

Terms of Reference for Consulting Services

Title of Work: Analyst for nature-based solutions case studies and risk financing

Time frame: March 1, 2021 to December 31, 2021; estimated up to 90 expert days

Budget: 23,000 EUR

Deadline for application: 28.02.2021

Application to: Max Ricker, The Nature Conservancy in Europe: max.ricker@tnc.org

1. Brief description of the project

Context:

Coastal areas are particularly vulnerable to climate change (CC) due to their exposure to sea level rise (SLR) and to extreme weather events. While traditional engineering-based solutions for adaptation to CC have long been the dominant paradigm in adaptation practice, the implementation of Nature-based Solutions (NbS) is increasingly being considered as a viable and cost-effective alternative strategy to adapt to CC.

Some coastal ecosystems, such as salt marshes, seagrass meadows and reef forming organisms (e.g. corals, oysters) can play a relevant role for adaptation to CC in coastal areas. They significantly protect coastal areas from erosion and flooding by buffering water currents and wave energy, and they have the capacity to adapt to SLR through the enhancement of sediment accretion and soil elevation. Additionally, they support multiple other ecosystem services relevant for coastal communities (e.g. maintaining water quality, enhancing biodiversity, supporting fish stocks). In the case of vegetated ecosystems (e.g. salt marshes, seagrass meadows) they contribute to CC mitigation through sequestration and long-term storage of CO₂, forming the so-called group of “Blue Carbon” ecosystems.

In the Atlantic coast of Europe, these ecosystems mainly develop in estuaries. Estuarine areas are particularly exposed to SLR and high human-related pressures, such as urbanization, tourism, and land use conversion. These pressures have caused a general decline and degradation of estuarine ecosystems, leading to the loss of the ecosystem services they provide.

Project description:

The general objective of the [LIFE Adapta Blues](#) project is to demonstrate the potential of the conservation and restoration of European estuaries as a Nature-based Solution to adapt to CC, decreasing risk in coastal areas while also contributing to CC mitigation.

To achieve this goal, the project addresses the following specific objectives:

1. Assessing the CC adaptation services provided by estuarine ecosystems in the Iberian Peninsula in relation to Sea Level Rise
2. Technical recommendations for restoration of estuarine ecosystems in 3 Atlantic EU regions for most impactful capturing of CC adaptation benefits
3. Development of one pilot project of estuarine restoration as a CC adaptation measure
4. Exploring financial mechanisms which could support estuarine restoration, based on the CC services they provide

5. Awareness-raising. Promoting the application of estuarine conservation and restoration as NbS to CC adaptation in European coastal areas.

The LIFE Adapta Blues project is managed by the Fundacion Instituto de Hidraulica Ambiental de Cantabria, and supported by the Municipio de Figueira da Foz, the Instituto Politecnico de Leiria, and The Nature Conservancy in Europe gGmbH.

2. Objectives of the assignment

The main objective of this consultancy is to support The Nature Conservancy (TNC) and their subcontracted partner, the University of California Santa Cruz (UCSC), in delivering the specific outcomes outlined below, as part of the LIFE Adapta Blues project.

TNC and UCSC aim to consolidate knowledge on European uses of nature-based solutions for climate adaptation and to disseminate this information in a concise and user-friendly format. The information and lessons learned from these case studies will be later added by TNC to a “Europe” page under the NbS database, <http://nrcsolutions.org/>. This database is widely used by conservation and climate practitioners; however it is currently mostly limited to US use, as the database currently only has US case studies. Thus, in addition to mapping and assessing the current status of NbS for climate adaptation in Europe, this project action aims to make this NbS tool available and relevant for European practitioners.

The role of the consultant in this process will be to support the collection of European case studies on NbS, to review the case studies for relevance, and to write up lessons learned and key information for each selected case study. Specifically, the consultant shall perform the following tasks:

- Develop a review of case studies in Europe for nature-based solutions to climate adaptation, write up lessons learned, outcomes, and key information for each selected case study, in close collaboration with team members at TNC and UCSC.
- Develop a selection and preparation of case study summaries and entries for the NbS website (<http://nrcsolutions.org/>), based on relevance to the Adapta Blues project objectives and the database of case studies. The final output will be 10-12 case studies selected and prepared by the consultant, following guidance from other team members.
- Format case study write-ups in compatible format for entry to the <http://nrcsolutions.org/> database. Guidance to be provided by UCSC and TNC.
- Review existing climate adaptation and resilience finance mechanisms for coastal habitats in Europe. Guidance to be provided by UCSC and TNC.
- Support the project team on reviewing funding mechanisms for nature-based adaptation in Europe, and support other team members in the feasibility assessment of a resilience insurance mechanism for the flood risk reduction analyses developed by project partners.

The specific deliverables will include:

1. Database of case studies. Manuscript describing the main lessons learned, state of implementation of NBS in Europe for coastal and estuarine areas, identified gaps and needs.
2. Summaries and entries for website: brief write-up on each case study including brief description, outcomes, main lessons learned, according to a given template.

- Summary report of finance mechanisms for coastal habitats

3. Duration and Deliverables of the assignment

The estimated time for the assignment is up to 90 expert days from 1st March 2021 to 31st December 2021, during which the expert shall deliver the following:

	Deliverable	Due by:
1	Collection of case studies on NbS for climate adaptation in Europe	31 May 2021
2	Review case studies and select for relevance to Adapta Blue objectives	31 May 2021
3	Write-ups for each case study	31 July 2021
4	Formatted case study entries for http://nrcsolutions.org/ database	15 November 2021
5	Summary report of funding mechanisms for nature-based adaptation in Europe.	31 December 2021

4. Qualifications Required

The consultant must have:

- Masters degree (completed or ongoing), in the field of environmental or resource management or a closely related field;
- Strong familiarity with and knowledge of climate change and nature-based solutions. Background in coastal science preferred;
- Work experience in coastal or environmental engineering, ideally within the private sector;
- Experience with technical analysis in the field of coastal management planning/monitoring;
- Ability to critically engage with content and synthesize key messages;
- Fluency in English, with the ability to read and summarize technical texts;
- Knowledge of additional European languages is desired. Portuguese and/or Spanish is a plus;
- Flexibility, where necessary and appropriate, in working with project partners and supervisors across multiple geographies / time zones.

5. Additional Information

Supervision will be provided by UCSC and TNC.

Documents on the background of the EU LIFE Adapta Blues project will be provided.

Point of contact: Max Ricker, Strategy Analyst Climate Adaptation at The Nature Conservancy in Europe, max.ricker@tnc.org

Please send applications to Max Ricker by 28.02.2021. Application should include your CV and a brief cover letter explaining your suitability to the role and ability to perform the described tasks.