will be treated from the moment of receipt in accordance with the confidentiality criteria governing ESGRM; the name and precise location of the Operation to which the complaint refers and any other fact or information that the complainant considers relevant to the analysis process.

The registered complaints are subject to a detailed eligibility analysis, according to the criteria defined in the ESGRM. Exclusions [4].

In accordance with the provisions of the Access to Information and Institutional Transparency Policy (PAITI), CAF will publish an Annual Report on ESGRM's activities and results.

7. GUIDELINE FOR DISSEMINATION AND PARTICIPATORY STRATEGY

The CAF and the AF are committed to ensuring the effective and informed participation of direct stakeholders in the formulation and execution. Effective stakeholder engagement is a cornerstone of achieving sustainable development. Engagement with stakeholders, including access to timely, relevant and understandable information and resolution of complaints, are key aspects of a human rights-based approach to programming. Government partners, civil society actors and organizations, local government actors, local communities and other stakeholders are crucial partners. Effective stakeholder engagement is also critical to achieving the Sustainable Development Goals (SDGs) and addressing the

[2] https://www.caf.com/en/topics/e/environment-and-climate-change/environmental-and-social-grievance-redress-mechanism-esgrm/

[3] https://www.caf.com/media/4661675/list-of-caf-offices-and-their-contact-numbers.pdf

[4] https://www.caf.com/media/4661677/exclsuions-ingles-para-web-2004.pdf

principle of “leaving no one behind” in the fight against inequality and ensuring equity and non-discrimination in all areas. programming.

In this sense, the project mechanism allows the participation of the parties, with the purpose of energizing their connection in the decisions and actions during the diagnosis, formulation, implementation, evaluation and monitoring of the Project. This mechanism establishes the general basis for the involvement of interested parties during the stages of the Project.

Preparation stage: During the Project design, stakeholder mapping was carried out and then Consultation Meetings were held in the Concept Note preparation stage. This process was deepened in the meetings with Interested Parties during the October 2023 mission at each of the Project sites. See Stakeholder Engagement reports annexed to the FP.

Execution stage: Before execution, each of the six Project sites will prepare its “Dissemination Plan and Participatory Strategy” adjusted to its reality, modality and dynamics of current meetings, in case a pre-existing mechanism already existed, or a new Plan for cases in which it did not exist. These Plans must guarantee the dissemination of information, free participation, and permanent work with the parties involved, especially the vulnerable population identified in the Project. These plans must contain details of the communication channels, method of convening, frequency and location of meetings, type of activities, etc.

Throughout execution, each Participation Plan must:

- Keep stakeholders informed about what is happening during implementation.
- Socialize with interested parties about any changes in the Project design or in the risks of environmental and social impacts, in the continuous implementation of E&S mitigation measures and any new aspects that arise in relation to or during the implementation of the Projects.
- Provide timely and consistent responses in relation to complaints and questions received through the Complaints and Claims Mechanism.
- Review the stakeholder engagement plan, including the adequacy of stakeholder identification, in light of any issues that have arisen during the implementation of the Projects.
- Proactively solicit input from stakeholders, prioritizing two-way dialogue in addition to one-way information sharing.
- It must be ensured that there is no discrimination based on gender in the design of the plan.
- Identify barriers and take measures to facilitate the participation of women and diversities.
- Facilitate inclusive participation by involving all stakeholders, including people or groups with disabilities, marginalized or vulnerable.

At the meetings, specific topics of interest for the Project may be discussed as proposed by one of the parties and experts and/or neighbors from other municipalities with experience may be invited, or others involved in the topic to obtain information and support when necessary. . The plan must establish the procedure to leave a record of each meeting of the proposals, concerns, complaints or questions made by the attendees and how they were or will be addressed, if applicable to the Project, by those responsible for making decisions.

The success of many of the Project activities and their sustainability are linked to the degree of involvement and participation of civil society during execution. The Environmental and Social Mitigation Plan (ESMP) highlights with a (*) the activities for which civil society must participate in order to mitigate identified risks such as, for example: lack of appropriation by the community and vulnerable groups, vandalism of walkways, billboards, plantations, lack of knowledge of how to act during the EWS flood alert, failure to record lessons learned, among others.

8. MONITORING, EVALUATION AND MONITORING

Before the execution of the project, the Operational Manual will be prepared in which what is necessary for the application of everything detailed in this ESMP and the social and environmental safeguards of the AF will be operationalized, this may include specific indicators, means of verification and those responsible for the application of mitigation measures. These procedures will be validated with the main parties involved in the execution of the project. Additionally, a training workshop will be held for members of the project Executing Entity and other organizations for the implementation of this Manual. CAF will provide technical support for the preparation of the manual and the operation of the training workshop.

5.1 Environmental and Social Monitoring

The monitoring of environmental and social aspects will be carried out permanently by the executing entity, the implementing entity, and will be reported to the Adaptation Fund through annual Project execution reports. These reports

will include a section on the status of implementation of the environmental and social management plan, including the measures necessary to avoid, minimize or mitigate environmental and social risks and evaluations of USP activities. The reports will also include, where appropriate, a description of any corrective measures deemed necessary. Intermediate and final evaluation reports including an evaluation of project performance with respect to environmental and social risks and the Complaints and Claims Mechanism.